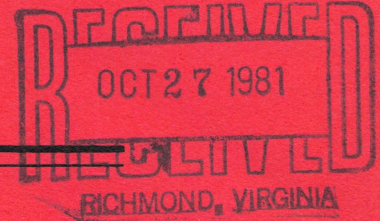


226VA164

CLERK  
SUPREME COURT OF VIRGINIA



---

IN THE

# Supreme Court of Virginia

AT RICHMOND

---

RECORD NO. 810223

---

T. M. GRAVES CONSTRUCTION, INC.

Appellant

v.

NATIONAL CELLULOSE CORPORATION

Appellee

---

JOINT APPENDIX

---

Robert N. Pollard, Esquire  
Sandy T. Tucker, Esquire  
Williams, Mullen, Christian,  
Pollard & Gray  
510 United Virginia Bank  
Building  
9th and Main Streets  
Richmond, Virginia 23219

Thomas S. Winston, III, Esquire  
P. O. Box 127  
Chesterfield, Virginia 23832  
Counsel for Appellant

Richard K. Bennett, Esquire  
Browder, Russell, Morris  
& Butcher  
1200 Ross Building  
Richmond, Virginia 23219

Counsel for Appellee



## TABLE OF CONTENTS

	<u>Appendix Page</u>
Motion for Judgment filed 11-24-78 .....	1
Third Party Motion for Judgment filed 12-26-78 .....	5
Grounds of Defense to the Third Party Motion for Judgment filed 1-23-79 .....	8
Plea of the Statute of Limitations filed 10-2-80 .....	11
Order entered 10-15-80 .....	13
Order entered 11-3-80 .....	14
Summary Judgment Order entered 11-3-80 .....	15
Final Order entered 11-7-80 .....	16
Assignments of Error .....	18
Assignments of Cross-Error .....	19
 <u>Transcript of Proceedings Heard 11-6 and 7, 1980</u>	
Discussion between Court and Counsel .....	23
Preliminary Instructions .....	32
Testimony of William Hobson Murphey, Jr. ....	54
Testimony of Edwin Cox, III .....	103
Testimony of Thomas Anthony Weiler .....	118
Testimony of William Newman .....	121
Testimony of Marvin Elmer Giffin .....	151
Testimony of Harold Boyer .....	198
Testimony of Thomas M. Graves .....	218
 <u>Plaintiff's Exhibits</u>	
Exhs. 10 - 27 - Photographs of the inside of the St. Christopher's gymnasium .....	284
Exh. 28 - Hand drawn diagram .....	301
Exh. 30 - Hand drawn diagram .....	302

## TABLE OF CONTENTS

(Continued)

	<u>Appendix Page</u>
<u>Defendant's Exhibits</u>	
Exh. 1 - Summary of expenses for Marvin Giffin .....	303
Exh. 2 - Two-page document showing progress of St. Christopher's job .....	304
Exh. 3 - National Cellulose Application Manual (Portions) .....	306

## MOTION FOR JUDGMENT

Plaintiff, Church Schools in the Diocese of Virginia ("Church Schools"), by counsel, for its Motion for Judgment against defendant, T.M. Graves Construction, Inc. ("Graves"), says as follows:

### COUNT I

1. Church Schools is a non-stock, non-profit corporation organized under the laws of the Commonwealth of Virginia. Church Schools owns and operates several church affiliated schools in the Commonwealth, one of which is St. Christopher's School in the City of Richmond.
2. Graves is a general construction contractor with offices at 11510 Jefferson Davis Highway, Chester, Virginia.
3. On August 19, 1974, Church Schools contracted in writing with Graves to construct a fieldhouse at St. Christopher's School in the City of Richmond.
4. Construction of the fieldhouse was commenced by Graves on or about September 1, 1974.
5. The contract between Church Schools and Graves required "spray-on" insulation manufactured by National Cellulose Corporation, K-13 Type 'T' (thermal), 1-1/2 inch (later changed to 1 inch) thick, color off white." The contract further required that "application. . . be in accordance with manufacturer's directions and specifications." The "spray-on" insulation was to be used on the ceiling of the fieldhouse.
6. In the contract between Church Schools and Graves, Graves expressly warranted to Church Schools that the insulation work would "be of good quality, free from faults and defects and in conformance with the contract documents."



7. The "spray-on" insulation work was performed by Graves through his subcontractors and agents. By the contract with Church Schools, Graves was "solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the contract."

8. The "spray-on" insulation work performed by Graves or his agents was not of good quality and free from faults or defects in breach of express provisions of his contract with Church Schools.

9. Construction of the fieldhouse with "spray-on" insulation on the ceiling was substantially completed by Graves on or about November 1, 1975.

10. Subsequent to completion of the fieldhouse, Church Schools discovered that the "spray-on" insulation work was not of good quality and not free from faults and defects when large portions of the insulation began to fall off the ceiling. The insulation continues to fall off the ceiling, requiring repair or replacement of the entire ceiling insulation.

11. Graves was promptly notified orally and in writing by Church Schools, or its agent, of the defective insulation work, but Graves has wrongfully refused, and continues to refuse wrongfully, to repair or replace the work or to pay Church Schools for such repair or replacement.

12. Graves has breached his contract with Church Schools and as a direct result thereof Church Schools has been damaged to the extent of a precise amount not currently known, but estimated to be no more than \$50,000.00.

## COUNT II

13. Church Schools repeats and incorporates herein the allegations contained in paragraphs 1 through 12. ,

14. In performing the "spray-on" insulation work, Graves breached an implied warranty of workmanship owed to Church Schools.

15. As a result of Graves' breach of his implied warranty of workmanship, Church Schools has been damaged to the extent of a precise amount not currently known, but estimated to be no more than \$50,000.00.

## COUNT III

16. Church Schools repeats and incorporates herein paragraphs 1 through 12.

17. Church Schools purchased from Graves "spray-on" insulation and binder that was impliedly warranted to be of merchantable quality and fit for its intended purposes.

18. The "spray-on" insulation and binder sold to Church Schools by Graves was not of merchantable quality and was not fit for its intended use on the ceiling of the St. Christopher's fieldhouse.

19. As a result of Graves' breach of warranty, Church Schools has been damaged to the extent of a precise amount not currently known, but estimated to be not more than \$50,000.00.



WHEREFORE, Church Schools moves this Court for judgment against Graves in the amount of \$50,000.00 or such other lesser amount as shall fully compensate Church Schools for Graves' breach, and its costs expended herein.

CHURCH SCHOOLS IN THE DIOCESE  
OF VIRGINIA

By

STG  
Of Counsel

Robert N. Pollard, Jr.  
Sandy T. Tucker  
Williams, Mullen & Christian  
P.O. Box 1320  
Richmond, Virginia 23210  
Counsel

THIRD PARTY MOTION FOR JUDGMENT

Third party plaintiff, T. M. Graves Construction, Inc. formerly Graves & Wiedemann Inc. (Graves) by counsel, for its Third Party Motion for Judgment against National Cellulose Corporation (Cellulose) T. Anthony Weiler, Weiler Insulation Company, Weiler Thermospray Co. and Glave, Newman Anderson & Associates, Inc. (Glave) says as follows:

1. That Graves contracted with Church Schools in the Diocese of Virginia ("Church Schools") which is the owner of St. Christophers School in the City of Richmond, Virginia to construct a fieldhouse.
2. That Glave was the architect on the property and specified that spray on insulation manufactured by Cellulose and known as K-13 Type "T" (thermal) 1 1/2 inch thick, color off white be used and the thickness was later changed to 1 inch.
3. That Graves informed Glave that there were rumors that this type of insulation was not suited for metal buildings and suggested another kind.
4. That Glave still required the use of K 13 Type T. by Cellulose in the fieldhouse.
5. That there was only one known source of this insulation in the Richmond area and that was Weiler Thermospray Co. which appears to be unincorporated and which is operated in conjunction with Weiler Insulation Company, a Virginia Corporation by T. Anthony Weiler an officer in Weiler Insulation Company and an owner of Weiler Thermospray Co.
6. That T. Anthony Weiler, Weiler Insulation Company and Weiler Thermospray Co. subcontracted with Graves to install the specified insulation for the price of \$9,600.00.
7. That the installation of the insulation was defective and T. Anthony Weiler, Weiler Insulation Company and Weiler Thermospray Co. have failed and refused to correct same.



8. That Cellulose, a Texas based Corporation is not registered in Virginia and is actively engaged in the transaction of business in Virginia.

9. That Cellulose supplied a defective product to T. Anthony Weiler, Weiler Insulation Company and Weiler Thermospray Co. which was installed in the fieldhouse.

10. That Glave negligently specified a defective product after they knew or should have known the product was not suited for this particular application.

11. That T. Anthony Weiler, Weiler Insulation Company and Weiler Thermospray Co. breached their contract with Graves by defectively installing a defective product.

12. That T. Anthony Weiler, Weiler Insulation Company and Weiler Thermospray Co. breached an implied warranty of workmanship owed Graves and furthermore breached an implied warranty of merchantable quality and fitness for its intended purpose owed to Graves.


13. That Cellulose by supplying a defective product breached its express warranty, and implied warranty of merchantable quality and fitness for its intended purpose owed to Graves, T. Anthony Weiler, Weiler Insulation Company and Weiler Thermospray Co.

13. That Church Schools has sued Graves for damages estimated not to exceed \$50,000.00.

WHEREFORE, Your Third Party Plaintiff moves the court to award it a judgment against the Third Party Defendants for any sums awarded Church Schools from Graves by reason of foregoing and further Graves moves the court to dismiss the action against him and give judgment against the Third Party Defendants in the amount of \$50,000.00 or such other lesser amount as shall fully compensate Church Schools for Third Party Defendants breaches of contract, warranty and negligence.

T. M. GRAVES CONSTRUCTION, INC.

By Counsel

  
p.q.  
Thomas S. Winston III  
Attorney at Law  
P. O. Box 127  
Chesterfield, Virginia 23832

CERTIFICATE

I hereby certify that a true copy of the foregoing Third Party Motion For Judgment was mailed to Robert N. Pollard, Jr. and Sandy T. Tucker, Attorneys for Church Schools in The Diocese of Virginia, c/o Williams, Mullen & Christian, P. O. Box 1320, Richmond, Virginia 23210, this 21 day of November, 1978.

  
Thomas S. Winston III



GROUND OF DEFENSE TO THE  
THIRD-PARTY MOTION FOR JUDGMENT

This third-party defendant, National Cellulose Corporation, by counsel, for its Grounds of Defense to the Third-Party Motion for Judgment, comes and states the following:

1. While it is without actual knowledge as to the allegations contained in paragraphs numbered 1 and 2 of the Third-Party Motion for Judgment, on information and belief, it believes same to be true.
2. It is without knowledge as to the information which alleged flowed from Graves to Glave and denies the remaining allegations contained in paragraphs numbered 3 and 4 of the Third-Party Motion for Judgment.
3. It is without knowledge as to the allegations contained in paragraphs numbered 5, 6 and 7 of the Third-Party Motion for Judgment and, therefore, denies same, calling for strict proof thereof. -
4. It denies the allegations contained in paragraph numbered 8 of the Third-Party Motion for Judgment.
5. It denies that it has supplied any defective products to T. Anthony Weiler, Weiler Insulation Company and/or Weiler Thermospray Co., and therefore, denies the allegations contained in paragraph numbered 9 of the Third-Party Motion for Judgment.
6. It denies the allegations contained in paragraph numbered 10 of the Third-Party Motion for Judgment.
7. It denies that it produced any defective product, and therefore, denies the allegations contained in paragraph numbered 11 of the Third-Party Motion for Judgment.
8. It is without knowledge as to the allegations contained in paragraph numbered 12 of the Third-Party Motion for Judgment, and therefore, denies same, calling for strict proof thereof.
9. It specifically denies the allegations contained in paragraph numbered 13 of the Third-Party Motion for Judgment.

10. It denies that T. M. Graves Construction, Inc. is obligated to plaintiff in any manner or amount for any cause whatsoever, and therefore, denies that it is obligated or could be obligated to the third-party plaintiff herein.

11. It alleges and charges that the primary action in this case and the Third-Party Motion for Judgment are both barred by the applicable statute of limitations of the Commonwealth of Virginia.

12. It alleges and charges that the sole proximate cause of plaintiff's alleged damages herein was negligence and/or breach of warranties on the part of others for whom in law this third-party defendant could not be responsible.

13. It denies that it is guilty of any negligence whatsoever in the premises or that it has breached any warranty implied by law which might enure to the benefit of T. M. Graves Construction, Inc. and/or plaintiff herein.

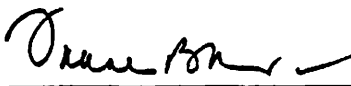
14. This defendant states that had its product been applied in the manner and means recommended by the manufacturer that plaintiff would have sustained no damage herein.

15. This defendant states that it will rely upon all defenses lawfully available to it at any trial of this matter and reserves the right to amend this, its Grounds of Defense to the Third-Party Motion for Judgment at such time as it may be advised.

WHEREFORE, this third-party defendant moves the Court for judgment in its behalf with its costs expended herein.

NATIONAL CELLULOSE CORPORATION

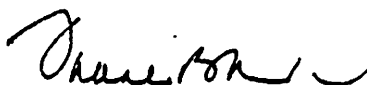
By Counsel

  
\_\_\_\_\_  
Frank B. Miller, III  
c/o Pierce Rucker, II  
Pierce, Anderson, Marks & Miller  
P. O. Box 1998  
Richmond, Virginia 23216



C E R T I F I C A T E

I hereby certify on this 22 day of January, 1979, that a true copy of the foregoing Grounds of Defense to the Third-Party Motion for Judgment was mailed to Robert N. Pollard, Jr., Esquire and Sandy T. Tucker, Esquire, Williams, Mullens & Christian, P. O. Box 1320, Richmond, Virginia, 23210, counsel for plaintiff; to Thomas S. Winston, III, Esquire, P. O. Box 127, Chesterfield, Virginia, 23832, counsel for third-party plaintiff; to Murray H. Wright, Esquire, 1400 Ross Building, Richmond, Virginia, 23219, counsel for Glave, Newman, Anderson & Associates, Inc.; and to Mr. T. Anthony Weiler, 8225 Tyndale Road, Richmond, Virginia.

  
\_\_\_\_\_

PLEA OF THE STATUTE OF LIMITATIONS

Comes now the third party defendant, National Cellulose Corporation, by counsel, and in response to the Amended Third Party Motion for Judgment filed by the third party plaintiff, it states that this amended claim is barred by the applicable Statute of Limitations and moves this Court to dismiss the amended third party claim against it.

DEMURRER

Comes now the third party defendant, National Cellulose Corporation, by counsel, and states that the Amended Third Party Motion for Judgment filed herein does not state a cause of action as to it and in support thereof and as its grounds therefor states as follows:

1. There is no duty either in tort or contract between T. M. Graves and National Cellulose.

2. Assuming, without admitting, that this action is one for indemnification, there is no basis for indemnification neither by contract or by common law or otherwise.

WHEREFORE, the National Cellulose Corporation moves this Court to dismiss the Amended Motion for Judgment against it together with its costs herein.

GROUND OF DEFENSE

For its Grounds of Defense to the Amended Motion for Judgment, National Cellulose Corporation, by counsel, adopts its original Grounds of Defense and furthermore denies the allegations of the additional paragraph numbered 9(a) of the Amended Motion for Judgment.

Respectfully submitted,

NATIONAL CELLULOSE CORPORATION

By ORIGINAL SIGNED BY  
RICHARD K. BENNETT  
Counsel

C E R T I F I C A T E

I hereby certify that on this 24~~th~~ day of October, 1980, a true copy of the foregoing Plea of the Statute of Limitations, Demurrer, and Grounds of Defense was mailed to Sandy T. Tucker, P. O. Box 1320, Richmond, Virginia; Edward F. Parsons, Suite 102, 2922 Hathaway Road, Richmond, Virginia; Linda L. Royster, Second Floor, Massey Building, 4 North 4th Street, Richmond, Virginia; and to Thomas S. Winston, III, P. O. Box 127, Chesterfield, Virginia.

NATIONAL CELLULOSE CORPORATION

By ORIGINAL SIGNED BY  
RICHARD K. BENNETT  
Counsel

Richard K. Bennett  
Browder, Russell, Morris & Butcher  
1200 Ross Building  
Richmond, Virginia 23219

O R D E R

This day came T. M. Graves Construction, Inc., the Defendant and Third-Party Plaintiff, by counsel, upon his Motion To Amend Third-Party Motion for Judgment after proper notice to all parties, and was argued by counsel on October 15, 1980. It appearing to the Court that the motion should be granted;

It is HEREBY ORDERED that the following paragraph be added to defendant's Third-Party Motion for Judgment.


9A. That National Cellulose Corporation negligently and defectively applied the insulation.

The allegation shall be deemed to be denied by National Cellulose Corporation without further pleading.

ENTER: 10 / 15 / 80

  
JUDGE

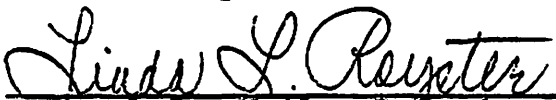
I ask for this:

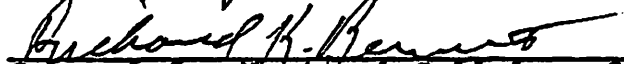
  
Counsel for Defendant and  
Third-Party Plaintiff

Seen and agreed:

  
Counsel for Plaintiff

Seen and ~~objected to~~:

  
Counsel for Weiler Defendants

*seen + objected to:*  
  
Counsel for National Cellulose Corp.

O R D E R

This day came plaintiff, Church Schools in the Diocese of Virginia, on its Motion to Amend Ad Damnum, and was argued by counsel. It appearing to the Court that such motion is proper and should be granted, it is hereby

ORDERED that the Motion for Judgment be, and it hereby is, amended to request judgment in the amount of \$55,900 or such other lesser amount as shall fully compensate Church Schools for its loss.

ENTER: 11 / 1 3 180

Ward D. Wall  
JUDGE

I ask for this:

Sandy T. Tucker  
Counsel for Church Schools

Seen and Agreed:

Thom J. Graves  
Counsel for Graves

Seen & Objected to

Paul F. Parr  
Counsel for the Weiler defendants

Richard B. Bennett  
Counsel for National Cellulose Corp.

SUMMARY JUDGMENT ORDER

This day came plaintiff, Church Schools in the Diocese of Virginia ("Church Schools") and defendant, T. M. Graves Construction, Inc. ("Graves"), and moved the Court for entry of summary judgment in favor of Church Schools against Graves in the amount of \$55,900. It appearing to the Court that the Church Schools and Graves have entered into a Stipulation of Facts wherein Graves concedes liability to Church Schools in the amount requested and consents to entry of judgment, it is hereby

ORDERED that summary judgment be, and it hereby is, entered against Graves in favor of Church Schools in the amount of \$55,900. The case will proceed on the remaining claims of the parties.

ENTER: 11 / 3 / 80

Will J. Walker  
JUDGE

We ask for this:

Sandy T. Tucker  
Counsel for Church Schools

James S. Winter  
Counsel for Graves



Virginia:

In the Circuit Court of the City of Richmond, Division 1,

THE 7th DAY OF November 19 80

CHURCH SCHOOLS IN THE DIOCESE OF VIRGINIA	Plaintiff
v.	Case No. B-1418
T. M. GRAVES CONSTRUCTION, INC.	Defendant and Third-Party Plaintiff
v.	
NATIONAL CELLULOSE CORPORATION	Third-Party Defendant

O R D E R

This day again came the third-party plaintiff and the third-party defendant by counsel, and came also the jury pursuant to their adjournment on yesterday.

After receiving instructions from the court and hearing arguments of counsel, the jury retired to their room to consult of their verdict and after some time returned into court with the following verdict:

We find for the plaintiff and fix damages at \$45,000.

(Signed) Terry L. Brown  
Foreperson

The third-party defendant by counsel moved to set aside the verdict for reasons stated in the record, which motion was granted and to which ruling of the court counsel for the third-party plaintiff objected.

It is, therefore, ORDERED that the third-party plaintiff  
take nothing and that judgment be entered in favor of the third-party  
defendant,

A Copy,

Teste: EDWARD G. KIDD, Clerk

by Mary Ellen Hughes

## II. ASSIGNMENTS OF ERROR

1. The lower court erred in setting aside the verdict because it considered only the sufficiency of plaintiff's evidence introduced in its case in chief, rather than considering all the evidence introduced by the parties, and in finding the evidence to be insufficient to support the verdict.

2. The lower court erred in setting aside the verdict because it incorrectly found that National Cellulose's alleged negligent set up of equipment was beyond the scope of Graves' allegation that National Cellulose had "negligently and defectively applied the insulation."

#### ASSIGNMENTS OF CROSS ERROR

1. The lower court erred in overruling the Motion to Strike the plaintiff's evidence at the conclusion of the plaintiff's case and also at the conclusion of all of the evidence.
2. The lower court erred in overruling the Plea of the Statute of Limitations filed on behalf of National Cellulose.

VIRGINIA: IN THE CIRCUIT COURT OF THE CITY OF RICHMOND,  
DIVISION I

CHURCH SCHOOLS IN THE DIOCESE  
OF VIRGINIA,

Plaintiff,

v.

Case No. \_\_\_\_\_

T. M. GRAVES CONSTRUCTION  
COMPANY, INC.,

Defendant.

Before:

Honorable Willard I. Walker, Judge  
and a jury of seven

PROCEEDINGS

November 6 and 7, 1980

Richmond, Virginia

C. Overton Lee

STENOGRAPH (R) SHORTHAND REPORTERS  
MUTUAL BUILDING  
RICHMOND, VIRGINIA 23219  
AREA (804) 648-3785

Reported by:  
Mary Ann McGhee

I N D E X

WITNESSES

	<u>Direct</u>	<u>Cross</u>	<u>Red.</u>	<u>Rec.</u>
PLAINTIFF:				
William Hobson Murphey, Jr.	33	57	73, 78	77
Edwin Cox, III	82			
Thomas Anthony Weiler	97			
William Newman	100	117		
Thomas M. Graves (in rebuttal)	197	200		
DEFENDANT:				
Marvin Elmer Giffin	130	161		
Harold Boyer	177	189	193	

PLAINTIFF'S EXHIBITS

<u>No.</u>	<u>Description</u>	<u>For Evid.</u>
1-9	Nine Samples of insulation	7
10-27	Seventeen photographs of the inside of the St. Christopher's gymnasium	7
28	A hand-drawn diagram	74
29	A paper bag containing samples of insulation	91
30	A hand-drawn diagram	105

DEFENDANT'S EXHIBITS

<u>No.</u>	<u>Description</u>	<u>For Evid.</u>
1	A summary of expenses for Marvin Giffin	134



DEFENDANT'S EXHIBITS (Con'd)

<u>No.</u>	<u>Description</u>	<u>For Evid.</u>
2	A two-page document showing progress of the St. Christopher's job	142
3	A National Cellulose application manual	196

1 Trial proceedings when heard on November 6 and 7,  
2 1980, before Honorable Willard I. Walker, Judge, and a jury of  
3 seven, in the Circuit Court of the City of Richmond, Virginia,  
4 Division I.

5  
6 **Appearances:**

7 WILLIAMS, MULLEN, CHRISTIAN, POLLARD & GRAY  
8 By: SANDY T. TUCKER, ESQ.,  
attorney, of counsel for the plaintiff

9 BROWDER, RUSSELL, LITTLE, MORRIS & BUTCHER  
10 By: RICHARD K. BENNETT, ESQ.,  
attorney, of counsel for the defendant

11  
12  
13 THE COURT: Just keep the jury out until I know  
14 they are all here and ready to go.

15 Did you-all come to any resolution about the  
16 status of Weiler?

17 MR. TUCKER: Yes, sir.

18 MR. BENNETT: I think we are agreed that we can  
19 tell the jury what the situation is, that they have conceded  
20 to a judgment and that Weiler has gone bankrupt.

21 THE COURT: All right, then, I will tell the jury.  
22 You-all don't have to worry about it.

23 MR. BENNETT: I do want to emphasize that this  
24 doesn't end the action against Weiler. As I understand it, it

1 merely stays it until some later date they can get relief from  
2 the stay.

3 THE COURT: I will explain to them exactly what  
4 is going on. I don't think it hurts anything for them to know.  
5 As a matter of fact, it may be a whole lot better for them to  
6 know than to wonder what in the world is going on. The case  
7 is still styled Church Schools v. Graves. It would leave a lot  
8 of questions in the mind of the jury if we pretended that the  
9 case is something that it is not.

10 Any other preliminary matters, gentlemen? All  
11 the Orders except Mr. Bennett's Order have been entered.

12 MR. BENNETT: Did you get the Order substituting  
13 Mr. Tucker as counsel?

14 THE COURT: I did. All those have been entered.

15 MR. TUCKER: Judge, we have some samples here  
16 that we have agreed to stipulate came from the building in  
17 various areas of the building. Would you like to go ahead and  
18 pre-mark those?

19 THE COURT: Might as well, anything we can do to  
20 save time. Have you exchanged photographs?

21 MR. TUCKER: Yes, sir. He has taken a look at  
22 them. I have picked out the ones that I plan to ask Mr. Newman  
23 about.

24 MR. BENNETT: Do you want to go ahead and mark

1 these?

2 MR. TUCKER: There are a lot of duplicates.

3 THE COURT: Don't use a lot of duplicates.

4 MR. TUCKER: What I meant was I have taken out the  
5 duplicates. I would like to go ahead and number them. Some of  
6 them already have numbers.

7 THE COURT: How many do you have?

8 MR. TUCKER: Nine.

9 THE COURT: Nine of them?

10 MR. BENNETT: Sandy, just so I will understand,  
11 you are numbering these bays 1 through 11; is that right, the  
12 east end of the building, and then move west toward the old  
13 unit?

14 MR. TUCKER: He did the numbering, Bill Henry did  
15 the numbering. I assume he will explain that. I will have him  
16 explain it.

17 THE COURT: Here you go. How many photographs?

18 MR. TUCKER: Eighteen. We have got nine samples.

19 THE COURT: Do you have any exhibits, Mr. Bennett,  
20 that we want to get cleared up now?

21 MR. BENNETT: I don't think so, at this time,  
22 Your Honor. We have our application manual, which is rather  
23 large. We are only going to use a few pages out of it, but I  
24 have got it all together. I don't know if we will get that.

1 THE COURT: Okay. Are counsel for the parties  
2 agreed to the admissibility of these, or agreed to marking these  
3 for identification?

4 MR. BENNETT: I have agreed those are samples  
5 taken from the building in various locations at various times.

6 THE COURT: Exhibits 1 through 9 are agreed to be  
7 samples of product taken from the building at various locations.  
8 And where they were taken from will be established from the  
9 evidence.

10 MR. TUCKER: I think we can stipulate, Judge, as  
11 to where seven of them came from. We have agreed as to that.  
12 The other two, I think we can.

13 THE COURT: Which seven?

14 MR. TUCKER: The first seven.

15 THE COURT: Is that true, Mr. Bennett?

16 MR. BENNETT: Yes, they were taken by Bill  
17 Newman, and he drew a sketch at the time, and he has numbered  
18 the bays of this building. I just want to make sure that we  
19 don't get the numbering reversed.

20 THE COURT: Is that going to come in?

21 MR. TUCKER: Yes.

22 MR. BENNETT: So I have no problem with any of  
23 that.

24 THE COURT: Defendant doesn't object to, once the

1 sketch is in, to the fact that the first seven are as came from  
2 the locations shown in the sketch. 8 and 9 will have to be  
3 established as to location; is that correct?

4 MR. BENNETT: Yes.

5 MR. TUCKER: Well, I don't know that I am going  
6 to be able to establish the precise location other than to say  
7 that they came from the building.

8 THE COURT: That is not stipulated, at this point.

9 10 through 27 are various photographs taken of  
10 the inside of the gymnasium belonging to Church Schools and are  
11 being received, Mr. Bennett, without objection as to the  
12 authenticity. These are pictures taken of it.

13 MR. BENNETT: Yes, they were taken a few weeks  
14 ago.

15 THE COURT: With the understanding these pictures  
16 were taken within the last several weeks. And also on these  
17 pictures, I have noticed some marking. I guess there is no  
18 problem with that, Mr. Bennett.

19 MR. BENNETT: I am somewhat confused about which  
20 end of the building they start at.

21 THE COURT: They will be established by the  
22 witness in the case.

23 MR. TUCKER: Right, right.

24 THE COURT: Okay.



1 (Nine samples of insulation were marked  
2 PLAINTIFF'S EXHIBITS 1 through 9 and received in  
3 evidence.)

4  
5 (Seventeen photographs of the inside of  
6 the gymnasium were marked PLAINTIFF'S EXHIBITS 10  
7 through 27 and received in evidence.)

8 MR. BENNETT: Judge, I think it would help us in  
9 this case if we could agree as to how we referred to this  
10 building. I have been talking about the west end of the  
11 building being the end next to the old gymnasium.

12 THE COURT: That's not going to help the jury  
13 any, because they are not seeing any old gymnasium in these  
14 pictures.

15 MR. BENNETT: No, but if we can establish, you  
16 know, bay 1 is the west end, or bay 11 is the west end, that is  
17 what I am saying. That is what I am somewhat confused about.

18 THE COURT: It might help. I am looking down, at  
19 this point, with numbers on the columns or beams at 1, 2, 3,  
20 4, 5, 6. Is that considered one end of the building?

21 MR. TUCKER: Do you want to make some stipulations  
22 that this is the old gymnasium over here, that this is  
23 St. Christopher's Lane?

24 MR. BENNETT: Right.

1 MR. TUCKER: That this is Patterson Avenue?

2 MR. BENNETT: Yes.

3 MR. TUCKER: Can I write it on here?

4 MR. BENNETT: Put "Old Gymnasium" so we won't get  
5 too botched up.

6 THE COURT: You have got numbered on the other  
7 end 1, 2, 3, 4, also, or do they start at 13? Or have you  
8 taken pictures of the other end?

9 MR. BENNETT: No.

10 THE COURT: All I see is 1, 2, 3, 4, 5, 6, 7, 8,  
11 9, 10, 11 in numbers. It all appears one end from left to  
12 right.

13 MR. BENNETT: No, that is the long side of the  
14 building.

15 THE COURT: Okay. And what are your letters?  
16 Are they the other side, or the end?

17 MR. TUCKER: The end.

18 THE COURT: That is the end?

19 MR. BENNETT: I am confused. Does it go up to  
20 12 or 11?

21 THE COURT: I thought it said 12. Maybe it  
22 didn't. Maybe you are right. No, it goes to 12.

23 MR. BENNETT: The drawings have 11 on it.

24 MR. TUCKER: He can explain the discrepancy.

1 THE COURT: 12 is the corner and 1 is a corner.

2 MR. BENNETT: He is numbering the beams them-  
3 selves.

4 THE COURT: The bays would be 11, the beams are  
5 12, so we are only taking one side and one end, not taking the  
6 other side. There is no other number sequence besides this  
7 1, 2, 3, 4, 5, 6 through 12.

8 MR. TUCKER: It goes all the way across.

9 THE COURT: I understand. But when we look at  
10 the pictures, we are looking down at one end of the building,  
11 not at the other end. Or are we?

12 MR. BENNETT: In other words, you are looking, as  
13 I understand --

14 THE COURT: Where is the jury?

15 JURY OFFICER: They are all here, sir.

16 THE COURT: They are here?

17 JURY OFFICER: Yes, sir.

18 THE COURT: Well, I am not sure we are looking at  
19 the same thing. I am really not sure these pictures are showing  
20 the same. Are these showing the same end? I think not.

21 MR. BENNETT: That is generally the middle.

22 THE COURT: Well, I mean, are they looking toward  
23 the same side, not to the other side?

24 MR. BENNETT: I have no way of knowing.

1 THE COURT: Looks like a world of difference  
2 between the ceilings between 5 and 6 here and 5 and 6 here.  
3 Well, we can't see as well. You-all have just got to explain  
4 to the jury.

5 What I am asking is: Have you got the camera  
6 focusing toward different sides of the building?

7 MR. TUCKER: I believe they are.

8 THE COURT: Then that could be, I suppose, the  
9 side. That is pretty much the same.

10 MR. TUCKER: Yes, sir.

11 MR. BENNETT: Of course, the insulation isn't  
12 falling off.

13 THE COURT: That's what I understand. Well,  
14 you will have to establish that. These photographs are  
15 received without proof of who took them, with the understanding  
16 that they were taken within the last several weeks. Is that  
17 right?

18 MR. BENNETT: Yes, sir.

19 MR. TUCKER: Yes, sir.

20 THE COURT: Put these out on the table. All right,  
21 let's bring the jury in.

22 (The trial of the case was convened at

23 10:30 a.m., November 6, 1980.)  
24

1 (The reporter was sworn; the jury was  
2 impaneled and sworn.)

3 THE COURT: I have a few more preliminary  
4 instructions to you, then I will be through, pretty much,  
5 except for ruling on legal matters, and counsel will take over  
6 the case.

7 Your function in the trial of this case is to  
8 reach a verdict that is based solely on the evidence and the  
9 instructions of law, which I will give you after the evidence  
10 has all been presented. You are the triers of the facts. You  
11 are to decide, after considering all the evidence presented,  
12 what happened, what the facts are, and you are to apply the  
13 facts as you find to the instructions of law.

14 You should use your common sense in considering  
15 the evidence, and you may draw reasonable inferences from the  
16 evidence. My function as Judge is to preside over the trial,  
17 rule on points of law, and to instruct you on the law. It is  
18 your responsibility, you and I, to see that this case is  
19 decided in accordance with the facts and the law.

20 To begin the case, the lawyers may make an  
21 opening statement. I am confident they will. In this opening  
22 statement, lawyers may tell you what they expect the evidence  
23 to be, a prediction of the evidence, if you will, a preview.  
24 This should help you to understand the evidence as it is

1 presented through the witnesses later and make you aware of  
2 conflicts and differences that may arise in the testimony. But  
3 what the lawyers say is not evidence. You must not consider it  
4 as evidence.

5 After the opening statement, you will hear and  
6 see evidence. It will come to you in the form of exhibits,  
7 pictures, samples, and, of course, the sworn testimony of  
8 witnesses on the stand. The only evidence you may consider in  
9 reaching a verdict is what comes from witnesses who testify  
10 before you or by depositions, from any exhibits presented,  
11 and/or from stipulations of counsel. If there is a stipulation,  
12 it will be explained to you when it is presented.

13 Each witness will be examined by the lawyer who  
14 calls him and may then be cross-examined by the lawyer for the  
15 other side. During the questioning of the witness, one lawyer  
16 may object to a question asked by the other. You must not  
17 consider this as an effort to keep something from you. It is  
18 the duty of a lawyer to object to a question at times if he  
19 believes it violates the rules of evidence. And it is my duty  
20 to rule upon such objections.

21 This case, like all cases, must be tried in  
22 accordance with the rules of evidence which have been developed  
23 over many years. These rules of evidence control what can be  
24 presented to a jury. Their purpose is to protect the fairness



1 and accuracy of the fact-finding process in which you are  
2 engaged. Therefore, do not concern yourselves with any  
3 objection or hold it against the side making the objection.  
4 There are certain types of evidence, ladies and gentlemen, that  
5 we have decided, over the years, is just simply unreliable, and  
6 we don't let that evidence in. One example of that, which I am  
7 sure you have heard about in your lifetime, is an objection  
8 based on hearsay. The witness on the stand doesn't really know,  
9 he is saying what somebody else told him. And oftentimes that is  
10 found to be objectionable, not always, because there are about  
11 ninety-seven exceptions to the hearsay rule. But, anyway, we  
12 will get to that. And that is my function, not for you to  
13 worry about.

14 If something comes into the case inadvertently,  
15 and I tell you to disregard it, to strike it from the record,  
16 you must try to strike it from your mind as well. You aren't  
17 to consider evidence that you have been told to disregard. You  
18 are the persons who have to decide what the facts are. If,  
19 while the witness is on the stand, you are unsure or uncertain  
20 as to what he said, or if you have any question relating to the  
21 case which you think he may be able to answer, you may ask a  
22 question. But I suggest that you wait until the lawyers have  
23 completed their questioning of the witness before you ask your  
24 question, because they may ask the same question. Let them run

1 the case, if you can. But, if you have a burning problem, I  
2 will be glad to hear from you. If you do have a question when  
3 the lawyers have finished, let me know by raising your hand,  
4 and I will see whether or not the question can be asked.

5 Please listen closely to each witness.

6 Ordinarily, a witness will not be recalled to the stand simply  
7 because you missed something he said or did not say, or you  
8 didn't understand what he said. You are going to hear the  
9 evidence once, and that is all.

10 After all the evidence has been presented, then  
11 the instructions on the law will be curtailed. You will then  
12 return to the Courtroom, I will read the instructions to you.  
13 After I read the instructions, the lawyers make their closing  
14 arguments. In their closing arguments, the lawyers will refer  
15 to the evidence you have heard. But, here again, what they say  
16 is not evidence. Their statements are only their recollection  
17 of the evidence, and your recollection governs.

18 There will be an occasional recess during the  
19 trial. Probably I will take one in about an hour or so, unless  
20 somebody needs one in the meantime. During these recesses, you  
21 must not discuss this case with anyone, including your fellow  
22 jurors. It isn't time, then, to start talking to each other  
23 about the case. You should not go to the scene or make any  
24 independent investigation or receive any information about the

1 case on radio, television, or newspaper. You have got to be  
2 objective, and you have got to be open-minded on the case at  
3 that time. Please keep an open mind as the evidence is  
4 presented. Remember, your job is to reach a verdict only after  
5 you have heard all the evidence, the facts of law, and the  
6 final arguments of the lawyers. When you retire to the jury  
7 room after the case has been submitted to you, you should first  
8 select a foreman, and then exchange your views on the case with  
9 other jurors fully and openly. This is the only time you start  
10 doing that, start talking about the case, when you are in the  
11 jury room after the whole case has been completed. All jurors  
12 should have the benefit of hearing the views and observations  
13 of all other members of the jury. Your verdict must be  
14 unanimous. The faithful and proper performance by you of your  
15 duties is vital to the administration of justice, and I ask  
16 your complete attention to the case as it is presented.

17 Opening statements, Mr. Tucker?

18 MR. TUCKER: I would like to move to exclude the  
19 witnesses.

20 THE COURT: Will all persons who are going to  
21 testify in this case, including the parties or the corporate  
22 representatives, please come forward at this time and be sworn?  
23 Do you-all have witnesses under subpoena who aren't here now  
24 that you expect to come later?

1 MR. TUCKER: I have one.

2 THE COURT: You will have to assist the Court in  
3 trying to see that the person doesn't come into the Courtroom.

4 Arrange yourselves so that you can see me and I  
5 can see you.

6 (All witnesses were sworn.)  
7

8 THE COURT: Most people, except for Mr. Graves  
9 and Mr. Boyer, who are witnesses, will have to remain outside  
10 until you are called. Gentlemen, don't let anyone talk to you  
11 about what they said in here, and don't talk to anyone when you  
12 leave about what you said in here. That is why you are being  
13 separated. Thank you very much.

14 MR. BENNETT: Judge, he has one other witness  
15 who is in the hall. Do you want to swear him now?

16 THE COURT: No, leave him out there and instruct  
17 him he is separated and is not -- we will swear him when he  
18 comes in.

19 Members of the jury, if I don't take a recess  
20 soon enough for your needs, you let me know. We are not down  
21 here to punish you, so if you have a problem, I will be glad  
22 to hear about it, and we can always take a break anytime you  
23 need it, no problem.

24 Mr. Tucker?

1 MR. TUCKER: Thank you, Judge.

2 Good morning. I am Sandy Tucker. I have already  
3 been introduced to you. Mr. Winston and I, seated here,  
4 represent T. M. Graves, who is at the end of the counsel table  
5 there, and his company, who was the general contractor for the  
6 construction of a field house, or a large gymnasium at  
7 St. Christopher's School in Richmond back in 1975.

8 THE COURT: Mr. Tucker, let me tell you this.  
9 You may start all over again, but I want to do two things.  
10 One of them is you-all are not assigned to those seats. If  
11 you don't like where you are, you can move. If you would  
12 rather be somewhere else, you may move. The other rule is the  
13 two-hand touch rule, and you are twenty feet too far away from  
14 the lecturn.

15 MR. TUCKER: I beg your pardon.

16 Mr. Graves, as you have heard the Judge tell you,  
17 has already admitted that he is responsible in some way for what  
18 has happened at the St. Christopher's field house. And what has  
19 happened is that the insulation in that building has come out  
20 over a period of time since it was constructed, that is,  
21 beginning in about 1976 up until today. This insulation  
22 continues to fall. And what we are talking about here is a  
23 field house. And you can imagine a large gymnasium. And you  
24 will see it later. But, this is a gymnasium with insulation

1 that is not hidden, but it is out in the open view. You can  
2 see it, and it is sprayed up there in such a manner that it is  
3 supposed to stick to the surface of the ceiling, and it is  
4 supposed to be one inch thick. You will see it. It is a blue-  
5 green color, largely.

6 Now, this insulation, of course, was not put up  
7 by Mr. Graves himself. Mr. Graves was the general contractor  
8 on the job. That's just what it means. If you have ever had  
9 anything constructed, a house constructed, you know there was a  
10 general contractor who agrees with the owner to build the  
11 building, and he doesn't know how to do all the various aspects  
12 of building the building, usually, so he will go out and he will  
13 get other people to come in and do the various specialty work,  
14 like an electrician, like plumbing, like insulation. In this  
15 instance, he went out and he contracted with Weiler Insulation  
16 Company to do the insulation.

17 Now, Weiler Insulation Company, you will find, is  
18 a local organization. And what they were were applicators for  
19 a corporation that is the defendant in this case, which is  
20 National Cellulose Corporation. This is a Texas corporation,  
21 and they manufacture the insulation that goes up. They  
22 manufacture the glue. They sell the machinery that is used to  
23 put up the glue. They instruct the applicators as to how it is  
24 put up, and you will see, I believe, really, they control the

1 entire process of the application of this insulation. Now,  
2 we have determined, and the evidence will show, that what is  
3 wrong with the insulation that was put up there is one thing,  
4 and that is there wasn't enough glue in it. It is very simple.  
5 We have employed an expert chemical engineer and chemist who  
6 has been out there, who has taken samples, who has run various  
7 tests. And all these tests you will hear about. But the  
8 bottom line is very simply there is just not enough glue in the  
9 insulation to hold it on.

10 And what we are trying to determine today, and  
11 what you ladies and gentlemen will be asked to determine, is  
12 whether National Cellulose Corporation bears the responsibility  
13 for the lack of glue in this insulation. Now, that is what we  
14 are going to be talking about, who is responsible for the lack  
15 of glue.

16 Now, the evidence is going to show you that even  
17 though Mr. Graves contracted with Weiler Insulation Company for  
18 this job, that the Weiler Insulation crew that was out there was  
19 a green crew, that they had not been National Cellulose  
20 applicators very long, and that they advised National Cellulose  
21 of this job and the size of this job because this job was  
22 larger than any one that they had had thus far.

23 National Cellulose sent down to Richmond its own  
24 instructor, trainer, manager, what have you. His name is

1 Marvin Giffin, and he is going to be here and called by National  
2 Cellulose today. But this is a man who is a National sales  
3 employee who came to Richmond and who stayed here for one week  
4 when this job got underway. And you will hear the foreman on  
5 this job, Mr. Bill Murphey, who worked for Weiler at the time,  
6 tell you that Mr. Giffin came down, and he instructed them as to  
7 every particular of this job concerning what should go up there,  
8 how it should go up, and the angle it should go up, the  
9 distance from the ceiling that it should be sprayed. And  
10 Mr. Giffin himself actually got up there and sprayed a portion  
11 of this building.

12 Mr. Murphey is further going to tell you that  
13 everything that was done thereafter as far as the amount of  
14 glue that was put up in this insulation was done in accordance  
15 with the way Mr. Giffin, the National Cellulose Corporation  
16 employee, told him to do it. And, based on that evidence and  
17 the fact that there is not enough glue up there, and the  
18 reason it is coming down is because it is not enough glue,  
19 Mr. Graves is going to ask you to find that it is not he who is  
20 primarily responsible for the fact that this insulation is  
21 falling off the ceiling and the fact that there is not enough  
22 glue there, but it is the primary responsibility of National  
23 Cellulose Corporation, the people who manufacture the fiber,  
24 the people who manufacture or distribute this glue, the people



1 who distribute and sell this machinery, and the people who sent  
2 Mr. Giffin down and told these green people who really are not  
3 schooled as yet in the application of this insulation how to  
4 put it up, and particularly how much glue to put into this  
5 insulation that goes up.

6           And let me tell you a little bit about that.  
7 The way this insulation goes up is it comes separately. There  
8 is fiber; there are bags of fiber that comes separate from  
9 anything else, and there is glue that comes separately. The  
10 glue comes in bags, and it has to be mixed with a certain  
11 percentage of water. Then that glue and that fiber are put  
12 together by a machine and sprayed up onto the ceiling. And  
13 they are put together in proportions, and these proportions  
14 have been worked out by National Cellulose Corporation. And  
15 they determine what proportion it is supposed to be mixed  
16 together in, and they advised Mr. Murphey and his crew as to  
17 what proportion it should be in. Those proportions are mixed  
18 together. It goes up on the ceiling. And if they are mixed  
19 in the right proportions, they will stay up there, that  
20 insulation will stick and it will adhere and it will insulate  
21 just as it is supposed to do.

22           But the problem with this insulation was there  
23 was not enough glue. And National Cellulose is going to tell  
24 you in its evidence and its argument that they are not

1 responsible for that, Weiler is responsible, Mr. Graves is  
2 responsible, the architect is responsible, anybody is  
3 responsible but them.

4           We are going to ask you to find that it is they  
5 who determined how much glue was supposed to go up there, who  
6 instructed these people as to how much glue was supposed to go  
7 up there, who set the machine to make sure the amount of glue  
8 was going up there that Mr. Giffin wanted to go in there, and  
9 that he left, Mr. Giffin left town, the job continued, and that  
10 these people who worked for Weiler continued to put this  
11 insulation up with the amount of glue that Mr. Giffin had told  
12 them to put up there.

13           And if you find, as I believe you will, that this  
14 stuff is coming down because there is not enough glue, and if  
15 you further find that there is not enough glue up there because  
16 National Cellulose determined how much glue would go into this  
17 mixture, then we are going to ask you to find that this liability  
18 that Mr. Graves has conceded that he is technically  
19 responsible for because of his contract should be passed on to  
20 National Cellulose Corporation who, we believe the evidence will  
21 show, are the primary ones who are responsible for this fault.

22           Now, the evidence is going to show we have gone  
23 out with various people, and we have gotten estimates as to how  
24 much it is going to cost to take all this defective insulation

1 down and to respray it with one inch of cellulose insulation  
2 that is mixed properly. The evidence is going to be that we  
3 have had various estimates over a period of time, over the last  
4 several years, as a matter of fact. And, as you can imagine,  
5 with any other building cost, each one of those estimates has  
6 gone up. The most recent estimates we have, the evidence will  
7 be, are in the neighborhood of approximately \$55,000.00. Now,  
8 the judgment that has been entered against Mr. Graves is for  
9 \$55,900.00, which is the highest estimate that we have  
10 received -- that Church Schools, anyway, has received, for the  
11 repair and respraying of this ceiling. And we are going to ask  
12 you to find that National Cellulose should be paying that amount  
13 of money for the repair and for the respraying rather than  
14 Mr. Graves or rather than anybody else, because they are  
15 primarily at fault.

16 THE COURT: Mr. Bennett?

17 MR. BENNETT: If it please the Court, ladies and  
18 gentlemen, the Court has told you my name is Dick Bennett. I  
19 am here representing National Cellulose Corporation, and I  
20 would like to get one thing straight right at the beginning.  
21 Just because National Cellulose is a corporation and it has got  
22 the name National in it doesn't mean they have got all the  
23 money in the world. It is a good company, and it is not a  
24 small company, but it is not the biggest company in the world,

1 either.

2 I would like to take just a few minutes to get  
3 the players straight, because Mr. Tucker has been talking about  
4 Mr. Graves as if Mr. Graves personally has consented to this  
5 judgment. That is not the case. T. M. Graves Construction  
6 Company, the general contractor for this entire job, which cost  
7 some \$500,000.00, has consented to a judgment for \$55,900.00,  
8 something in that neighborhood.

9 Now, in turn, T. M. Graves turned around and sued  
10 Weiler Insulation Company. And Weiler Insulation Company -- let's  
11 get this straight -- is the local contractor on this job. They  
12 subcontracted the insulation work, and their contract said that  
13 they would come in and spray on an inch of this spray-on  
14 insulation. And they further warranted that it would stay.  
15 They are the people that put it up. National Cellulose is the  
16 company that makes this fiber and makes the glue and sells it  
17 to everybody around the country so that they can put it up. It  
18 is kind of like this rolled-on insulation that you might put in  
19 your attic. There is a big company that makes it and sells it  
20 to a local company, and the local company will come out and put  
21 it in. There are two separate operations, two separate  
22 companies. They have nothing to do with each other except  
23 that they do business together. And Mr. Tucker is trying to  
24 leave you with the impression we came in and put this stuff up

1 there, and it is just not the case. Now, as part of our  
2 product, we want to try to assure that the people in the field  
3 are going to do it right, that the Tony Weilers, the Weiler  
4 Insulation Companies are going to do it right. And we had a  
5 man at the time by the name of Marvin Giffin who had been in  
6 this business for about 15 years who was very experienced, and  
7 we would send him around the country to the various jobs. And  
8 Marvin did come to Richmond in June of 1975, and he was here  
9 for four days, from June 16th, I think it was, a Monday. He  
10 came in Monday night, and he worked with Weiler Insulation  
11 people until Friday at noon, and then he left.

12 Now, this was right at the beginning of the spray-  
13 up of this insulation. And the evidence will be that there is  
14 approximately 50,000 square feet of insulation in this building.  
15 And, while Mr. Giffin was here, he helped the men set up the  
16 job. He trained them, and they actually sprayed about 3,000  
17 square feet while he was here in Richmond. He left.

18 National Cellulose has no responsibility for  
19 spraying up this entire job. That is not our function. We sell  
20 the products, and we try to take steps to assure that Weiler  
21 Insulation will do the job right. But we obviously cannot be  
22 responsible for things that happen after we leave.

23 Now, the evidence will be that Weiler proceeded to  
24 finish this job and sprayed from approximately June 19 or

1 June 20 until sometime in July, probably July 20, a fairly long  
2 period of time. And, again, we have got 50,000 square feet of  
3 insulation that had to be sprayed up there.

4 Now, the evidence in this case will be that a lot  
5 of this insulation has failed. There is no question about that.  
6 You will see pictures of the building, and it is a terrible  
7 job. And there is no dispute about that. The dispute comes in  
8 trying to put it back on National Cellulose. I think you can  
9 appreciate from what the Court has told you why they are trying  
10 to do that. Weiler Insulation Company filed bankruptcy yester-  
11 day, and this case was proceeding along, and it looked like it  
12 was obvious that Weiler Insulation Company was the culprit. And  
13 you can draw your own conclusions as to why they had to file  
14 bankruptcy. But the mere fact that they aren't here and avail-  
15 able to pay this does not mean that you just look to the next  
16 guy and drop it on them.

17 Now, we are going to have a lot of evidence  
18 today. And this spray-on insulation at first sounds sort of  
19 simple, but it is really a fairly complex operation. And I  
20 didn't understand it when I started this case. And I think I  
21 understand about half of it. But we have got people who are  
22 from National Cellulose. And this is Harold Boyer. He is the  
23 Vice-President, and he is the technical man from National  
24 Cellulose. He will be able to explain to you about this

1 insulation. But the most important witness in this case is  
2 going to be Marvin Giffin, who is the man who is the field  
3 expert for National Cellulose. And he has been in the business  
4 for a couple of years and has traveled all around this country  
5 and Europe spraying K-13.

6 Now, if you want to assume that he doesn't know  
7 what he is doing, then that is one thing. But I think you will  
8 find, when he testifies, that he is very knowledgeable about  
9 the field application of this product. And it is very  
10 important, because the evidence will show you at the end of  
11 this case that there are any number of ways that Weiler  
12 Insulation Company could have gone wrong.

13 Basically, we have got two components. One is a  
14 fiber. And we have got some samples of the finished product  
15 that has fallen off. But the fiber comes in 35-pound bags.  
16 The fiber is nothing magic. As I understand it, it is basically  
17 ground up paper and a lot of old newsprint that has been  
18 processed and shredded into real fine little shreds. Then they  
19 treat it with some chemicals to make it not burn. That is one  
20 part of it. That is the fiber.

21 The second part we will call glue. Some people  
22 may call it adhesive, some people may call it emulsion. It is  
23 glue, and it comes in 55-gallon drums. They are probably about  
24 the size of this thing. And it comes in a concentrated form.

1 And you must take the 55-gallon drum and mix it, three and a  
2 half parts of water to one part glue.

3 Now, the way the men in the field do this is  
4 that they know for a 55-gallon drum, I think it is, we need  
5 12 gallons of this concentrated adhesive in this 55-gallon  
6 drum, and you fill it up with water. That gives you the  
7 proper mixture.

8 Now, how does this stuff get up onto the ceiling?  
9 You have got two machines. And this is where I don't want to  
10 lose you, but I think it is important that you try to under-  
11 stand this process, because there is no way you can decide how  
12 this went wrong unless you do understand it. One machine is  
13 referred to as a blower machine. That machine takes these  
14 35-pound bags of fiber and chops it up some more and blows it  
15 up through a big tube up to a nozzle. That is how the fiber  
16 gets up there. The glue, on the other hand, is mixed up, and  
17 it is in the big drum. And you have got a glue pump. Now,  
18 the glue pump has a hose that comes off and goes into the glue  
19 drum. That pump is the second machine. That will be referred  
20 to as the glue pump. That pump sucks up the glue, and it has  
21 got a feature on it that it really sucks out about three times  
22 more than it needs, so it has got a return line that goes back  
23 into the drum for the glue that you don't need. But, in any  
24 case, it sucks the glue out of the drum, and that goes up



1 through a separate hose to a nozzle. And the glue and the  
2 fiber are shot out of this nozzle through special jets and  
3 special openings, and they mix in midair, and they come  
4 together and they stick on the ceiling, or wherever you want to  
5 spray.

6 Now, you can see just from that brief descrip-  
7 tion of this process that there are any number of ways that  
8 this can go wrong. And National Cellulose is experienced, and  
9 Marvin Giffin is experienced in how to do this, and he knows  
10 how to do it. He has been doing it for 15 years, and he  
11 doesn't have the type of problems that St. Christopher's has.

12 Mr. Weiler, on the other hand, got in this business  
13 probably, the evidence will show, sometime in the early '70s  
14 for a competitor of K-13. That is the only thing I don't  
15 think I have told you.

16 Our product is referred to very often as K-13,  
17 and that has no special meaning. It is just a brand name.

18 Mr. Weiler got into this type of business in the  
19 early '70s, the spray-on insulation business, and was a local  
20 distributor for a company called Thermo Corporation. That is  
21 another spray-on insulation, has nothing to do with National  
22 Cellulose. But it is similar. He worked with them for several  
23 years. Then, in 1973, he signed an agreement with National  
24 Cellulose to be their local distributor and to use their

1 products. And, since 1973, he had done any number of jobs  
2 with K-13. And the evidence will be, on other jobs, that they  
3 sprayed it, and it didn't have any problem.

4 Now, why they had a problem on this job will  
5 become apparent when you hear the evidence from Mr. Giffin  
6 about what happened while he was here in Richmond. And you  
7 will hear a number of possibilities as to how they go wrong.  
8 But, basically, what the evidence will show you is that some-  
9 time in the middle of this job, Mr. Weiler ran out of glue.  
10 And, being in the middle of a big job and having responsibili-  
11 ties to get it finished, he went up to another company and  
12 bought another type of glue. And it is called Fuller. Now, we  
13 don't know what Fuller is. We know it is a glue, but we have  
14 never tried it with our product. We don't know what will happen  
15 if you spray it up there. But it is evident from looking at  
16 this building what happened. That is one way that he probably  
17 went wrong.

18 Another way was his men were not terribly  
19 experienced. He had one applicator quit in the middle of the  
20 job.

21 We know that you have to take the glue from a  
22 concentrated state and mix it so that you can spray it up.  
23 The man mixing the glue is very important, because he has got  
24 to put enough water in it. You can't put too much water in it.

1 If he puts too much water in it, you are going to get exactly  
2 what we have got here, a low glue-to-fiber ratio. And all that  
3 means is it doesn't have enough glue in it to stick it up to  
4 the ceiling for very long. It will stick as soon as you blow  
5 it, it eventually is going to fall.

6 Well, there are several other possibilities as  
7 to how they went wrong. And the fact of the matter is no one  
8 is going to be able to tell you exactly what they did, because  
9 no one is going to be here that was there for the entire job.  
10 Marvin Giffin was there for four days, and he has come from  
11 Colorado yesterday and has gone to the building and remembers  
12 exactly what he did while he was there. And he prepared a  
13 handwritten report. And the importance of that handwritten  
14 report will become apparent, because on it he recorded exactly  
15 how much fiber they were blowing while he was there, and  
16 exactly the pressures that he had on his glue pump and at his  
17 nozzles.

18 Now, all of these things, you will see from our  
19 manual, are right on where they are supposed to be. Now, what  
20 happened after Mr. Giffin left is going to be totally out in  
21 the open, and nobody is going to be able to tell you. The  
22 only witness, I believe, that will testify will be a man named  
23 Bill Murphey who, at the time, worked for Weiler Insulation  
24 Company. Mr. Murphey was not an applicator, he was not skilled

1 in how to do this process. He was hired basically to sell the  
2 jobs to customers and estimate how much it would cost, and then  
3 he also would supervise the men on the work. But he is the  
4 type of man who would come in in the morning and stay and see  
5 that everybody got started, and then leave. He does not know  
6 what actually happened on this job and will not be able to tell  
7 you, as Mr. Tucker has promised, that they did everything just  
8 like Marvin said, because he wasn't there.

9 Now, I have tried to briefly summarize what the  
10 evidence is going to be. It is going to be a lot more than  
11 what I have said, and I hope I have not said anything that will  
12 not turn out to be the case. But, if I have, what you must  
13 decide the case on is the evidence that comes from the witness  
14 stand. And so, if I said something that is not correct, you  
15 disregard what I said, because I wasn't there, and I don't know.  
16 And I didn't know anything about spray cellulose until they  
17 came to me when they got sued.

18 But it is important that you listen to these  
19 witnesses, because this is not going to be an easy case to  
20 understand. And I know that you will give this your best  
21 attention. And if you get to a point where you don't under-  
22 stand, I think the Judge has told you you can ask questions of  
23 the witnesses. And I will urge you to do so, because at the  
24 end of this case, if one thing happens, I want you to under-

1 stand what this process is, and how it works. And if you do  
2 that, then I would think you will have no problem deciding the  
3 case.

4 I want to again thank you for being here today,  
5 and I hope that we don't take up too much of your time. But  
6 we do have a lot of ground to cover. Thank you.

7 THE COURT: Ladies and gentlemen, we are about  
8 to call the first witness in the case. You-all have been down  
9 here, I guess, since 9:30 or so this morning. If you want to  
10 take a few minutes now before we start taking evidence, I will  
11 do that. Otherwise, we will take the first witness. Would you  
12 like to take a short break? Well, make it a fairly short  
13 recess, about four or five minutes, then we will start the case.

14 (Recess)

15  
16 THE COURT: First witness, Mr. Tucker?

17 MR. TUCKER: I would call Bill Murphey, Your  
18 Honor. He was not sworn.

19  
20 WILLIAM HOBSON MURPHEY, JR., was sworn and  
21 testified in behalf of the plaintiff, as follows:

22 DIRECT EXAMINATION

23 BY MR. TUCKER:

24 Q Bill, will you tell the jury your name and

1 address, please?

2 A William Hobson Murphey, Jr.

3 Q Where do you live?

4 A 731 Green Castle Road in Chesterfield.

5 Q What do you do now, Bill?

6 A In roofing and sheet metal business.

7 Q Did you used to work for Weiler Thermospray, or  
8 Weiler Insulation Company?

9 A Weiler Thermospray.

10 Q And when did you work for Weiler?

11 A It's been approximately five years ago, maybe six.

12 Q All right. ~~Were you working for Weiler during the~~  
13 ~~St. Christopher's job?~~

14 A ~~Yes, I was.~~

15 Q And that was in 1975; is that correct?

16 A I believe so.

17 Q And I believe you left Weiler in 1976; is that  
18 correct?

19 A It was about a two-year stay that I had with  
20 Weiler.

21 Q All right. ~~What was your job at Weiler?~~

22 A ~~I was the manager of the thermospray unit, Weiler~~  
23 ~~Thermospray. I was in charge of all the sprayed-on insulation~~  
24 ~~other than Fiberglas.~~

1 Q Did Weiler have any relationship at all with  
2 National Cellulose Corporation?

3 A He was a dealer, franchise applicator, National  
4 Cellulose.

5 Q What do they call Weiler? What was Weiler?

6 A Would be a franchise applicator.

7 Q An applicator?

8 A Right.

9 Q All right. And what do you call the process that  
10 you used to put this spray-on insulation?

11 A Just spray-in-place cellulose.

12 Q All right.

13 A Or spray-on.

14 Q What did being a National Cellulose applicator  
15 entail?

16 A Well, of course, we had to go out and sell the  
17 job.

18 Q What do you mean by that?

19 A Go out and talk to the architects and engineers,  
20 metal building installer, owners, plant engineers, school  
21 boards, anybody that would use an insulation, really.

22 Q All right. And what else did an applicator do?

23 A Well, above and beyond selling the job, it was  
24 installing the material.

1 Q All right. And how would you go about installing?  
2 Could you just give us a rundown of the ~~steps that you took as~~  
3 ~~an applicator for the installation of this insulation?~~

4 A Number one is after the job has been sold and the  
5 building is either erected or it -- maybe it is what we call a  
6 retrofit building, already standing, you go in there and make  
7 sure it was ready to insulate. We had to find a source of  
8 electrical to power the equipment, and water. We needed water  
9 to mix the glue with, had to make arrangements for those  
10 connections, or bring in generators and haul water by barrels.

11 And, after that, we would come in and start  
12 making preparations to apply the material, to be covering up  
13 areas that wouldn't be sprayed, the floors. ~~We would set the~~  
14 ~~equipment up,~~ make the electrical and water connections, put the  
15 hoses on, erect the scaffolding. ~~And, when everything was~~  
16 ~~complete, we would start spraying the material in place.~~

17 Q All right. Now, first of all, was this what was  
18 generally involved in the application process for National  
19 Cellulose Corporation installation?

20 A National Cellulose was a distributor of the  
21 material. They were the people that supplied the equipment and  
22 the material. They had sales representatives to help you go  
23 out and make your sales, make your calls on the architects and  
24 engineers. They had the technical people to help you with the



1 equipment, show you how to apply their material. And that was  
2 their specific role. They would help you if you had trouble on  
3 the job.

4 Q All right. Now, what equipment are you referring  
5 to that you had to use for this National Cellulose Corporation  
6 installation?

7 A Well, it was just two basic machines, and that  
8 was the insulation blower and the pump to pump the glue, along  
9 with the hoses and the nozzles.

10 Q Now, what materials were you using in these  
11 machines?

12 A K-13, National Cellulose's material.

13 Q Was that K-13 a fiber?

14 A Cellulose fiber.

15 Q And you mixed it with some glue; is that right?

16 A Well, when you sprayed it on, it was mixed with  
17 glue.

18 Q All right. Where did the glue come from?

19 A Glue come from glue barrels that were mixed, and  
20 you had one hose that went -- attached to the hose that carried  
21 the fiber. This went all the way to the end, where it was  
22 connected to a nozzle that had spray jets in it. The fiber  
23 came through the middle, and the glue and the fiber came  
24 together after it left the gun.

1 Q All right. Where did you get the equipment  
2 from?

3 A National Cellulose.

4 Q Where did you get the materials from?

5 A National Cellulose.

6 MR. BENNETT: Judge, are we just talking  
7 generally, now, or St. Christopher's?

8 THE COURT: I assume we are talking about this  
9 job. I hope we are.

10 MR. TUCKER: Yes, sir.

11 BY MR. TUCKER:

12 Q Where did you get the materials that you started  
13 out on this St. Christopher's job with?

14 A Well, the materials were there before I came to  
15 Weller. He had bought the materials prior to my coming, so the  
16 bulk of it was in stock.

17 Q And where did those materials come from?

18 A National Cellulose.

19 Q All right. Now, who were the people that were  
20 assigned to this job out at St. Christopher's?

21 A Our people?

22 Q Yes, sir.

23 A Well, was myself, superintendent, we had a boy,  
24 Clankey Allen. He was the job foreman. We had another boy,

1 Jim Coppage, that assisted Clankey in spraying. We had a man,  
2 Clyde Kelley. He was the one that operated the truck which  
3 fed the material and the glue. Then we had other people there  
4 helping move the scaffolding, pushing brooms, so forth and so  
5 on.

6 Q ~~Had you any experience in the application of~~  
7 ~~National Cellulose insulation at that time before you started~~  
8 ~~this St. Christopher's job?~~

9 A ~~Just a little bit, just a little bit.~~ We did  
10 three smaller jobs prior to that, and I would have, above and  
11 beyond making sure everything was there and working all right,  
12 I would sometimes get up there and spray a little bit just to  
13 associate myself with the equipment.

14 Q How did you learn how to do it?

15 A Mostly from Clankey, because Clankey had worked  
16 for Tony before, and he had been through a training session  
17 prior.

18 Q ~~How about these other people that were on the job?~~  
19 ~~Had they had any training in how to put on this spray-on~~  
20 ~~insulation?~~

21 A ~~No.~~

22 Q Now, you mentioned that there were some other  
23 little jobs that you-all had done before the St. Christopher's  
24 job. ~~Is this St. Christopher's job any different from the other~~

1 jobs?

2 A Scope and size, yes; it was three and four times  
3 larger than these others. We did the ceiling of a church, and  
4 we did a small metal building addition for Moore Sign  
5 Corporation. And what was that other thing?

6 Q Well, was it a small job?

7 MR. BENNETT: I think he is trying to think of  
8 the medical center.

9 THE WITNESS: Yes, the medical center, that's it.

10 That was the ceiling of the medical center.

11 BY MR. TUCKER:

12 Q Now, did you notify National Cellulose Corpora-  
13 tion, or any of their representatives, about this  
14 St. Christopher's job before you started?

15 A Yes.

16 Q Why did you do that?

17 A It was a job of a certain size. It was kind of  
18 a feather in your cap to get a job of that size and that scope.  
19 The National Cellulose people, they had a pretty good organiza-  
20 tion. They would talk it up around other distributors about  
21 different people getting certain jobs, and so forth and so on.  
22 They had newsletters that were put on there, certain applicators  
23 got this job and that job, and it was kind of blowing everybody's  
24 horn about it for somebody to make a big sale like that.

1 Q Did you request any assistance from National  
2 Cellulose on the job?

3 A Yes, we did.

4 Q Why did you do that?

5 A Because of the scope of the job and the fact that  
6 we didn't have but actually one person who had ever had any  
7 training with it.

8 Q All right. And what assistance did you ask for?

9 A Well, we went to -- Tony and myself went to a  
10 sales meeting in Houston. There, we talked with the people at  
11 National Cellulose. We checked on some new products that they  
12 had for application, new methods, quality control, ways of  
13 checking coverage to make sure you are getting proper coverage  
14 so you wouldn't use too much material, which would run the cost  
15 up on your jobs.

16 Q Well, what assistance did you request of them?

17 A We had our technical people come down at the  
18 start-up of the job to help us orient our people with spraying,  
19 plus we had a little problem with the machine that they had to  
20 get corrected before we could get started.

21 Q Again, tell me why you needed those technical  
22 people.

23 A Just to help train our people to install the  
24 material.

1 Q And this was because your people didn't know how  
2 to do it?

3 MR. BENNETT: I object. He is leading the guy.

4 THE COURT: Same thing as testifying, Mr. Tucker,  
5 when you do that.

6 BY MR. TUCKER:

7 Q Why was it that you needed these people, again?

8 A We didn't have but one man that ever sprayed it  
9 before.

10 Q ~~Now, did somebody from National Cellulose actually~~  
11 ~~come down to Richmond at the beginning of this job?~~

12 A ~~Yes, they did.~~

13 Q Who was that, sir?

14 A Marvin Giffin.

15 Q All right. Were you there when Mr. Giffin came  
16 down?

17 A Yes, I was.

18 Q How long was he in Richmond on the job?

19 A He was there for a week.

20 Q ~~Were you out at the job during that week?~~

21 A ~~Yes.~~

22 Q ~~How often were you there?~~

23 A ~~I was in and out every day, off and on.~~

24 Q And what was your assignment concerning this

1 particular job?

2 A My responsibility, to make sure the job was  
3 ready to start. I had to make sure we had electrical and water  
4 connections. I had to make sure we got the men and materials  
5 to the job, the scaffolding was there, and everything set to  
6 go.

7 Q After it started, what responsibilities did you  
8 have?

9 A Make sure everything was operating all right,  
10 that they had all materials there, that enough men was there  
11 to properly operate the job.

12 Q All right. Well, tell me what, if anything,  
13 Mr. Giffin did at the job site during this week that he was  
14 there.

15 A Well, the first thing he did when he came in,  
16 that was before we went to the job, is we worked on the machine.  
17 It had electrical problems, and it kept blowing fuses.

18 Q Which machine was this?

19 A This was the blower, the fiber machine, the  
20 blowing machine, not the glue pump.

21 Q Where had you gotten that fiber machine?

22 A It was from National Cellulose.

23 Q And what was the problem with it?

24 MR. BENNETT: Can we clear up -- he says gotten

1           that machine. I think they got it from them.

2           THE WITNESS: It was leased.

3           MR. BENNETT: Oh, leased? Go ahead.

4           BY MR. TUCKER:

5           Q        Again, what was the problem with the machine?

6           A        It was an electrical short. It kept blowing a  
7           fuse, cutting it off.

8           Q        What, if anything, did Mr. Giffin do about that  
9           problem?

10          A        Well, he came in, checked the electrical panel  
11          out, didn't do much, because we didn't work on it long. This  
12          was at the warehouse, put in a new fuse. We operated it for a  
13          little bit, sprayed a little fiber back in the back, just used  
14          water on it instead of putting glue, sprayed it up against the  
15          wall in the back of the warehouse. Everything operated okay  
16          then, so we cut it off, loaded everything up in the truck. And  
17          the next morning, we took everything out to the job.

18          Q        All right. Now, what, if anything, did  
19          Mr. Giffin do concerning setting up the equipment for the job?

20          A        Well, we had some conversion kits, and so forth  
21          and so on, to put on the machine for more volume, because we  
22          were interested, of course, in doing the job as quick as possi-  
23          ble. But we didn't hook it on, because Marvin felt like it  
24          would be a mistake on our part to have brand new trainees



1 operating this machine at high speed, that we would end up  
2 wasting more material than was actually sprayed on, so we left  
3 the machine alone.

4 Q All right. ~~Now~~, who set up the machinery to start  
5 this job?

6 A ~~Well~~, the machine was actually set up when we got  
7 it.

8 Q Who set it up?

9 A National Cellulose sent the machine on their  
10 truck when they sent the material to the plant.

11 Q Who set it up on the job site at St. Christopher's?

12 A Well, it was between myself and Clankey and Marvin  
13 and Clyde and all of us as far as setting the machine up, hook-  
14 ing the hoses up and everything.

15 Q ~~Now~~, did this machine have any different settings  
16 for the flow of fiber, for the flow of glue?

17 A Yes, it had the thing where you could increase  
18 the flow of fiber, but that wasn't fooled with, that was kept at  
19 the low setting.

20 Q ~~Who determined it would be kept at the low~~  
21 ~~setting?~~

22 A Well, like I said, it was decided since we had so  
23 many new personnel that had never had any experience with the  
24 spray work, it was decided to keep the thing at a nice slow

1 easy pace.

2 Q Who decided that?

3 A Well, it was suggested and talked over between  
4 Marvin, Tony and myself.

5 Q And who decided to do it that way?

6 A Of course, it was Tony's and my actual decision,  
7 but it was at Marvin's recommendation.

8 Q All right. Now, was there any testing of the  
9 material done by Mr. Giffin at the job site?

10 A Well, after we set it up and got out there and  
11 got ready to spray, it wouldn't work. The short kept acting  
12 up, so that is when we tried to bypass the fuse. And when we  
13 did that, we burned out the panel, the control panel itself.

14 Q All right. What, if any, testing was done to  
15 see how much fiber was coming out of the machine, or how much  
16 glue was coming out of the machine?

17 A None. It was just a matter of cranking it up,  
18 see if you had proper flow, and that was a sight check.

19 Q All right. Who checked that?

20 A Marvin. He was the one that was there that  
21 actually started the spraying.

22 Q All right. And what, if anything, did he do to  
23 check the flow of the glue out of the machine?

24 A As long as you got a proper spray pattern out of

1 the nozzles, then the flow was okay, the pressure was up, and  
2 the tips were open, and that was it.

3 Q What did he do, actually, to check the pressure?

4 A Just looked at it, turned it on and looked at it.

5 Q Did he squirt any in a bucket like that to  
6 measure how much was coming out at the time?

7 A No.

8 Q Did he run any other tests on it other than look  
9 at it?

10 A No.

11 Q What, if anything, did he tell you concerning  
12 whether that was a proper amount coming out?

13 A Said it looked good to him.

14 Q Okay.

15 A Because he went up there and got the man that  
16 started spraying it, once we finally got the machine to work.

17 Q All right. Now, what, if anything, did  
18 Mr. Giffin do to teach you and your crew how to put this stuff  
19 on at the job site?

20 A He went over the technique of holding the nozzle.  
21 Comfort was a big thing in spraying that much insulation. We  
22 had to keep two people up there, one to relieve the other one  
23 after he sprayed for a period of time, to help manage the hose.  
24 One man, while he was resting, would be holding a hose so it

1 wouldn't pull and tug on the man that was actually spraying.  
2 You know, you had to hold the nozzle at the correct angle and  
3 at a proper length away from the surface to be sprayed. You  
4 had to try to be uniform in your spray patterns, so you could  
5 get a uniform thickness. And, of course, you had to come back  
6 and check yourself after you sprayed a little bit to make sure  
7 you were putting on the proper thickness. And they had a method  
8 of checking it, the coverage, after you had sprayed a period of  
9 time, because so many pounds of fiber would cover so many square  
10 feet at one inch thick. And you would just come back and check  
11 yourself there, at the ends, to make sure you were getting a  
12 proper coverage. And it was so many pounds of fiber, and there  
13 was so many barrels of glue. You could check your glue by  
14 doing that, too.

15 Q Did Mr. Giffin check that?

16 A Mr. Giffin didn't actually --

17 MR. BENNETT: I am going to object, at this  
18 point, because this man has already testified he is in  
19 and out during this job. How could he say what  
20 Mr. Giffin did during the week?

21 THE COURT: That goes to the weight of his  
22 testimony, not to the admissibility.

23 MR. BENNETT: I would like him to confine himself  
24 to what he knows of his personal knowledge.

1 THE COURT: Well, that certainly would be true,  
2 only what you know yourself. What was the answer to  
3 that question? The question was whether or not  
4 Mr. -- is it Giffin or Griffin?

5 MR. TUCKER: Giffin.

6 THE COURT: -- did any checking. And what  
7 knowledge do you have of what he did?

8 THE WITNESS: I do not believe Marvin checked for  
9 proper coverage while he was there.

10 THE COURT: Well, do not believe is one thing.  
11 The question is what do you know.

12 THE WITNESS: I do not know. No, I do not know  
13 if Marvin Giffin -- ~~I do know how much area was covered~~  
14 ~~by Marvin while he was on the job.~~

15 BY MR. TUCKER:

16 Q ~~And how much was that?~~

17 A Approximately 3,000 feet.

18 Q All right. Where was that in the building?

19 A It was in two spots. The first spot he did was  
20 on the side wall section. That was when he finally got the  
21 machine to operate. That was late one evening. And then the  
22 next morning, they took the JLG manlift and raised it into the  
23 high part and started spraying in there.

24 THE COURT: Are you talking about the wall, now?

1 Were you supposed to do the wall and ceilings?

2 THE WITNESS: There was a strip of wall around  
3 the perimeter that didn't get covered up by this inside  
4 paneling, and we insulated that.

5 BY MR. TUCKER:

6 Q Now, while that was being done, were you there?

7 A I was there when he started spraying that side  
8 wall, and I came in there while he was up in the high part the  
9 next day.

10 Q Let me make sure I understand what you are telling  
11 me. ~~Tell me~~ once again how it was that you and your men  
12 determined how much glue would go into that mixture that was  
13 ~~actually~~ sprayed on the ceiling?

14 A ~~The glue was determined by the nozzles on the gun.~~

15 Q All right. ~~And tell me, who checked the nozzles?~~

16 A They were flow-checked. We bought those from  
17 National Cellulose.

18 Q ~~Tell me~~ who check the nozzles at the site.

19 A Marvin.

20 Q All right. ~~Now,~~ were those nozzles, to your  
21 knowledge, after Marvin checked them, ever changed in any way?

22 A Yes.

23 Q ~~How~~ were they changed?

24 A When they stopped up, or they would start

1 spraying erratically, then they were pulled out. They were  
2 made of real soft brass, and they would wear out after a  
3 period of time.

4 Q So you replaced them?

5 A Yes. And once they stopped up, if the glue ever  
6 hardened on them, you wasn't supposed to clean them, because  
7 they were so soft that if you pushed anything into the opening,  
8 it was hard, it would foul the tips up.

9 Q Now, to your knowledge, were there ever any  
10 adjustments made after Mr. Giffin adjusted this machine? Were  
11 there ever any adjustments made by you or any of your men to  
12 change the flow rate of the glue coming out of the machine?

13 THE COURT: Just a moment.

14 MR. BENNETT: I am going to object to this  
15 question. I know Mr. Murphey is not trying to tell us  
16 something he doesn't know, but obviously his role is an  
17 in-and-out type supervisor. How can he know what his  
18 men may or may not have done?

19 MR. TUCKER: He is going to tell you.

20 THE COURT: Mr. Murphey, you have to understand  
21 this type of question is based on what you know, not what  
22 somebody has told you.

23 THE WITNESS: Right.

24 THE COURT: So ask the question again,

1 Mr. Tucker, with that understanding.

2 MR. TUCKER: All right.

3 BY MR. TUCKER:

4 Q What, if anything, was done by you or your men,  
5 to your knowledge, after Mr. Giffin looked at the nozzle,  
6 checked it, and determined the glue flowing out of that that  
7 might have changed the flow rate of that glue?

8 A I know that while I was there, there were times  
9 that we removed nozzles, replaced them with clean new ones.

10 Q All right.

11 A To maintain proper flow.

12 Q Now, what, if anything, would that have done to  
13 increase the flow or decrease the flow that was coming from the  
14 pump?

15 A That was done to maintain proper flow.

16 Q Was there anything else done?

17 A Nothing while I was there.

18 Q Now, how often were you on the job site while it  
19 was being done?

20 A It was a minimum of twice a day that I was on the  
21 job site.

22 Q Did you do any spraying yourself?

23 A Yes.

24 Q How much of it did you spray?



1           A           It was during the last part of the job that I  
2 spent one or two days there helping spray.

3           Q           Now, were you there when other people were  
4 spraying?

5           A           Clankey and Jim.

6           Q           Now, what, if anything, do you know about what  
7 they may have done concerning changing the flow of the glue?

8           A           Other than keeping the tips clean, that was it.

9           Q           All right.

10          A           They stayed up on the scaffolding all the time.

11          Q           Now, after Mr. Giffin left at the end of the  
12 week, do you know -- well, to your knowledge, did you or any of  
13 your men do anything in spraying the insulation on that  
14 building that Mr. Giffin had not told you to do?

15               MR. BENNETT: I object to that question. That is  
16 obviously calling for a conclusion. He was not there  
17 but two times a day. How can he know?

18               MR. TUCKER: I asked him to his own personal  
19 knowledge.

20               THE COURT: Let's break the question down. I  
21 think it is a fair question to ask him if he did any-  
22 thing. First, let's start there.

23          A           I did not do anything to change Marvin's  
24 instructions.

1 BY MR. TUCKER:

2 Q All right.

3 A While I was there, they did exactly as Marvin  
4 had instructed them.

5 Q Who was it that taught you how to operate these  
6 machines?

7 A Well, when I first came there, this was my  
8 first introduction to it was the actual manuals on the equip-  
9 ment.

10 Q All right. What manual are you referring to?  
11 Where did that come from?

12 A The application and the franchise manual from  
13 National Cellulose.

14 Q All right. Now, who taught you how to use that  
15 machine on the St. Christopher's job?

16 A On the St. Christopher's job was Marvin.

17 Q And who taught you how to spray on the  
18 St. Christopher's job?

19 A Marvin.

20 Q And who taught your men how to spray the  
21 insulation and how to use the machinery on the St. Christopher's  
22 job?

23 A Marvin worked with the men on the  
24 St. Christopher's job.

1 Q I believe, Mr. Murphey, there came a point in  
2 time when you ran out of fiber that you had; is that correct?

3 A That's right.

4 Q All right. Now, what did you do to get some  
5 other fiber?

6 A Well, Tony started calling around to different  
7 people. He talked to Ted Lockwood, and he finally ended up  
8 buying some material from -- I believe his name was Mr. Jones  
9 in Pennsylvania.

10 Q What kind of material did you buy?

11 A K-13, the blue K-13 like we were using.

12 Q Well, was that K-13 National Cellulose material?

13 A Yes.

14 Q All right. Why did you go to this man in  
15 Pennsylvania to buy the material?

16 A He was the closest source of the small amount  
17 that we needed for to complete the job.

18 Q Why didn't you just buy it from National  
19 Cellulose Corporation?

20 A Well, the minimum we could buy from them was a  
21 half a trailerload. And, from what I understand, they would  
22 not ship that half a trailerload until the bulk was filled by  
23 some other applicator.

24 THE COURT: Its relevancy? Let's go on with the

1 case. I mean, there is no issue about the fiber, is it?

2 MR. TUCKER: There could be.

3 THE COURT: Well, could be is one thing. Are you  
4 vouching there is an issue? Because that hasn't been --

5 MR. TUCKER: I am not raising it, Your Honor; the  
6 defendant may be.

7 BY MR. TUCKER:

8 Q Did you also buy some glue?

9 A Yes, sir.

10 Q You ran out of the --

11 A The glue. That was after we had picked up the  
12 fiber and got that back. And then, a little bit later, we ran  
13 short of the glue.

14 Q All right. Now, what kind of glue was this that  
15 you got?

16 A I went to Lockwood Company, and he sent me to a  
17 place in Lorton, Virginia, which is where Davenport Insulation  
18 manufactures cellulose. And we bought this glue from  
19 Davenport Insulation through Ted Lockwood.

20 Q Was this National Cellulose glue?

21 A No, it wasn't.

22 Q ~~Now, this additional glue and fiber that you got,~~  
23 ~~did you use any different method to put that up than you did~~  
24 ~~the National Cellulose materials?~~

1           A       There was no different method to put it up after  
2 it was, you know, sprayed in place. You had one application  
3 technique.

4           Q       Well, did you do anything differently with that  
5 material than you did with the material that you had to start  
6 the job? .

7           A       Just sprayed it on.

8                   MR. TUCKER: That's all I have, Judge.

9                   THE COURT: Mr. Bennett?

10  
11                   CROSS-EXAMINATION

12 BY MR. BENNETT:

13           Q       Mr. Murphey, as I understand it, you came to work  
14 for Tony Weiler sometime around about '74; is that correct?

15           A       I believe that's correct.

16           Q       Was it about nine months before the  
17 St. Christopher's job?

18           A       I don't believe it was that long.

19           Q       Maybe six months before?

20  
21           A       Probably more in that area.

22           Q       And the St. Christopher's job, we have agreed,  
23 was in June and July of 1975?

24           A       Yes.

Murphey - Cross

1 Q Prior to the time that you came with Weiler,  
2 was he already spraying K-13 on other jobs?

3 A Three other.

4 Q Well, you had three before the St. Christopher'  
5 job while you were there.

6 A That's right. Now, what he did before I came,  
7 I'm not sure.

8 Q Right. But it was your understanding that he had  
9 been a distributor for this product for sometime?

10 A I don't actually think he was there that long.  
11 Only thing that was ever discussed about it is they did a little  
12 garage somewhere in the Short Pump area with the material,  
13 because he had pictures of it.

14 Q But you don't know how many jobs he did before  
15 you got there?

16 A No.

17 Q All right. Now, your function at Weiler  
18 Insulation Company, or Weiler Thermospray, was basically to  
19 sell the jobs and then to be sort of the man in charge, to make  
20 sure that the men got on the jobs and they had the equipment,  
21 and that type of thing?

22 A The only thing that I didn't do while I was at  
23 Weiler was a lot of the book work. I even went down to collect-  
24 ing the money on certain jobs that we did.

1 Q Right. And, as I understand your testimony  
2 on the St. Christopher's job, you would generally come by  
3 the morning and make sure that your crew was there and that  
4 they were working, and then check back in the afternoon to m  
5 sure they were working?

6 A There had been no problems. I would pick up  
7 people and take them out there to see the job.

8 Q Right. But you were not there on the scene  
9 spraying up material for any length of time during the course  
10 of a given day on this job?

11 A Only at the end when we were trying to finish it  
12 up.

13 Q Did you have an applicator quit in the middle of  
14 this job? Did Clankey Allen quit right in the middle of this  
15 job?

16 A I do not remember if he quit in the middle of  
17 that one or not.

18 Q Clankey quit at some point; didn't he?

19 A Oh, yes; Clankey wouldn't work for anybody any  
20 longer than a few months.

21 Q And was Clankey working for Weiler when you came?

22 A No, he worked for Weiler before I came there, and  
23 came back after I had been there.

24 Q I see. And he was the one that had the

Murphey - Cross

1 experience with spraying the K-13?

2 A Well, it was Clankey and another boy named Fra  
3 Enricus. But Frank didn't do that much spray work at that  
4 particular time, because Frank worked with me in the sales  
5 part.

6 Q Let's stick to the people in the St. Christopher's  
7 job so we don't get too confused. On the St. Christopher's  
8 job, Clankey was the only employee that had any experience  
9 spraying this material?

10 A That's right.

11 Q And he had sprayed the three jobs that you have  
12 referred to? He was the primary man on this?

13 A That's right.

14 Q And he was the foreman on this job?

15 A That's right.

16 Q And it was his responsibility to stay there all  
17 day and spray and make sure everything was going right?

18 A That's right.

19 Q All right. Now, when you mix up the glue, how do  
20 you do that?

21 A Well, it was on a ratio. I forget what exactly  
22 the ratio was, but we would keep empty drums there, and we would  
23 put so many gallons of glue in the drum and then fill it up  
24 with water.



1 Q All right. 55-gallon type drums?

2 A I don't believe they were 55-gallon drums,  
3 because they were cardboard drums, and I don't think they were

4 Q Well, now, who mixed up the glue and water?

5 A Mr. Kelley was in charge of handling that on the  
6 St. Christopher's job.

7 Q Did you ever check Mr. Kelley to see that he was  
8 doing that correctly during the course of his job?

9 A I always checked with Mr. Kelley to make sure  
10 he was doing okay, yes.

11 Q When you would come by in the morning or after-  
12 noon, you would say, "Are you doing all right?"

13 A "All right? Everything going okay? No problem  
14 with the equipment?"

15 Q But you didn't actually physically check him to  
16 see that he was putting the right amount of glue and the right  
17 amount of water into what the pump was pumping; did you?

18 A Huh-uh.

19 Q When did you do that?

20 A I worked on the truck a lot of the times,  
21 because we had some pump problems when we first started.

22 Q Well, how many times during the course of this  
23 job did you check Mr. Allen's mixture when he would mix that?

24 A I personally didn't check Mr. Allen's mixture at

1 any point. I was present when Mr. Kelley did fill the d

2 Q Right. But you didn't check to see that he  
3 getting the proper ratio? That was his --

4 A The proper ratio, as far as glue and fiber, v  
5 controlled by the nozzles.

6 Q I am talking about proper ratio of water to gl

7 A I was there when Mr. Kelley filled the glue  
8 barrels, and he was putting what was supposed to have been in  
9 there, so many gallons of glue to so many gallons of water.

10 Q And what is the ratio that you used?

11 A I don't remember that, at this time.

12 Q Okay. Now, when you bought this other glue, the  
13 Fuller adhesive --

14 A That's right.

15 Q -- did that have a different ratio? Did you  
16 have to mix that up with water, too?

17 A That was emulsion, too.

18 Q Do you have to put more water in that?

19 A I don't remember if the ratio was the same on  
20 that or not.

21 Q So you might have had some change right there  
22 when you switched glues?

23 A It was possible, but that was -- it had instruc-  
24 tions for that material on top of the barrel.

1 Q All right. Did you have any experience or any  
2 reason to think that this was the same as K-13? Or did you  
3 know?

4 A It was insulation adhesive that was used by  
5 Davenport. They have a system similar to National Cellulose  
6 K-13 that they use, and this was theirs.

7 Q Did Marvin Giffen, when he was in Richmond, say  
8 it was all right to substitute any glue that you wanted?

9 A No.

10 Q Now, during the course of this job, am I correct  
11 that, on the average day, you would be there in the morning for  
12 some period of time?

13 A That's right.

14 Q Half an hour?

15 A Half hour to an hour, sometimes an hour and a  
16 half. Sometimes I would have to leave, pick up something, bring  
17 it back.

18 Q All right. Now, what would you do? What were  
19 you there for your hour in the morning?

20 A Normally check on how things were going, see if  
21 there was any problems with either the manlift, the scaffolding,  
22 the trucks, the fiber machine.

23 Q Now, you say that you don't remember your men  
24 doing anything to change the flow of glue. Why did you change

1 tips on the nozzles?

2 A If they stopped up or wore out, they wouldn't  
3 give you a proper ratio.

4 Q And, as I understand, the nozzle we are dealing  
5 with has eight tips; is that right?

6 A It was either six or eight.

7 Q You don't know? All right. And these are the  
8 openings that the glue shoots out of?

9 A That's right.

10 Q And, during the course of this job, you recall  
11 specifically having to change those tips on several occasions?

12 A That's right.

13 Q And you would only change them if they got  
14 clogged up?

15 A That's right.

16 Q All right.

17 A Or they wore out.

18 Q Or they wore out, and if they got clogged up,  
19 you wouldn't be getting enough glue?

20 A You wouldn't get any glue out, or it would spray  
21 off to the side.

22 Q And if that happened, you wouldn't get the proper  
23 glue-to-fiber ratio?

24 A That's right.

1 Q And you do recall having to change those during  
2 the job?

3 A That's right.

4 Q And this would be after Marvin left?

5 A That's right.

6 Q Okay. Now, do you recall this nozzle that you  
7 spray up? Does that have a gauge on it to tell you what  
8 pressure you have got there of glue?

9 A I don't recall it having a gauge. It had an  
10 on-off valve for the glue itself, but I don't recall if it had  
11 a pressure gauge at the nozzle or not.

12 Q Do you remember whether or not it had a setting  
13 so that you could change the amount of pressure, glue pressure  
14 you have got there?

15 A It was strictly an on-off valve.

16 Q Strictly on-off, that you recall?

17 A Uh-huh.

18 Q How about the fiber machine? Did I hear you say  
19 that you recall Marvin setting this on the lowest speed?

20 A Marvin did not set it on the lowest speed,  
21 Marvin left it as it was set, which was on the lowest speed.

22 Q All right.

23 A We have bought a high-speed conversion kit to  
24 install on that machine.

1 Q But you never got into that for this job?

2 A We didn't put it on, because we didn't think it  
3 was advisable.

4 Q All right. Now, you are in the midst of this  
5 job, and you ran out of material, as I understand.

6 A That's right.

7 Q The fiber material?

8 A That's right.

9 Q And the fiber that you were blowing at first,  
10 the National Cellulose fiber, was blue?

11 A That's right.

12 Q And you were blowing a solid blue one-inch layer?

13 A That's right.

14 Q At what point in the job, approximately, did you  
15 run out of fiber? Halfway through?

16 A No, we had finished all that high center section,  
17 and we were working around the perimeter of the building where  
18 it made that step down.

19 Q Okay. And I think you said earlier that you went  
20 in and bought blue K-13 from another source?

21 A That's right.

22 Q Okay. And did that give you enough material to  
23 finish the job?

24 A To my knowledge, I believe we did, yes, yes.

1 Q Enough fiber material?

2 A Enough fiber.

3 Q So all you used was blue on that job?

4 A To my knowledge, yes, sir.

5 Q All right. Now, we have already marked these  
6 pictures. I would like to refer to them, if I may. If you  
7 can, look through these pictures, Mr. Murphey. And I will tell  
8 you those are pictures that we have agreed were taken a few  
9 weeks ago of this building and the insulation.

10 A Uh-huh.

11 Q And, in looking through there, do you see some  
12 areas where you have got some brown-looking stuff?

13 A Uh-huh.

14 Q And then some greeny-blue looking stuff?

15 A That's right.

16 Q Can you explain to me how, on this job, that  
17 brown fiber got up there underneath the blue fiber?

18 MR. TUCKER: Objection. I am going to object to  
19 the relevancy of this insofar as what we are talking  
20 about is the lack of glue. It doesn't make any  
21 difference as to what the color of the fiber is, unless  
22 we can show it is connected up in some way that this  
23 brown fiber, or whatever color it is, has something to  
24 do with it falling down. I don't think it is relevant

1 at all.

2 THE COURT: Objection is overruled.

3 BY MR. BENNETT:

4 Q You see the pictures with the brown fiber?

5 A Yes.

6 MR. BENNETT: May I approach the witness, Your  
7 Honor?

8 THE COURT: Yes.

9 MR. BENNETT: Give me one of those close-up  
10 pictures. Would it be all right if I passed one of these  
11 to the jury? There are two very similar pictures. One  
12 is marked 14 that I will pass to the jury, if I may.

13 BY MR. BENNETT:

14 Q And I will ask you to look at 13, which I think  
15 is showing approximately the same area.

16 A That's right.

17 Q Now, that shows an area where most of the  
18 insulation has fallen off; is that correct?

19 A Yes.

20 Q And there is some brown-type insulation left  
21 there stuck against the middle?

22 A Yes.

23 Q And then we see some areas where it is greeny-  
24 blue type color.



1           A           Yes.

2           Q           Is that greeny-blue type color, is that the color  
3 of the K-13?

4           A           Yes, it was blue.

5           Q           How did that brown stuff get underneath the  
6 blue stuff?

7           A           I do not know.

8           Q           To your knowledge, there was no color other than  
9 blue K-13 used on that job?

10          A           To my knowledge, no.

11                   THE COURT: Ladies and gentlemen of the jury --  
12 I assume they are looking at the ceiling, at this point.

13                   THE WITNESS: Yes.

14                   THE COURT: The picture is similar to the one  
15 you have got that is a ceiling shot looking up.

16                   THE WITNESS: I am looking right now through  
17 pictures of the entire far-off scans.

18                   THE COURT: The one they are looking at is like  
19 the one I will be handing back to you. I think that  
20 is the ceiling. Is that the ceiling, Mr. Bennett?

21                   MR. BENNETT: Yes, Your Honor. This is a close-  
22 up view of a particular section.

23                   THE COURT: Of the ceiling?

24                   MR. BENNETT: Yes, sir.

1 BY MR. BENNETT:

2 Q Well, Mr. Murphey, I understand that you weren't  
3 there for all of the days, but would you have known if your  
4 men were using some other fiber?

5 A I was there. I brought most of the bulk of the  
6 fiber there.

7 Q Let me ask you this: Did Mr. Weiler at the time  
8 you worked for him also have some material, some fiber material  
9 known as Thermocon, or Thermo-K?

10 A Yes.

11 Q All right. It is manufactured by someone other  
12 than National Cellulose?

13 A Yes.

14 Q Is that material an off-white or brown-type color?

15 A He had some off-white, yes, sir.

16 Q And that off-white color, after it is sprayed,  
17 it has been up there awhile, does it take on a similar  
18 appearance to what we see in PLAINTIFF'S EXHIBIT 14, the  
19 close-up?

20 A Only off-white Thermo-K I've ever seen was in  
21 Tony's office at the old warehouse that he had when I first  
22 got there, and that was off-white.

23 Q Well, was any of that Thermocon fiber used on  
24 this job?

1 A Not to my knowledge.

2 Q Do you have any explanation for this?

3 THE COURT: He has already answered the question,  
4 Mr. Bennett, that he doesn't know.

5 BY MR. BENNETT:

6 Q Now, what part of the building did you use with  
7 glue that you bought, this Fuller adhesive?

8 A It was the very last section.

9 Q How many drums do you recall buying?

10 A We bought two.

11 Q You bought two?

12 A That's right.

13 Q And did you use all those up?

14 A I don't remember if we used all of that glue  
15 at that time or not.

16 Q Would that be two 55-gallon drums?

17 A That's right. They were steel 55-gallon drums.

18 Q Right.

19 BY THE COURT:

20 Q Do you have any idea how much glue you used on  
21 the whole job?

22 A No, I don't, Your Honor.

23 Q Can you identify from a photograph or location of  
24 the building where it was that you used this glue that you

1 bought?

2 A Yes.

3 Q Where was it in the building in terms of -- I  
4 think you-all have a diagram that talks east to west, and so  
5 forth. Can you do it from a photograph? Can you find a  
6 photograph that shows where it was in the building?

7 A Well, it was along the football field side of  
8 the building.

9 MR. BENNETT: I think we can agree that is the  
10 north side.

11 A Over towards the school where it connected to  
12 the school. As we went over to the big overhead door that is  
13 in that corner is where we used that.

14 BY MR. BENNETT:

15 Q As I understand, when Mr. Giffin was there, when  
16 he was spraying the high area, that was up in the area of the  
17 dormer windows on one of the bays?

18 A He was in a high opposite end of the building.

19 Q Now, as I understand it, Mr. Giffin was there,  
20 actually, for approximately 3,000 square feet of spraying  
21 operation?

22 A That's right.

23 Q And he actually sprayed some, and your men  
24 actually sprayed some while he was there?

1           A           He was in the lift with my two men while all the  
2           spraying was done.

3                   MR. BENNETT: I think that's all I have, Your  
4           Honor.

5                   THE COURT: Any redirect, Mr. Tucker?

6                   MR. TUCKER: Yes, sir.

7  
8                               REDIRECT EXAMINATION

9           BY MR. TUCKER:

10           Q           Did Mr. Giffin give Mr. Kelley any instructions  
11           at the job site?

12           A           I did not see him give any instructions.

13           Q           All right. Did Mr. Giffin give you or your men  
14           any instructions at the job site concerning the mix of the  
15           water and the powder adhesive?

16           A           Wasn't powder adhesive, it was a liquid.

17           Q           Did he give you any instructions there?

18           A           I do not remember.

19           Q           Now, did Mr. Giffin give you any instruction as  
20           to when to change these tips?

21           A           Well, that was -- the changing of the tips were  
22           really -- that was self-explanatory. When you were spraying  
23           the material, and that thing -- either one or two of them cut  
24           off, or they started getting haywire, that is when you stopped

1 and changed them.

2 Q Did you have any discussion about that with  
3 Mr. Giffin?

4 A I do not remember having any direct discussion  
5 with Mr. Giffin about that.

6 Q Mr. Murphey, let me show you a map that you drew  
7 previously at your deposition wherein you attempted to identify  
8 and did identify the area where you put up this glue that you  
9 got from Lockwood.

10 A Uh-huh.

11 MR. TUCKER: May I present that to the witness,  
12 Judge?

13 THE COURT: Let me mark it. What was the last  
14 exhibit? This will be 28. Are you going to introduce  
15 this?

16 MR. TUCKER: Yes, sir.

17 THE COURT: Have you seen this, Mr. Bennett?

18 MR. BENNETT: That is from the deposition, yes.

19 (A hand-drawn diagram was marked  
20 PLAINTIFF'S EXHIBIT NO. 28 and received in  
21 evidence.)  
22

23 BY MR. TUCKER:

24 Q Is this your drawing, Mr. Murphey?

1 A Yes, it is.

2 Q Can you tell us on that drawing where it is that  
3 you previously drew to define the area where you put up this  
4 glue from Lockwood?

5 A It is right here where I have marked "Finish."

6 Q All right.

7 A I have got it marked as Lockwood glue.

8 Q Could you hold that up to the jury and show them?  
9 Is this the area you are referring to?

10 A Yes.

11 MR. TUCKER: All right. Could I hand that to the  
12 jury?

13 THE COURT: Yes.

14 MR. BENNETT: May I see that just a second?

15 BY MR. TUCKER:

16 Q Did you see on any of those photographs that  
17 Mr. Bennett gave you the area that was marked there "Finish"?

18 A I was trying to recognize which end of the  
19 auditorium it was. I was looking for the overhead door. I  
20 believe, if I am not mistaken, it was in this picture here. I  
21 am not real sure if this is that wall or not. And that ceiling  
22 was above that, 1, 2, 3, and 4, that they have got marked  
23 there.

24 Q All right. This would be PLAINTIFF'S EXHIBIT 18

1 you are referring to; is that correct?

2 A Yes.

3 Q And you are referring to the areas here which  
4 have the numbers 1, 2, 3, and 4 on them?

5 A It might have been all the way over to 6 that  
6 we sprayed this material.

7 Q All right. It was in that last section.

8 MR. TUCKER: Could I show that to the jury,  
9 again?

10 THE COURT: Yes.

11 MR. TUCKER: I believe that's all I have, Your  
12 Honor.

13 MR. BENNETT: A few more questions.

14 THE COURT: Just a minute, Mr. Bennett.

15 MR. BENNETT: Oh, I'm sorry. Have they finished  
16 looking at that?

17 THE COURT: No, no.

18 JUROR ADAMS: Could I ask a question about the  
19 glue?

20 THE COURT: Let me hear the question.

21 JUROR ADAMS: Is it normal procedure to put the  
22 same amount of mixture, water and glue, for every job  
23 so that if they did a small garage, or if they did a big  
24 auditorium, or whatever, that it would be the same amount



1 of glue regardless?

2 THE COURT: That is a fair question.

3 MR. BENNETT: Yes.

4 THE COURT: Is that true?

5 THE WITNESS: That is true.

6 THE COURT: Yes, this is true.

7  
8 RECROSS-EXAMINATION

9 BY MR. BENNETT:

10 Q Bill, with regard to the Fuller glue that you  
11 bought, do you remember whether you bought that from Lockwood?  
12 I think you said earlier you got it from somewhere else.

13 A We picked the material up at this Lorton ware-  
14 house, Lorton, Virginia, warehouse. I'm not real sure exactly  
15 how the transaction was between Tony and Ted Lockwood as to  
16 whether or not he bought it from them or bought it direct. I  
17 know that --

18 Q You just went and picked it up?

19 A I went to get it.

20 Q Right. And this was after you had already made  
21 the one trip to Pennsylvania to get some blue K-13 fiber?

22 A That's right.

23 Q All right. I understand this thing happened five  
24 years ago. How long after this incident did you work for

1 Weiler Insulation?

2 A Well, just trying to guess, it was in an 18-month  
3 range of -- it was a little over a year before I left.

4 Q Okay. Since that time, have you given this  
5 incident any great thought, or are you trying to just tell us  
6 what you remember today?

7 A Just trying to remember. I have had an occasion  
8 to see the Moore Sign job. That was last year, as early as  
9 last year.

10 Q This was a job you did before?

11 A That's right.

12 MR. BENNETT: I think that's all I have, Your  
13 Honor.

14 MR. TUCKER: Your Honor, I have only two,  
15 prompted by these questions. Could I ask them?

16 THE COURT: All right, sir. We are going to end  
17 here in a minute.

18 MR. TUCKER: All right.

19  
20 REDIRECT EXAMINATION

21 BY MR. TUCKER:

22 Q Mr. Murphey, did a National Cellulose representa-  
23 tive come down and assist you in any way with these three jobs  
24 that you did prior to the St. Christopher's job?

1 MR. BENNETT: Judge, now, what relevance is that?

2 THE COURT: I'm a little bit confused as to the  
3 relevance of that.

4 MR. TUCKER: The relevance is, I believe, they  
5 testified that they did not, and there had been no  
6 problems with the other jobs.

7 THE COURT: But does that have anything to do with  
8 this job? Objection sustained.

9 MR. TUCKER: All right. That's all I have.

10 THE COURT: You can step down. Do you-all want  
11 him to remain outside, or release him?

12 MR. BENNETT: Judge, I can't release him as yet.  
13 I'm sorry.

14 THE COURT: You will have to wait.

15  
16 (The witness stood aside.)

17  
18 THE COURT: Leave those right there. You just  
19 remain out in the hall, Mr. Murphey. I don't think I told you  
20 this. The purpose of separating witnesses is so they don't  
21 discuss their testimony. So when you go out there, you are not  
22 going to tell those fellows out there what you testified to, and  
23 they shouldn't ask you. And they aren't supposed to tell you  
24 what they testified to.

1 MR. MURPHEY: All right.

2 THE COURT: Next witness?

3 MR. TUCKER: Your Honor, before I call the next  
4 witness, I would like to read into evidence, if I might, some  
5 Answers to Interrogatories that were submitted to National  
6 Cellulose, and their response.

7 THE COURT: Would you check that with Mr. Bennett?

8 MR. BENNETT: Which ones do you want to read?

9 THE COURT: I hope you-all have got copies. This  
10 file is a mess.

11 MR. TUCKER: May I explain to them what this is?

12 THE COURT: Yes.

13 MR. TUCKER: Ladies and gentlemen of the jury,  
14 these are written questions that were submitted to National  
15 Cellulose Corporation and which their representative responded  
16 to under oath. I realize it is tedious, but I need to read  
17 these into the record, because it relates to some testimony  
18 that you-all will hear later.

19 -The first question is: "State with particularity  
20 the chemical composition of the K-13 insulation in its finished  
21 state that was sold to Weiler Insulation for use in the  
22 St. Christopher's field house, assuming proper preparation and  
23 application of the insulation."

24 Answer: "Seventy-six percent cellulose fiber,

1 four percent aluminum sulfate, and twenty percent boric acid."

2 And then, following that are tolerances, I  
3 believe, which are: Boric, plus 3.5, minus 1.0; sulfate,  
4 plus .5, minus 4.0; fiber, plus 1, minus 2.

5 In Question 4, I asked them to state the ratio of  
6 product to fiber that was specified for the materials sold to  
7 Weiler for application in the St. Christopher's field house.

8 Answer: ".051 gallons of adhesive to one pound of  
9 fiber."

10 5: "State what, if anything, your representative  
11 did to assure the proper mixture of K-13 product sold to Weiler  
12 for application in the St. Christopher's field house."

13 Answer: "Nothing specifically was done for this  
14 job. All K-13 is applied with standard procedures as outlined  
15 in our application manuals."

16 6: "As to the binder sold to Weiler for applica-  
17 tion in the St. Christopher's field house, state its generic  
18 name, its brand name, its composition and the supplier of such  
19 binder to you."

20 Answer: "Non-ionic acrylic emulsion. Brand  
21 name is K-13. Supplier is Celanese Corporation."

22 We would like to call Mr. Cox, Your Honor.

23 THE COURT: Mr. Cox?

24 MR. TUCKER: Yes, sir.

1 THE COURT: You are going to have some paper you  
2 are going to be working with?

3 MR. COX: I don't know, sir. I don't think so.

4 THE COURT: Well, okay. We will wait and see.  
5 You were sworn this morning; weren't you?

6 MR. COX: Yes, sir.

7 THE COURT: You may sit down.

8  
9 EDWIN COX, III, was sworn and testified in behalf  
10 of the plaintiff, as follows:

11 DIRECT EXAMINATION

12 BY MR. TUCKER:

13 Q Mr. Cox, will you state your full name, please?

14 A Edwin Cox, III.

15 Q Where do you live, Mr. Cox?

16 A 7111 Pine Tree Road in Richmond.

17 Q And what do you do for a living?

18 A I am engaged in the practice of chemistry and  
19 chemical engineering.

20 Q Can you tell us what your education and background  
21 is in chemical engineering and chemistry?

22 A Yes, sir. I graduated from Virginia Military  
23 Institute with a degree in Chemistry. After I got out of the  
24 Army, I went up to the University and received a masters degree

1 in Chemical Engineering. Since then, I have become a  
2 registered engineer here in Virginia, and I am an accredited  
3 chemist.

4 Q Can you tell us, briefly, what experience you  
5 have in the field of fluid mechanics and solid mechanics?

6 A Well, those are the typical disciplines, sir,  
7 in the area of chemical engineering, the conveyance and  
8 handling of fluids and solids.

9 Q And have you had some experience in that area?

10 A Yes, sir.

11 Q And how long have you had experience in that  
12 particular area?

13 A Well, obviously, I studied it in school since  
14 1960, off and on.

15 Q In particular, have you had any experience with  
16 the study of spray-on insulation?

17 A We did the quality control procedures for a  
18 manufacturer of it here in Virginia, sir.

19 Q All right. Mr. Cox, have you been asked by me to  
20 make an examination of the insulation at the St. Christopher's  
21 field house and to determine, if you could, what, if anything,  
22 caused the insulation to fail to adhere to the surface?

23 A Yes, sir.

24 Q And have I supplied you with some materials in

1 order to assist you in that effort?

2 A Yes, sir.

3 Q Can you tell me what you have been supplied with  
4 to make your conclusions?

5 A I believe it was eleven samples that you delivered  
6 to me in various plastic bags. You gave me a copy of the  
7 depositions of a gentleman named Weiler and a gentleman named  
8 Murphey. You gave me the Answers to Interrogatories. I don't  
9 know whose questions they were. The answers were those of  
10 National Cellulose. And then later, I got a copy of what they  
11 call the instruction manual for K-13.

12 Q All right. Now, I show you PLAINTIFF'S EXHIBITS  
13 1 through 9 and ask you if these are the samples which were  
14 delivered to you by me and which were examined by you in your  
15 study?

16 A Yes, sir.

17 Q All right. Now, in addition to looking at those  
18 samples and studying the other materials that I submitted to  
19 you, did you do anything else to try to determine the cause of  
20 this failure?

21 A Yes, sir.

22 Q What did you do, sir?

23 A Well, I went out to the --

24 MR. BENNETT: Judge, I hate to interrupt here, but



1 we have not qualified this man as an expert yet, and I  
2 want to make it clear as to what his area of expertise  
3 is and what it is not. And I think we are going to get  
4 to opinion questions right quick here.

5 THE COURT: Well, what are you offering? Do you  
6 want to go on and make a formal offer of him? Is that  
7 what you put him on for?

8 MR. TUCKER: I am going to offer him as an  
9 expert in fluid mechanics and particle mechanics and  
10 particularly as that field relates to the study of  
11 composition of spray-on insulation.

12 MR. BENNETT: Judge, I would be perfectly  
13 willing to stipulate that Mr. Cox is an eminently  
14 qualified chemist and that is his field, but he is not  
15 qualified in the application of spray-on insulation.  
16 And he already demonstrated that in his deposition.

17 MR. TUCKER: I object to that, Your Honor. That  
18 is not in evidence.

19 MR. BENNETT: That is the problem we have. I  
20 think he is going to want him to give opinions about  
21 spray techniques that he knows nothing about.

22 MR. TUCKER: If Your Honor please, if you would  
23 just let me proceed, I am sure Mr. Bennett can object to  
24 any question that I ask that he thinks is not proper

1 when I ask him without anticipating.

2 THE COURT: So far, he is qualified as a chemical  
3 engineer and a chemist and has done some quality  
4 control work with regard to spray-on insulation. Beyond  
5 that, I haven't heard anything.

6 MR. BENNETT: I would like to clear that up, also.  
7 He has not done quality control work.

8 THE COURT: Are you through examining him on his  
9 expertise?

10 MR. TUCKER: Yes, sir.

11 THE COURT: We will allow voir dire on the  
12 question of his expertise. Mr. Bennett?

13 MR. BENNETT: Mr. Cox, with regard to the quality  
14 control work you did, as I understand it, that was with  
15 a company that was manufacturing fiber, the fiber  
16 material that goes into a spray-on type application; is  
17 that correct?

18 THE WITNESS: That is one form of it for that  
19 company, that's correct, sir.

20 MR. BENNETT: Right. And that is your experience  
21 in the field of this type of insulation is quality  
22 control relating to the fiber?

23 THE WITNESS: To the addition of chemicals to the  
24 fiber, sir.

1 MR. BENNETT: Right, the chemicals being stuff  
2 that you mix into the fiber in a dry state, not the  
3 glue side of the picture, but just the fiber side of it?

4 THE WITNESS: That's correct, sir.

5 MR. BENNETT: Okay. Do you have any other  
6 experience in this field?

7 THE WITNESS: In the addition of binder to a  
8 solid matrix so that you get the proper ratio.

9 MR. BENNETT: No, I'm talking about spray-on  
10 insulation.

11 THE WITNESS: No, sir, I do not.

12 MR. BENNETT: That's all I have, Your Honor.

13 THE COURT: All right, Mr. Tucker.

14 BY MR. TUCKER:

15 Q Well, tell the jury what, if any, experience you  
16 do have in the field of making a determination as to what ratio  
17 of binder to fiber that should be in a matrix of spray-on  
18 insulation.

19 MR. BENNETT: Judge, now, I object. That is  
20 beyond his scope.

21 MR. TUCKER: That is what you didn't want to ask  
22 him, Mr. Bennett.

23 THE COURT: Let me hear the answer. Go ahead.  
24 Objection is overruled.

1           A           Sir, in the field of chemical engineering, you  
2 very often have the problem of adding a liquid to a solid in  
3 a fixed ratio for whatever purpose you want, ultimately. For  
4 example, in granulated fertilizer, you take a dry matrix. You  
5 have to add a slurry or a liquid to it that is going to be the  
6 binder in exactly the right ratio, because if you don't, if you  
7 have too much liquid, you have a slurry flowing out. If you  
8 have too little, you have dust flowing out. You have failed to  
9 accomplish what you want, which is a physical condition which  
10 has as its basis the moisture level added to a solid. That, I  
11 think, would be relatively applicable to it.

12                   Another would be on many sprays that are put on  
13 as coatings on a passing substance, whether it be the coating  
14 of a piece of paper, spraying a house, where you are adding two  
15 systems at one time, sir, for example, the process where you  
16 actually are melting things at a time when you would have to  
17 have two components feed to a common discharge.

18           THE COURT: Let me see if I understand. I think  
19 you are saying, as a chemist and engineer, you have a  
20 general understanding of the process of mixing a liquid  
21 with a solid in a combination.

22           THE WITNESS: Yes, sir.

23           THE COURT: But I believe you are also saying in-  
24 sofar as this particular application process, you have

1 not had any direct experience in that.

2 THE WITNESS: That's correct, sir.

3 THE COURT: Go ahead, Mr. Tucker.

4 MR. TUCKER: All right. Are we done with the  
5 voir dire, Your Honor?

6 THE COURT: Well, I don't know. I mean --

7 MR. TUCKER: I am offering him. I am offering  
8 Mr. Cox as an expert in the field of fluid mechanics  
9 and particle mechanics and particularly as an expert  
10 who can chemically determine or otherwise determine  
11 whether there is a sufficient binder in a matrix of a  
12 binder and fiber to adhere to a given substance.

13 THE COURT: I think he probably has sufficient  
14 qualifications to make that analysis.

15 MR. BENNETT: Judge, so I am clear, he is not  
16 going to be allowed to give opinions as to the applica-  
17 tion process.

18 THE COURT: I doubt it, but I haven't had a  
19 chance to rule on it yet. I thought that has been  
20 pretty clear up to now. When we get to the question,  
21 we will get to the objection and we will decide if he  
22 has exceeded the territory. He certainly has sufficient  
23 expertise to get into what you just said.

24 MR. TUCKER: Yes, sir.

1 BY MR. TUCKER:

2 Q Now, Mr. Cox, what, in addition to the materials  
3 that you have been given, did you do or did you gather to make  
4 your determination about the cause of this failure?

5 A Well, in addition to the samples that I was  
6 given, these -- and I think there were more at the time -- I  
7 went out to the site twice. And, on one visit, I picked up  
8 some more samples myself. These I analyzed in the laboratory.

9 Q Do you have these additional samples with you?

10 A Yes, sir, I do, sir.

11 Q Where are they?

12 A They are in this paper bag I brought.

13 MR. TUCKER: All right. Could I introduce these  
14 samples as the next exhibit?

15 THE COURT: Any objection, Mr. Bennett?

16 MR. BENNETT: No. As I understand, they are  
17 samples he took recently.

18 THE COURT: I presume at random.

19 MR. TUCKER: He is going to explain that, Your  
20 Honor.

21 THE WITNESS: Sir, they will get you real dusty  
22 if you pick them up.

23 MR. TUCKER: If I could just have the bag marked,  
24 that would be the easiest way to do it.

1 (A paper bag containing samples of  
2 insulation was marked PLAINTIFF'S EXHIBIT NO. 29  
3 and received in evidence.)  
4

5 BY MR. TUCKER:

6 Q Now, in your various tests and analyses, Mr. Cox,  
7 were you able to determine whether, if the fiber and glue that  
8 you found in the St. Christopher's field house had been mixed  
9 together in the proper proportions, whether they would have  
10 adhered in insulating?

11 MR. BENNETT: It is a leading question. If this  
12 man has an opinion, let's hear it from him.

13 THE COURT: There is no foundation for that  
14 question. Objection sustained.

15 BY MR. TUCKER:

16 Q Tell me, Mr. Cox, what you did in your analysis  
17 of the cause of this failure.

18 A Since the problem was to put the binder with the  
19 fiber, if you will, glue it, in this case, to the ceiling, the  
20 question is: Is there enough glue there to hold it to the  
21 ceiling? Well, now, you know, when you talk about a chemist,  
22 you think he can do anything. But he has got to have something  
23 to look for. And, in this case, we were looking for the glue.  
24 Since we didn't know the composition of the glue, but we did

1 know what some of the chemicals should have been in the  
2 cellulose to which the glue was added, then if we could keep  
3 track of that, we might say in the applied insulation, after  
4 it had gotten to the ceiling and after it had fallen back  
5 down, which is where these came from, if we could analyze for  
6 these compounds, then the decrease in the number would tell us  
7 how much glue had been put in.

8 So what we did was to try to analyze for boron  
9 and aluminum, which are two of the elements that are put into  
10 the cellulose when it is manufactured and before the glue --  
11 not when the cellulose -- when the insulation is manufactured  
12 in the dry state, before the glue is put in.

13 Now, we already had, from the Answers to  
14 Interrogatories you asked me about, sir, a statement of how  
15 much should be there, so that was what we were looking for.  
16 But we also had some analyses that National Cellulose had run  
17 that told us that this boron content varied markedly, and that  
18 is what we found in the laboratory, was that their results  
19 showed the same thing. So we could not use the boron and/or  
20 the aluminum concentration in the insulation as applied to tell  
21 us how much glue was there, because it varied from not being  
22 present at all to being present in remarkable amounts.

23 Q All right. And what, if anything, else did you  
24 do to make the determination as to how much glue was present?



1           A       Well, that struck out that part, that method of  
2 determination. Then we looked at it under what we call a  
3 magnifying glass, a microscope, to see, when you looked at the  
4 fiber, what was around it, was it glue around them, could you  
5 see foreign things in there that didn't look like cellulose,  
6 or did they all look like cellulose. And then, after we got  
7 the manual and we had been told what they should look like --  
8 and the easiest way to describe it is the fibers ought to  
9 look like the branches of a tree after an ice storm, the glue  
10 around the fibers -- then you knew what you were looking for.

11                   Then there is another test. You might call it a  
12 feel test. It certainly isn't a scientific test, but by  
13 feeling something, you can see whether it is glued together or  
14 not.

15           Q       Could you show them what you mean, Mr. Cox, in  
16 some of your samples?

17           A       Yes, sir. Here is one of the samples we took,  
18 which is 2C. And, as you can see, this is a pretty tough  
19 sample. You can break it, but it is obviously glued together.

20                   Here is another sample, 4C. This I found on the  
21 floor in the middle, and you would expect it to be dusty, and  
22 you can see that it is. You can see the same difference in  
23 some of these samples, the first set that I had.

24                   And then here is another sample, and you can see

1 on one surface that it scratches very easily. On the other, you  
2 can do it, but you are breaking it loose.

3 Now, when you look at this under the microscope,  
4 you see the same thing. There is really not much difference.  
5 In looking at this, you can look at it and see pretty loose  
6 fibers. If you look at this, it looks pretty well glued on  
7 those sides. If you look at this one, this powder is from the  
8 roof. You can see it was sprayed up against the piece of  
9 metal. Of course, it was flat at the time. It has got sort of  
10 bowed in the bag. On the other, you can see it has got a  
11 different finish to it. If you look at this under the micro-  
12 scope, you can see it looks sort of like the fibers in an ice  
13 storm. If you look at this, you can see discrete fibers very  
14 clearly. You can see some glue in there, just some, but nowhere  
15 as much as here.

16 Q Based on these tests and analyses that you ran on  
17 these samples, were you able to determine whether a properly  
18 proportioned mixture of glue and fiber would have adhered to  
19 the surface in the St. Christopher's field house and insulated  
20 that building?

21 MR. BENNETT: Judge, I am going to interrupt. I  
22 think we have got to limit it to the samples he has.

23 THE COURT: I thought he said based on the samples  
24 that he examined. Go ahead.

1 THE WITNESS: Well, to answer your question  
2 another way, sir, in this sample, I do not believe  
3 there was enough glue on this surface to hold it to the  
4 ceiling. You have some good samples, so it would be my  
5 opinion if there was enough glue there, it would have  
6 held the cellulose to the ceiling the way it was  
7 supposed to.

8 BY MR. TUCKER:

9 Q Now, based on your tests and analyses of the  
10 samples that you had, did you make any determination as to why  
11 this insulation failed to adhere to the surface?

12 A Not enough glue.

13 MR. BENNETT: That is where he gets past his  
14 area of expertise.

15 THE COURT: Well, not really, because he just  
16 answered that.

17 MR. BENNETT: I agree.

18 THE COURT: But the answer is not enough glue,  
19 and I don't know why in the world we are spending all  
20 this time and money, because it seems to me if it falls  
21 down, it has got to be because it didn't stick. I mean,  
22 what are we trying to prove?

23 MR. TUCKER: This is all I am trying to show.

24 THE COURT: You-all could have stipulated.

1 MR. BENNETT: Stipulated the samples don't have  
2 enough glue.

3 THE COURT: Didn't have enough glue to stick to  
4 the ceiling.

5 THE WITNESS: That's right, it didn't.

6 THE COURT: I would have thought that 20 minutes  
7 ago.

8 MR. TUCKER: All right. That's all I have of  
9 this witness, Your Honor.

10 THE COURT: Any cross?

11 MR. BENNETT: No questions.

12 THE COURT: Thank you, Mr. Cox.

13 (The witness stood aside.)  
14  
15

16 THE COURT: Who would your next witness be and  
17 what is the length anticipated?

18 MR. TUCKER: Mr. Newman is the next witness,  
19 Your Honor, and I expect he may be a total of a half an hour.

20 THE COURT: Members of the jury, in order to get  
21 any decent food down in this part of the City, you have got to  
22 get out early before they sell out. We are going to lunch.  
23 You-all, of course, can go where you want. I am not going to  
24 give you a great deal of time. I am going to ask you to come

1 back at 1:15. That does give you almost 40 minutes, roughly.

2 I would like you-all to be back here at 1:15.

3 We will start the case up again.

4 (A recess was taken for lunch.)

5  
6 THE COURT: Who is your next witness, Mr. Tucker?

7 MR. TUCKER: Mr. Weiler.

8  
9 THOMAS ANTHONY WEILER was sworn and testified in  
10 behalf of the plaintiff, as follows:

11 DIRECT EXAMINATION

12 BY MR. TUCKER:

13 Q State your name, Mr. Weiler.

14 A Thomas Anthony Weiler.

15 Q And are you the Weiler in Weiler Insulation?

16 A Yes.

17 Q All right. ~~Can you tell the jury briefly what~~  
18 ~~the relationship was between Weiler Insulation, or what Weiler~~  
19 ~~Insulation was as far as National Cellulose was concerned?~~

20 A ~~We were a contracting applicator for National~~  
21 ~~Cellulose.~~ We sold K-13 and installed the product. And we  
22 rented equipment for the K-13 as far as the application, as  
23 far as the hoppers and feeders. The pumps -- which it is a  
24 two-component system -- the pumps which we used were adhesive.

1 We bought and maintained those.

2 Q This is equipment you got from National Cellulose;  
3 is that correct?

4 A Yes, equipment purchased from them or leased from  
5 them, excuse me.

6 Q Now, as a National Cellulose applicator, can you  
7 explain what that --

8 MR. BENNETT: I am going to object to that term.  
9 I don't think that is the proper characterization. They  
10 don't work for National Cellulose. They are not a  
11 National Cellulose applicator.

12 MR. TUCKER: Judge, that is just what I asked  
13 him. He was called -- he called himself an applicator  
14 of National Cellulose products. That is what I am  
15 referring to. When I say "National Cellulose applicator,"  
16 I don't mean to imply he is an employee of National  
17 Cellulose.

18 THE COURT: I think that has been explained to  
19 the jury pretty well, now.

20 BY MR. TUCKER:

21 Q As a National Cellulose Corporation applicator,  
22 can you tell me what the --

23 THE COURT: I think that is misleading,  
24 Mr. Tucker. I say that, and then you turn around and say

1 "As a National Cellulose Corporation applicator." That  
2 is very misleading. He is an independent contractor who  
3 buys National Cellulose products and applies them.

4 MR. TUCKER: I am not trying to mislead anyone.

5 THE COURT: Well, it seems that way.

6 BY MR. TUCKER:

7 Q Well, as an applicator of National Cellulose  
8 materials, would you explain what the application process is  
9 and what it includes?

10 A Well, we purchased the truckloads or carloads of  
11 dry cellulose bagged material, and you would purchase 55-gallon  
12 drums of chemical, which has a blue type of material. You  
13 would have the material, you would go through what is called  
14 the hopper, or a blower, and it would be pneumatically  
15 installed. You would, of course, put the material in the  
16 hopper, and then it would go through various grinding and  
17 shredding processes within the machine, with valves to adjust  
18 the -- or gauges, excuse me, that would adjust the rate of  
19 flow of the cellulose. And you had adhesive pumps that  
20 pumped adhesive. The adhesive, you mixed. And I am not  
21 familiar with it. I have forgotten what all the rates of  
22 application are, but you would mix so many parts of the  
23 adhesive with so much water and then apply the material in a  
24 type of papier-mache process.

1 Q All right. So, do I understand from your  
2 testimony that determining the rate of flow of the fiber and  
3 the rate of the flow of the glue is all included in the  
4 application process?

5 A Yes.

6 MR. TUCKER: That's all I have.

7 MR. BENNETT: I don't have any questions, Your  
8 Honor.

9 THE COURT: You can step down, Mr. Weiler.

10 (The witness stood aside.)  
11

12  
13 THE COURT: Who is your next witness?

14 MR. TUCKER: Mr. Newman, Your Honor.

15 THE COURT: Do you want Mr. Weiler to stay  
16 around?

17 MR. TUCKER: No, he may be released.  
18

19 WILLIAM NEWMAN was sworn and testified in behalf  
20 of the plaintiff, as follows:

21 DIRECT EXAMINATION

22 BY MR. TUCKER:

23 Q State your name, sir.

24 A William Newman, N-e-w-m-a-n.



1 Q What do you do for a living, sir?

2 A I am an architect.

3 Q And what firm are you with?

4 A Glave, Newman & Anderson Architects.

5 Q All right. And were you the architect for the  
6 field house at St. Christopher's School?

7 A Yes.

8 Q Did you design the building?

9 A Yes.

10 Q All right. What did you specify, Mr. Newman,  
11 concerning the spray-on insulation for that building?

12 A It was K-13 thermal spray-on insulation of  
13 National Cellulose Corporation.

14 Q And you were employed by the owner of that  
15 property, Church Schools; is that correct?

16 A Yes.

17 Q All right. And am I also correct that the  
18 general contractor on that job was Mr. Graves?

19 A Yes.

20 Q And his corporation, anyway, Graves Construction,  
21 Incorporated?

22 A Yes.

23 Q When were you first notified of any problem  
24 concerning the insulation, Mr. Newman?

1           A           I think the first I knew of it was within a  
2 couple of months after the building was completed, after final  
3 inspection.

4           Q           All right. And did this problem have anything to  
5 do with the insulation falling off?

6           A           The first I knew of any insulation falling off  
7 was a couple of months after the building was completed.

8           Q           All right. Would you tell the jury the progres-  
9 sion of what you have learned and what you have seen concerning  
10 the fate of this insulation?

11                   MR. BENNETT: I'm sorry, I don't understand the  
12 question.

13 BY MR. TUCKER:

14           Q           Would you tell the jury what you have seen and  
15 learned between the time you first knew there was a problem  
16 and today concerning this insulation falling off?

17                   THE COURT: Just a moment, Mr. Tucker.

18                   MR. BENNETT: Is he asking what he has personally  
19 seen, or asking him to state an opinion?

20                   THE COURT: I think he asked him two things,  
21 what he has seen and what he has learned, which probably  
22 is not permissible.

23 BY MR. TUCKER:

24           Q           Tell us what you have seen, Mr. Newman.

1           A       Well, first, as I recall, within a couple of  
2 months after the final inspection, a couple of patches of  
3 insulation fell off, about as big as your hand, perhaps. And,  
4 as I recall, we notified Mr. Graves and asked him to have it  
5 fixed; and he did. He had it replaced. And then, more of it  
6 would fall. And, by the spring, larger patches of it, perhaps  
7 as big as two-feet square or bigger, would fall.

8                   Each time it happened, we would ask Mr. Graves  
9 to fix it, and he would endeavor to do that. But then, by  
10 the summer and the fall of the next year, by then, a year later,  
11 it was falling down over a large portion of the building. And  
12 it was clear by then that there was a major problem, and it  
13 couldn't be repaired by just putting a little of it back, or  
14 regluing some of it that fell, or even doing a little bit of  
15 respraying, that the material was falling. And it was all  
16 evidence it was going to continue that way. And, indeed, that  
17 is what happened. It is perhaps -- well, there is a very  
18 larger portion of the building that now has lost insulation.

19           Q       When is the last time you were in the building,  
20 Mr. Newman?

21           A       Last week.

22           Q       Did you, at that time, observe the condition of  
23 the insulation?

24           A       Yes.

1 Q Could you generally describe for us the condition  
2 of the insulation as you saw it a week ago?

3 A Well, on the south wall, or the south half of  
4 the building, let's say -- because I am actually talking about  
5 the ceiling and not the wall -- I haven't made an attempt to  
6 calculate this, but I would estimate 40 to 50 percent of the  
7 insulation has come down. On the north half of the building,  
8 perhaps 25 to 30 percent. The east end, perhaps 30 percent.  
9 And the west end is in pretty good shape.

10 Q Did you go out to that building in July of 1980  
11 and take some samples of the material?

12 A Yes.

13 THE COURT: This is going to tie into the  
14 exhibits, now?

15 MR. TUCKER: Yes, I believe, Your Honor, we can  
16 stipulate that EXHIBITS 1 through 7 of our exhibits  
17 introduced thus far are samples that were taken by  
18 Mr. Newman and Mr. Boyd in July of this year.

19 MR. BENNETT: Yes, sir. And I think they  
20 correspond to a drawing that they did.

21 MR. TUCKER: Right.

22 BY MR. TUCKER:

23 Q Mr. Newman, at the time you were at the building  
24 in July, did you make a drawing to have these samples

1 correspond to certain designations on the drawing?

2 A I made a freehand drawing at the site, yes.

3 Q All right. Let me show you this drawing and ask  
4 if that is the one that you are referring to?

5 A Yes, it is.

6 THE COURT: What number is this going to be?

7 Do you-all have the numbers?

8 MR. TUCKER: 30, yes, sir.

9 (A hand-drawn diagram was marked  
10 PLAINTIFF'S EXHIBIT NO. 30 and received in  
11 evidence.)  
12

13 BY MR. TUCKER:

14 Q Mr. Newman, on this drawing you have numbers  
15 1 through 7, circles in various places. Did you make those?

16 A I believe they refer to the sample numbers.

17 Q All right. And do the areas where those numbers  
18 appear indicate the area from which the samples were taken?

19 A Yes.

20 Q All right. Now, did you also more recently, when  
21 you went to the building, take some photographs of the area,  
22 at my request?

23 A Yes.

24 Q Let me show you PLAINTIFF'S EXHIBITS 10 through

1 27, I believe, and ask you if you can tell me whether those  
2 are photographs that you took at my request a week ago?

3 A Yes.

4 Q All right. Are you able to relate those photo-  
5 graphs and what they show to the location in the building?

6 A Yes.

7 Q All right. And can you do it by use of  
8 PLAINTIFF'S EXHIBIT 30?

9 A I think I can, yes.

10 THE COURT: The best way to do this is to get  
11 up in front of the jury and go through the pictures in  
12 some sequence. I don't care if it is 10 through 27 in  
13 sequence, but identify each picture as he is talking  
14 about it.

15 If you-all will get maybe a little closer  
16 together -- Mrs. Applewhite, you could maybe move over  
17 a little bit, make it easier to let all of you see.

18 You can stand out in front of the jury, hold the  
19 plat out so they can all see it.

20 BY MR. TUCKER:

21 Q All right. Let's look first at PLAINTIFF'S  
22 EXHIBIT 14 and see if you can describe what that shows and  
23 where it is located by using PLAINTIFF'S EXHIBIT 30, the  
24 picture.

1           A           All right. It is in the southern part of the  
2 building, in bay 67, so that would be right here. And it  
3 shows a panel of the roof, the other side of the roof between  
4 two of the structural frames. These lines going across  
5 represent the structural frames that hold the roof up. You  
6 can see a frame here, and one here. So that is about 20 feet.

7           JUROR ADAMS: You mean only those tiny patches  
8 of glue is all that remains?

9           THE WITNESS: Well, the white you see is the  
10 underside of the steel roof.

11          JUROR ADAMS: And the brown, we have never  
12 determined what it was.

13          THE WITNESS: The brown is a portion of the  
14 insulation that is still sticking, and the green is --

15          JUROR ADAMS: What has fallen off?

16          THE WITNESS: Is the surface of the insulation.  
17 You can see it much more clearer in that close-up view  
18 there. You can see the white metal roof. The brown is  
19 stuck to the roof, and the green is peeling off of the  
20 brown portion, so the insulation has, in fact,  
21 separated in the middle.

22 BY MR. TUCKER:

23           Q           We are looking now at PLAINTIFF'S EXHIBIT NO. 12.  
24 Could you identify where on PLAINTIFF'S EXHIBIT 30 that area is

1 located?

2 A This area is, in fact, a part of 30, right here.

3 Q And you are referring, now, to PLAINTIFF'S  
4 EXHIBIT 14. Are you saying PLAINTIFF'S 12 is a part of --

5 A Is a blowup of this one.

6 THE COURT: Close-up of a portion of it?

7 THE WITNESS: That's correct, yes. I think I  
8 could find it in there, if you want to.

9 THE COURT: Yes, Mrs. Applewhite?

10 JUROR APPLEWHITE: I was just thanking you. I  
11 was going to thank you for telling me that was a blowup  
12 of the one we have just seen.

13 BY MR. TUCKER:

14 Q Let's look at PLAINTIFF'S EXHIBIT 11. And would  
15 you tell the jury what that is?

16 THE COURT: Let me go back to the other one.

17 When I say a blowup, I think the witness will show what  
18 I mean. It is a close-up that is not showing the whole  
19 picture. That is showing a small picture, larger.

20 JUROR APPLEWHITE: In other words, this one is  
21 showing that closer?

22 THE COURT: Yes, a small section of it closer,  
23 yes.

24 THE WITNESS: The distance, if I put my shoe



1 down on this picture, it would go from here to here.

2 THE COURT: So you are covering a little over a  
3 foot square there. And the other one is covering some-  
4 thing like 20 feet square.

5 THE WITNESS: That's right. Certainly, this is  
6 the same picture as that. There are two of them.

7 THE COURT: That comes from the same section,  
8 the south?

9 THE WITNESS: Well, in fact, I took two shots of  
10 each picture just to make sure.

11 THE COURT: All right. And that is just a copy.

12 E TUCKER:

13 Q All right, let's move on, then, to PLAINTIFF'S  
14 E17 and see if we can identify that one, where it is on  
15 t'ving.

16 All right. This, again, is the south wall. And  
17 ihe entrance here. This first frame is here, second,  
18 t'rth. So that is the first, second, third, and  
19 f you see three bays.

20 THE COURT: The camera is over here somewhere  
21 ing towards this?

22 THE WITNESS: That's correct, toward the  
23 ce. And we see one of the dormer windows, which is  
24 ne right here. So that is about 75 feet right

1           there.

2 BY MR. TUCKER:

3           Q       All right. Let's move on to PLAINTIFF'S  
4 EXHIBIT 16. Let's see if you can identify that one, where it  
5 is located on the drawing.

6           A       That would be frame 6, 7, and 8.

7           THE COURT: That is going to be very close to  
8 NO. 12.

9           THE WITNESS: That's right.

10          THE COURT: Yes. Same general area?

11          THE WITNESS: Same area, yes, that is true.

12 BY MR. TUCKER:

13          Q       PLAINTIFF'S EXHIBIT 15 is what?

14          A       That is the same one.

15          Q       Skip PLAINTIFF'S EXHIBIT 15, move on to  
16 PLAINTIFF'S EXHIBIT 27.

17          A       Okay. I have got to look back at some notes I  
18 have, because I didn't write on this picture. I have a log  
19 with these pictures in my pocket, if it is all right if I  
20 refer to that.

21          THE COURT: Sure.

22          A       That is in this second bay right here.

23 BY MR. TUCKER:

24          Q       South wall?

1           A       Yes, south wall.

2           Q       All right. Now, where would PLAINTIFF'S EXHIBIT  
3 13 have been taken?

4           A       That, again, is in one of the same ones here,  
5 NO. 6.

6           Q       Could you tell me what PLAINTIFF'S EXHIBIT 19 is?

7           A       That is on the north wall on this side. And you  
8 can see the frames are numbered 3, 4, 5 through 8. So that  
9 would be 3, 4, 5, 6, 7, 8. And, in fact, that is where all  
10 these samples were taken, right in this area.

11          Q       All right.

12               JUROR ADAMS: Are most of those pictures  
13 relatively in place in that spot, in that spot in the  
14 building? Is most of it up --

15               THE WITNESS: Yes, ma'am. As I said, the north  
16 side of the building is in better shape than the south  
17 side.

18               JUROR APPLEWHITE: I thought you said the west  
19 wall was.

20               THE WITNESS: The west wall is in very good  
21 shape.

22               THE COURT: Yes. Did you want to ask a question?

23               JUROR APPLEWHITE: Because he said the west wall  
24 was in very good shape, that is what I thought.

1 THE COURT: And the west wall is the one down  
2 toward the old gym.

3 BY MR. TUCKER:

4 Q Tell us what PLAINTIFF'S EXHIBIT 10 is.

5 A That is virtually all of the east wall. That is  
6 this wall down here. See? The east and the west walls are  
7 about half as long as the north and south walls.

8 JUROR APPLEWHITE: That is the side over here  
9 that is --

10 THE WITNESS: Yes, ma'am.

11 THE COURT: That would be a portion of the north  
12 wall to your left, I think, wouldn't it, if you are  
13 looking straight on to the east wall?

14 THE WITNESS: That is the east wall, so I really  
15 can't see but part of what you have seen in previous  
16 pictures. This is the south wall over here, and then  
17 the north side over here.

18 BY MR. TUCKER:

19 Q Tell them what PLAINTIFF'S EXHIBIT 21 shows.

20 A That would be the north wall, about this half of  
21 the building here all the way down to the -- there is the east  
22 wall, and this is the north wall.

23 Q All right. Can you tell me what PLAINTIFF'S  
24 EXHIBIT 26 shows?

1           A       This is the second bay over here on the north  
2 side.

3           Q       All right. PLAINTIFF'S EXHIBIT 23?

4           A       That is on the north side, bay 5 and 6.

5           Q       And this is the south side?

6           A       Excuse me, south side, this bay right here.

7           MR. BENNETT: I'm sorry, 23 is on the south  
8 side of the building?

9           THE COURT: South side, yes. And that is still  
10 ceiling we are looking at.

11          THE WITNESS: Yes, sir, that is correct.

12 BY MR. TUCKER:

13          Q       All right. Where is PLAINTIFF'S EXHIBIT 24  
14 located?

15          A       That is in bay 7-8.

16          Q       Also on the south side?

17          A       South side, yes.

18          Q       Was PLAINTIFF'S EXHIBIT 20 also on the south side?

19          A       That's correct.

20          THE COURT: Mr. Newman, was some of this applica-  
21 tion in there put up on a vertical wall as opposed to  
22 a ceiling?

23          THE WITNESS: No, sir. We are talking about  
24 ceiling in all cases here.

1 THE COURT: Was any of the ceiling different  
2 from the rest of the ceiling?

3 THE WITNESS: You are absolutely right. The  
4 side walls of the dormers are vertical, yes.

5 THE COURT: Are vertical?

6 THE WITNESS: Yes.

7 THE COURT: Do they show in the pictures?

8 THE WITNESS: Yes, Your Honor. You have to look  
9 closely. You can see them in some of these, like that  
10 one, for instance.

11 MR. TUCKER: That is PLAINTIFF'S EXHIBIT 18 you  
12 are referring to?

13 JUROR ADAMS: Speaking of this area, that has  
14 adhered. And this is still intact.

15 THE WITNESS: Yes, ma'am. The side walls seem to  
16 stick all right.

17 JUROR APPLEWHITE: In other words, it is just the  
18 ceiling that is coming down?

19 THE WITNESS: That seemed to be the case, yes,  
20 ma'am, at this point.

21 JUROR BURKE: But you said the west end wall was  
22 still in shape?

23 THE WITNESS: The west end of the building was in  
24 pretty good shape.

1 JUROR APPLEWHITE: Just the west end?

2 THE WITNESS: The ceiling on the west end.

3 JUROR APPLEWHITE: The ceiling on the west end?

4 THE WITNESS: Yes, ma'am.

5 JUROR APPLEWHITE: But how about the wall?

6 THE WITNESS: In fact, there are no dormer  
7 windows on the west end. Well, now, wait a minute, I'm  
8 sorry. You-all seem to know more about this building  
9 than I do. There is a flat portion on the west.

10 JUROR APPLEWHITE: That is what I wanted to see.

11 THE WITNESS: The side portions are vertical,  
12 like a wall, yes.

13 JUROR APPLEWHITE: Uh-huh.

14 THE COURT: All right, Mr. Newman. You can take  
15 your seat back.

16 BY MR. TUCKER:

17 Q Mr. Newman, when you visited the building  
18 recently, did you notice whether or not any of the insulation  
19 was continuing to come down?

20 A I didn't observe any on the floor. All I  
21 observed was what you notice in these pictures, that some of  
22 it was sagging and looked like it was ready to fall.

23 Q Have you been out there on various occasions  
24 between the construction in 1975 and last week?

1 A Yes, yes.

2 Q You were out there in 1976?

3 A I played tennis there in '76.

4 Q Were you out there, also, in 1977, '78, and '79?

5 A On various occasions, yes.

6 Q Did you go out there on any occasion and observe  
7 that there was no insulation falling -- that had fallen from  
8 the ceiling?

9 A I don't understand your question.

10 Q Did you go out there on any occasion and find  
11 that there had been no insulation falling, or was on the floor?

12 A Well, there would be occasions where the  
13 building had recently been swept, and there was nothing on the  
14 floor.

15 Q Do you know how often it is swept?

16 A No, I don't.

17 MR. TUCKER: Thank you. That is all I have,  
18 Judge.

19 THE COURT: Mr. Bennett?

20 JUROR APPLEWHITE: Your Honor, may I ask a  
21 question?

22 THE COURT: What is it, Mrs. Applewhite?

23 JUROR APPLEWHITE: While they were playing  
24 tennis, or anything like that, has any of the stuff



1           fallen on their heads?

2           THE COURT: I don't know that it is terribly --  
3           did you have any fall while you were playing?

4           THE WITNESS: I think that on one occasion I  
5           did observe some float down, but it did not hit me.

6           JUROR APPLEWHITE: I didn't mean that.

7           MR. BENNETT: Did you ever hit the ceiling with  
8           the tennis ball?

9           THE WITNESS: Well --

10          MR. BENNETT: That's all right.

11          THE COURT: He didn't really mean that as a  
12          question.

13  
14                           CROSS-EXAMINATION

15          BY MR. BENNETT:

16           Q       In a lot of these pictures that you have just  
17           shown the jury, I see a condition with blue insulation, and  
18           underneath that is this brown-type insulation that is next to  
19           the metal. Is it a fair characterization that this condition  
20           exists in numerous areas of that building?

21           A       Yes, I would say that a good portion of it has  
22           that characteristic.

23           Q       And has this brown insulation also fallen off?

24           A       Yes.

1 Q Let me just hand you one letter and see if you  
2 can identify this.

3 A This is my final inspection of the building.

4 Q All right. What date is that letter?

5 A September 25, 1975.

6 Q All right. And was that letter written after the  
7 final inspection, or shortly after it?

8 A Yes.

9 Q All right.

10 A These are the things that had to be corrected  
11 before final payment could be made.

12 Q I'm interested in the date of the final inspec-  
13 tion, and that would be sometime prior to the date of that  
14 letter, probably about --

15 A By three or four days, perhaps.

16 MR. BENNETT: Thank you. That's all I have,  
17 Your Honor.

18 THE COURT: Anything further of Mr. Newman?

19 MR. TUCKER: I have nothing, Your Honor.

20 THE COURT: You-all don't need him to stay, do  
21 you, gentlemen?

22 MR. BENNETT: No, sir.

23 (The witness stood aside.)

1 THE COURT: What did we do with 8 and 9? We  
2 decided not to do anything with those, or are we going to do  
3 that through somebody else?

4 MR. TUCKER: I merely offer them, Your Honor, as  
5 samples of the insulation from the building which have been  
6 analyzed by Mr. Cox in his determination.

7 THE COURT: Locationwise, you can't pin them  
8 down?

9 MR. TUCKER: Location, we cannot.

10 THE COURT: Next witness, Mr. Tucker?

11 MR. TUCKER: Your Honor, I have no other witnesses  
12 other than some stipulations that we have entered into con-  
13 cerning the estimate for the repair of this building.

14 THE COURT: Do you-all have that in written form?

15 MR. TUCKER: No, sir, orally.

16 THE COURT: You-all have an understanding of  
17 this?

18 MR. BENNETT: Well, we may state it differently.  
19 But you give it a shot, and I will tell you if I disagree.

20 MR. TUCKER: I believe that we stipulated that we  
21 have had several estimates done on the cost of tearing down  
22 everything that is there and replacing it with one inch of  
23 cellulose insulation.

24 The first estimate we have that we have  
stipulated to is an estimate from Ford Brothers Insulation,

1 Incorporated, dated August 13, 1979; and that estimate was for  
2 \$41,500.00.

3 We have also stipulated that we have an estimate  
4 within the last month from W. W. Nash and Sons for the same  
5 thing, that is, taking all the insulation down and respraying  
6 it with one inch of cellulose insulation, for \$54,700.00.

7 And, finally, I have a third estimate from  
8 Waco, Incorporated, which is the National Cellulose Corporation  
9 applicator in the area now; and they have estimated that in  
10 order to take all of this insulation down and respray it with  
11 one inch of cellulose, National Cellulose Corporation K-13,  
12 properly mixed, that it would cost \$55,900.00.

13 MR. BENNETT: Judge, I think that fairly states  
14 the stipulation, with the understanding that we don't agree  
15 that it all needs to come down.

16 THE COURT: All right, sir. You have no further  
17 witnesses, Mr. Tucker?

18 MR. TUCKER: We rest.

19 THE COURT: Mr. Bennett?

20 MR. BENNETT: I think I have got a matter I would  
21 like to take up with the Court at this point.

22 THE COURT: I will let you-all take a little  
23 break while I hear from counsel on a legal point. Would you-  
24 all step into the jury room? We won't be very long.

(The jury retired from the Courtroom.)

MR. BENNETT: Judge, at this point, I would move the Court to strike the plaintiff's evidence as to National Cellulose Corporation. There are several grounds for this.

First, I would like to renew my plea of the statute of limitations on the basis that Mr. Newman is the only one that has identified the ending date of that project; and he stated the date of final inspection was sometime prior to this letter of September 24. So, on the basis of that five-year statute, even if we are talking about an indemnity action, this Amended Motion for Judgment alleging negligent application was filed more than five years after the only date we have of final completion of that building.

Further -- and I think more importantly and more to the point -- there has been no evidence today by which this jury could conclude why this stuff fell down. We know that Mr. Cox has said that, based on the samples he has looked at, there is a low glue-to-fiber ratio in the stuff that fell off. The problem with the case is how do you get a low glue-to-fiber ratio and pin that back to the National --

THE COURT: When we say we don't know why, what you mean is we do know why it fell, because it didn't have enough glue. What you are saying is there is not enough evidence as to why it doesn't have enough glue.

1 MR. BENNETT: There is nothing that I have heard  
2 today that pins that back to National Cellulose, and, speci-  
3 fically, to Marvin Giffin.

4 THE COURT: Let me ask you this: Your opening  
5 statement tells me you are not pursuing the claim based on  
6 defective product.

7 MR. TUCKER: That's correct, sir.

8 THE COURT: All right, then, that Count is  
9 stricken. We are only talking about what is now 9(a), the  
10 amended paragraph 9(a) in the case.

11 MR. BENNETT: Right.

12 THE COURT: Go ahead, Mr. Bennett.

13 MR. BENNETT: The only testimony, obviously, that  
14 we have that even concerns that issue is Mr. Murphey. And  
15 Mr. Murphey has testified that he was there in the morning, in  
16 the afternoons. And Marvin Giffin was here in Richmond for a  
17 week and helped them get started on the job. And there is  
18 nothing that I have heard today that would allow a jury to  
19 conclude Marvin Giffin did anything negligently while he was  
20 here.

21 The fact that the insulation failed does not  
22 necessarily follow the fact that he was here at the beginning  
23 of the job. I don't know how else to state it, but there is  
24 certainly no evidence that he did anything that is outside of

1 our specifications, or not in accord with the way he should have  
2 done it. I don't see how this case can proceed beyond this  
3 point.

4 THE COURT: Mr. Tucker?

5 MR. TUCKER: Yes, sir, Your Honor. We are  
6 proceeding on 9(a) of the Amended Motion for Judgment, which  
7 alleges negligent application, that this was negligently  
8 applied.

9 Mr. Weiler and Mr. Murphey have both testified  
10 that they were applicators, that Weiler was an applicator, that  
11 application, or the application process, includes not only  
12 spraying it up there but setting up the equipment. And, in  
13 setting up the equipment, they have testified that what is  
14 included in setting up the equipment is determining the amount  
15 of fiber and the amount of glue that goes into this mixture  
16 that actually goes up there.

17 And we know from Mr. Cox that the stuff has  
18 fallen down because it doesn't have enough glue in it.  
19 Mr. Murphey testified Mr. Giffen came down here and that he  
20 set up the equipment. And, as far as the glue content of  
21 that material that was going up there, Mr. Murphey said that  
22 Mr. Giffin checked it by feel only. He checked the material  
23 by feel only to determine the amount of glue and that, in  
24 essence, he said, "Go ahead, boys, everything is fine. Spray

1 it."

2 He sprayed some of it himself. And Mr. Murphey  
3 said that, to his knowledge, everything that was done after  
4 that check was done in accordance with the way Mr. Giffin had  
5 told him to do it. And Mr. Giffin obviously had made the  
6 setting and determined how much glue was going into that  
7 matrix.

8 And Mr. Murphey says that some of it was sprayed  
9 by Mr. Giffin himself. And, after he left, he really never  
10 did anything differently from what Mr. Giffin had told him to  
11 do concerning how much glue was going in there, except that  
12 they changed the nozzle whenever it got stopped up. That is  
13 the only change and the only evidence we have got of anything  
14 that was done contrary to what Mr. Giffin told him.

15 And Mr. Giffin told him exactly how much glue  
16 to put in there. And there is not enough glue in there. And  
17 I think that makes a prima facie case for the plaintiff.

18 THE COURT: Mr. Bennett?

19 MR. BENNETT: Judge, just briefly in rebuttal,  
20 that sounds an awful lot like res ipsa. Just because we  
21 trained the men, we can't assure what they are going to do  
22 after we leave. There is no evidence to show that there was  
23 a continuation of the same circumstance. Certainly, any  
24 number of things can go wrong.



1 I just don't see any evidence of negligence in  
2 this case.

3 THE COURT: Well, I was thinking a little bit of  
4 res ipsa, but that doesn't really state the theory of the  
5 plaintiff's case. It is a deductive reasoning process that --  
6 well, let's take it first as to Weiler. I think we are making  
7 a double jump when we come over to National Cellulose in some  
8 ways, because of the pleading we discussed the other day. But,  
9 as to Weiler, if that was the defendant we were looking at, we  
10 would then know that they were the ones who actually sprayed it  
11 up there. That would be the whole thing, with a little help,  
12 apparently, from the gentleman from National Cellulose. And we  
13 would know, so we would know that they did the work. And we  
14 know that they -- well, they are the ones that actually put it  
15 up there. We know that. We also know it didn't stay up there.  
16 We know the reason it didn't stay up there was because there  
17 was insufficient glue. Would that be sufficient evidence to  
18 make out a case based on negligent application against Weiler?  
19 I'm not talking about a case of warranty of contract breach.  
20 I am talking about a case of negligent application. Is it  
21 sufficient to show they put it there, and it came down because  
22 of a lack of glue. And that lack of glue, for Mr. Cox, is not  
23 quite as far as maybe you'd like it to be.

24 There isn't enough glue at the surface of this

1 material where it goes against the metal to adhere, that is, it  
2 won't adhere to that surface. That is what Mr. Cox's testi-  
3 mony is, in effect, not enough glue to adhere that material to  
4 that metal surface.

5 Now, if we were looking at Weiler itself without  
6 getting into this tricky thing about the 9(a) paragraph, is  
7 that enough evidence to show negligence on the part of Weiler?  
8 Aren't you close to saying the mere fact that there has been  
9 an event, then it follows that that must be negligence?

10 MR. TUCKER: No, sir, because what Mr. Cox was  
11 if it had been mixed in a proper proportion, it would have  
12 stayed up there. That is what he said.

13 THE COURT: I am really not so sure Mr. Cox said  
14 that. You might have wanted to hear him say that, but Mr. Cox  
15 didn't know that the -- but he did know what the proper pro-  
16 portions were, I guess, from the information he got from  
17 National Cellulose.

18 MR. TUCKER: I asked him very specifically if,  
19 based on his tests and analyses, he could determine whether that  
20 fiber and that glue, if mixed together in the proper propor-  
21 tions, would have adhered and insulated; and his answer was yes,  
22 it would have, assuming there is proper glue in it. But there  
23 is not enough glue, and his testimony was also not confined to  
24 the fact that there wasn't enough glue on the surface of it.

1 He pointed to one sample that he had which showed clearly there  
2 was not enough glue on the surface, but he also said there was  
3 not enough glue in the matrix generally. And, therefore, you  
4 get some of the separation which he pointed out. Then, not  
5 just the metal surface and the fiber and the glue, but also in  
6 matrix of the fiber and the glue together, some of that came  
7 apart.

8 THE COURT: What about the statute of limitations  
9 problem, Mr. Tucker?

10 MR. TUCKER: Well, Your Honor, the statute of  
11 limitations, that statute talks about final completion. And we  
12 didn't have any evidence of what the final completion is. We  
13 have evidence of Mr. Newman's final inspection of it. But, as  
14 far as when final completion of it was, we don't have it.

15 That document that he was referring to and taking  
16 the date off of was an inspection document by which Mr. Newman  
17 was instructing that certain other things had to be done before  
18 completion was actually made.

19 THE COURT: Well, let's get the statute clearly  
20 in our mind, because we are mixing up statutes. The statute  
21 doesn't say a word about final completion at all. You have to  
22 get that from judicial interpretation from the statute. The  
23 statute says more than five years after the performance of. It  
24 should be performance or furnishing of such services and

1 construction. And you are using the V.M.I. King case and  
2 Federal Reserve Board-Marcellus Wright case to say that means  
3 something other than a date they did the work but, rather, use  
4 the completion of the job to run the five years.

5 MR. TUCKER: Yes, sir. I don't think my evidence  
6 in and of itself shows that we are in violation of that  
7 statute of limitations.

8 THE COURT: What constitutes the completion of  
9 the job? What is the specific language used in Marcellus  
10 Wright? I haven't got those cases in front of me. The  
11 completion of the project? I think my own experience and back-  
12 ground tells me that we are talking about when the building is  
13 ready for occupancy, although you can get into a lot of argu-  
14 ment whether you are talking about ready for occupancy or  
15 occupied, or whether there has been a final acceptance of the  
16 project by the owner.

17 MR. TUCKER: Final completion date of the entire  
18 project is the language of the Federal Court in the Marcellus  
19 Wright case.

20 THE COURT: And when is that?

21 MR. TUCKER: There is no evidence of it as of  
22 now; and, therefore, I don't think that the statute of limita-  
23 tions can be properly applied to strike the plaintiff's  
24 evidence at this point.

1           If Mr. Bennett has some affirmative evidence that  
2 he can show that the final completion date of the entire  
3 project was more than five years after this action was filed,  
4 then --

5           THE COURT: I am going to overrule the statute  
6 of limitations plea. The final inspection -- and, as a matter  
7 of fact, the witness brought out, whether you meant for him to  
8 do it or not, that there was a checklist of corrections and  
9 problems there, which obviously meant that the final approval  
10 had not been obtained from the owner or from the architect, at  
11 that point in time.

12           It is an awfully thin case, Mr. Tucker, and the  
13 negligence being shown on National Cellulose. Even if I were  
14 to read this pleading that sets this up, which is 9(a), the  
15 amended paragraph, as broadly as you would like to have it  
16 interpreted, and charge them with the word applied to the whole  
17 project -- which I am unsure that I am willing to do -- but,  
18 nonetheless, the jury is having a grand time with this case,  
19 and they are well into it.

20           The Supreme Court says to let cases go on unless  
21 you have an absolute feeling that you can't be wrong. And I  
22 am not that sure that I am right, so I am going to let the case  
23 go on, let the defense evidence go on and let the case go to  
24 the jury, then we will take another long look at it later.

1                   It is a rare case, Mr. Bennett. I strike the  
2 evidence very rare.

3                   Bring the jury back in.

4                   (The jury returned to the Courtroom.)

5  
6                   THE COURT: Who is your first witness,  
7 Mr. Bennett?

8                   MR. BENNETT: We call Marvin Giffin.

9  
10  
11                   MARVIN ELMER GIFFIN was sworn and testified in  
12 behalf of the defendant, as follows:

13                   DIRECT EXAMINATION

14                   BY MR. BENNETT:

15                   Q       Mr. Giffin, would you tell us your full name and  
16 home address, please, sir?

17                   A       Marvin Elmer Giffin, Mansfield, Missouri.

18                   Q       And are you married, Mr. Giffin?

19                   A       Yes.

20                   Q       Where are you employed, now?

21                   A       Employed at Denver, Colorado, for Cris  
22 Corporation.

23                   Q       How long have you been associated with the spray  
24 insulation business?

1 A Twelve years.

2 Q How did you get your start, and who were you  
3 working for?

4 A I was working for Butler Construction in Wichita,  
5 Kansas, before becoming an employee for National Cellulose.

6 Q All right. What type of work did you start off  
7 doing?

8 A Spray insulation applicator.

9 Q Okay. Is that the same type of process that we  
10 are talking about in this case?

11 A Yes, sir.

12 Q And that was twelve years ago you started doing  
13 that?

14 A Yes.

15 THE COURT: Excuse me just a second. If you  
16 would sit back and relax, that thing will pick you up.  
17 Just forget it and talk to the jury.

18 BY MR. BENNETT:

19 Q Now, when did you go to work for National  
20 Cellulose?

21 A Approximately 1970.

22 Q All right. And you are not employed there now.  
23 When did you leave, roughly?

24 A Oh, I worked for them three different times. I

1 can't recall the actual dates that I left and returned.

2 Q Okay. Well, during the past twelve years,  
3 regardless of who you have been working for, have you always  
4 been involved in spray-on insulation?

5 A Yes, sir.

6 Q And what is your involvement? What do you do?

7 A Applicator, as of right now.

8 Q Well, tell the jury what that entails. Are you  
9 the man out there spraying?

10 A Yes, I am. I have applicated, actually sprayed  
11 the insulation fiber onto the mat, or whatever it consists of.

12 Q And where have you done this work over that  
13 period of twelve years?

14 A From Israel to Holland and every state in the  
15 Union.

16 Q All right. And how did you happen to get to  
17 Israel and Holland?

18 A I was sent there by National Cellulose as a  
19 technical advisor to show them how to set the equipment up  
20 and actually advised them how to spray the application.

21 Q All right. You were here during the  
22 St. Christopher's job; is that correct?

23 A Yes.

24 Q Since that job, have you been back to Richmond



1 until this occasion?

2 A No, sir.

3 Q When did you first come back and look at this  
4 building first?

5 A Yesterday.

6 Q All right. Now, do you submit some reports to  
7 National Cellulose on your expenses when you are on a job?

8 A Yes, I do.

9 Q And let me just ask you to look at this group of  
10 papers.

11 MR. BENNETT: Have you seen these, Sandy? They  
12 are just expense receipts.

13 MR. TUCKER: Yes.

14 BY MR. BENNETT:

15 Q Look at this couple pages and see if you can  
16 identify them.

17 A This is my expense report.

18 Q All right. I think the first page of that  
19 summarizes the expenses that you had while you were here in  
20 Richmond.

21 A Yes.

22 Q What dates were you here?

23 A I believe I arrived on the 16th and I did leave  
24 on the 20th.

1 Q The 16th was a Monday?

2 A Yes.

3 Q 20th was a Friday?

4 A Yes.

5 MR. BENNETT: Judge, I would just like to  
6 introduce the summary sheets of his expenses just to  
7 prove the dates.

8 THE COURT: That will be marked Defendant's  
9 Exhibit No. 1.

10 (A summary of expenses for Marvin Giffin  
11 was marked DEFENDANT'S EXHIBIT NO. 1 and  
12 received in evidence.)

13  
14 BY MR. BENNETT:

15 Q ~~Now, at the time you came to Richmond on June 16,~~  
16 ~~1975, what was your position with National Cellulose?~~

17 A I was a technician in the Application Department.

18 Q All right. Well, what did your job entail, at  
19 that time?

20 A ~~My job was to train the crew, to see that the~~  
21 ~~equipment functioned in all respects of pressure involved in~~  
22 ~~every type of application.~~

23 Q And would you do this all around the country?

24 A Yes.

1 Q And who were you working with, specifically?  
2 Were you working with other National Cellulose employees, or  
3 were you working with local distributors?

4 A They were all distributors from -- set up by  
5 National Cellulose.

6 Q All right. Now, do you recall the trip to  
7 Richmond and the St. Christopher's job?

8 A Yes, I do.

9 Q And what happened? Just tell us what happened  
10 the first day you got to Richmond, what you recall about it.

11 A I was picked up at the airport and taken to the  
12 shop.

13 Q Whose shop is this?

14 A Tony Weiler.

15 Q Would that be Weiler Insulation Company?

16 A Yes.

17 Q Now, what did you do that first day at the shop?

18 A We just looked at the machine and just talked.

19 Q All right. When was the first day that you were  
20 actually out on the job site at St. Christopher's?

21 A I believe I went out probably Tuesday, I think we  
22 went out and looked at the job.

23 Q Did you go back out the next day and actually  
24 start to do some work?

1 A Yes, it was on a Wednesday.

2 Q What did you do on that day?

3 A I was there when they set the equipment up, which  
4 was already out there the following morning. On Wednesday, the  
5 equipment was there when they picked me up at the motel, and I  
6 just proceeded then to check the machinery out and see that it  
7 was functioning properly.

8 Q All right. Now, you didn't spray anything that  
9 day?

10 A No.

11 Q All right. The following day, what happened?

12 A We went into the spray operation, when the manlift  
13 came at 1:00 o'clock.

14 Q The manlift? Describe that machine.

15 A That is a JLT manlift that extends 30 to 40 feet  
16 into the air to reach the ceiling area.

17 Q All right. And had Weiler rented that manlift  
18 to do the high areas?

19 A Yes.

20 Q Now, did you actually do some spraying that day  
21 with Weiler's men?

22 A Yes.

23 Q ~~Can you describe to the jury the procedure that~~  
24 ~~you go through when you start a job such as this to determine~~

1 ~~how much fiber you use and how much glue you use and that type~~  
2 ~~of thing?~~

3 A Yes. First thing I do is take an rpm reading of  
4 the machine off of the sprocket for 60 seconds. That determines  
5 the amount of fiber that will flow through the hose in this  
6 period of time.

7 Q You are going to have to remember that these  
8 people have never heard about these processes. What machine  
9 are you talking about?

10 A I am talking about the A-302 blowing machine.

11 Q All right.

12 A Hopper.

13 Q Operate the fiber?

14 A Yes.

15 Q All right. What is the next step that you do?

16 A Next step is, once I determine the amount of fiber,  
17 after my rpm reading, I establish the pounds it will produce in  
18 an hour, then I go back to my chart and I find how much glue I  
19 need to saturate this amount of material.

20 Q Right.

21 A This amount of product in each bag, then I know  
22 where to set my pressure. If it is 200 pounds per hour, I will  
23 have to go to a chart and read to see how much glue pressure I  
24 need for this amount of fiber.

1 Q Now, you are talking about a chart. Is that  
2 chart in this application manual?

3 A It should be in this manual. Here is the one I  
4 carry.

5 Q All right. This isn't the one that you carry  
6 around?

7 A No, I have one.

8 Q Can you look in that manual and find the chart  
9 you are talking about?

10 A Right here.

11 Q All right. That is on section one, page 6  
12 of eight?

13 A Yes.

14 Q Now, what does that chart tell you, essentially?

15 A This tells me the pounds of fibers and, according  
16 to the jets I used on the nozzle, how much pressure I should  
17 have at the ends of the nozzle after determining the 200 pounds  
18 of fiber per hour. If it is this, I will go around and find  
19 the eight-jet nozzle and determine what the pressure at the  
20 ends on my gauge will be.

21 Q All right. ~~Now, on this particular job,~~  
22 ~~St. Christopher's job in Richmond, did you make some determina-~~  
23 ~~tion of how many pounds of fiber per hour you had coming out of~~  
24 ~~your machine?~~

1 A ~~Yes, I did.~~

2 Q ~~How do you make that determination?~~

3 A ~~By taking the rpm reading off of the machine~~  
4 ~~before I ever applicate.~~

5 Q Is there another test that you use as you are in  
6 the process of applying the fiber to confirm how many pounds  
7 per hour that you are blowing out?

8 A Yes.

9 Q How do you do that?

10 A I weigh each bag individually by a zero-to-50  
11 pound scale, and each bag is marked individually at the period  
12 of the time of the hour, then I stop the machine and I will  
13 take the material that actually went through the hopper in  
14 this period of time and add up the pounds of fiber I have  
15 actually applicated. Then I go back to my chart and see  
16 exactly what my glue pressure would be in this period of time  
17 that I will have to use.

18 Q All right. Now, does the blowing machine, that  
19 does have something on it that helps you tell how long it has  
20 been running?

21 A It has a time indicator. If there is not one on  
22 the machine, I will specifically carry my own timer, and I will  
23 hook it up.

24 Q Did you do that on the St. Christopher's job?

1 A Yes.

2 Q Now, what did that tell you, essentially? How  
3 much fiber you are using?

4 A Yes, it tells me how much fiber in that one hour  
5 that has actually went through the machine.

6 Q All right. Now, as I understand it, fiber is  
7 one-half of this process and glue is the other half. How do  
8 you determine how much glue that you are using?

9 A Well, I determine the glue I use by checking what  
10 comes out of the barrel.

11 Q All right.

12 A Per Day.

13 Q Now, you have a pump; right?

14 A Yes.

15 Q Does the pump have some gauges on it?

16 A The pump has a gauge up to 300-pound pressure  
17 gauge, and I like to set that gauge on this amount of fiber,  
18 which would be -- I set it at 200 pounds pressure on my pump.

19 Q Is there another pressure gauge to measure your  
20 glue pressure up at the nozzle?

21 A Yes, and this here is where -- after I determine  
22 how many pounds of fiber I am using, I set that pressure at the  
23 end of my nozzle at 80 pounds of pressure, if this is what it  
24 takes for this amount of fiber.



1 Q All right. ~~Now, was that what you actually set~~  
2 ~~it at on the St. Christopher's job?~~

3 A ~~Yes, 80 pounds.~~

4 Q Now, it's been five years since this has  
5 happened. Did you make any note of these readings when you  
6 made them?

7 A Yes.

8 Q Did you send the report in to National Cellulose?

9 A Yes.

10 Q Let me hand you a Xeroxed copy of that report and  
11 see if you can identify those two pieces of paper.

12 A Yes.

13 Q All right. What are those two pieces of paper?

14 A This is my report on the starting of this job  
15 until the day I left, my readings, my pressures, and my rpm's  
16 is here at the bottom.

17 Q All right. Now, you write that out in your own  
18 handwriting?

19 A Yes.

20 Q Then do you send it in to National Cellulose?

21 A Yes.

22 Q Did you do that shortly after this job?

23 A Yes.

24 Q ~~Now, what are the readings that you have in this~~

1 report as far as pump pressure, nozzle pressure, and your fiber  
2 flow?

3 A My pump pressure was 200 pounds. My nozzle was  
4 80 pounds. My rpm's, I believe I had 188 pounds of fiber per  
5 hour.

6 Q Now, the 288-pound figure, was that determined  
7 by the method of actually weighing the bags and running the  
8 machines?

9 A Yes.

10 Q And how do you do that? You run it for an hour  
11 and then just figure out how much you have used?

12 A Yes.

13 MR. BENNETT: Your Honor, I would like to  
14 introduce this as the next exhibit, please.

15 THE COURT: It will be No. 2. I am going to  
16 staple these, I think, if I can do it without cutting  
17 off anything. Let me see.

18 (A two-page document showing progress of  
19 the St. Christopher's job was marked DEFENDANT'S  
20 EXHIBIT NO. 2 and received in evidence.)

21  
22 BY MR. BENNETT:

23 Q Now, I think I have sort of gotten us off  
24 track. You are in Richmond, and you have spent a few days

1 looking at the machinery. And Thursday, I believe, you went  
2 out, and the manlift arrived at 1:00 o'clock. And did you  
3 actually spray this on that afternoon?

4 A Yes.

5 Q Can you tell us where you started spraying this  
6 building?

7 A Yes, I started at the north end of the building.

8 Q Now, you say north. Which --

9 A Not the north, the west. I'm turned around in  
10 this. I was at the west end of the building facing this way  
11 on the far wall up next to the old gymnasium.

12 Q You were on the end of the building that connects  
13 over to the old gymnasium?

14 A Yes.

15 THE COURT: Can you relate that to the map, now?  
16 Because that is going to help the jury in ending this  
17 thing.

18 MR. BENNETT: Yes.

19 BY MR. BENNETT:

20 Q Step out here for a second. I am showing you a  
21 drawing that is PLAINTIFF'S EXHIBIT NO. 30. And just so we  
22 are oriented, this is marked east, north, south, and west, and  
23 we have agreed that the old gym is over on this end.

24 A Yes.

1 Q Now, when you went in there yesterday, did you  
2 remember where you started on that job?

3 A Yes, it is this area here.

4 Q All right. Now, you were in the manlift. Were  
5 you blowing up near the dormer windows?

6 A Yes.

7 Q Did you blow any other area while you were there  
8 in Richmond?

9 A No, except I brought three sections back to the  
10 east.

11 Q Uh-huh.

12 A And that was the completion of my application  
13 here.

14 Q All right. ~~How much area would you say in terms~~  
15 ~~of square feet that you -- or was actually applied while you~~  
16 ~~were in Richmond?~~

17 A ~~Possibly, I'd say I did probably 3500, maybe 6500~~  
18 ~~feet in this period of time.~~

19 Q Okay. Now, again, I have got us a little off  
20 track. Thursday afternoon, you sprayed some. Did you spray any  
21 on Friday?

22 A Yes.

23 Q How long did you spray?

24 A Approximately until noon.

1 Q All right. Now, during the Thursday and Friday  
2 time periods, what were you doing insofar as Weiler's people  
3 were concerned?

4 A I was training and working back and forth from  
5 the manlift with the manlift inside back to the hopper man,  
6 which is on the floor.

7 Q Now, describe to the jury, if you will -- and I  
8 don't think we have done that -- how this type of job is set  
9 up. In other words, is there a truck with the machines on it?

10 A The truck, was no truck there, it was just on a  
11 low-boy type setting, just up there in the floor.

12 Q And what is on the low-boy?

13 A The hopper and the glue pump and the glue  
14 barrels.

15 Q All right. Now, in the general process, do you  
16 have a man stationed out there?

17 A Yes, there is a man stationed at the hopper.

18 Q And what is his function?

19 A His job is to keep the hopper properly filled  
20 with the fiber and to keep checking on the glue to see that it  
21 doesn't run out of glue, and make changes at the proper time.  
22 So that is the way we keep a certain -- the same amount of glue  
23 traveling up to saturate the fiber.

24 Q All right. The man on the truck, or the low-boy,

1 does he have to mix the glue?

2 A Yes.

3 Q Now, how is the glue mixed?

4 A With 12 gallons of glue, 43 gallons of water.

5 Q And would he do this in one of these big drums?

6 A 55-gallon drum.

7 Q Is that mixed up as the job progresses, or do  
8 you mix up a big batch at first?

9 A No, you mix two 55-gallon first and operate with  
10 the same two barrels on this case.

11 Q Now, the fiber end of the operation, how does that  
12 man on the truck feed the fiber?

13 A He just takes and cuts a 30-pound bag in half  
14 and gently puts it inside the hopper.

15 Q All right. And does he have to keep the hopper  
16 full all the time?

17 A Yes.

18 Q ~~Now, what type of settings do you have on these~~  
19 ~~machines to control how much fiber you are getting and how much~~  
20 ~~glue you are getting? How does that work?~~

21 A ~~Well, it works off of a two-step pump, a low,~~  
22 ~~medium, and high speed.~~

23 Q Now, which machine are you talking about?

24 A I am talking about the blowing machine, same

1 machine that we operated out there.

2 Q All right. Now, do you recall which setting that  
3 you had this machine on?

4 A Yes, I have had it set on medium speed.

5 Q All right. Was that the speed that it was set on  
6 when you arrived, or did you change it?

7 A No, sir; I changed it from the low speed to the  
8 medium speed.

9 Q All right. Now, once you set your fiber machine  
10 and you determine how many pounds of fiber you are going to  
11 have, how do you control how much glue is being sprayed up  
12 there?

13 A You have a bag at the end of your nozzle, and a  
14 gauge to the pressure gauge just above that.

15 Q All right.

16 A And you turn your valve to that setting of 60-  
17 to-80, or whatever pounds you need for the amount of fiber..

18 Q All right. Now, I would like you, at this point,  
19 if you will, to find the page in the application manual with  
20 that chart in it that tells us about pounds per hour and how  
21 much pressure you need at your nozzle. And if you would,  
22 step over here in front of the jury and show them how you set  
23 this machine up. Again, we are referring to section one, page  
24 6 of eight.

1 A Yes.

2 Q All right.

3 A This is the pounds of fiber per hour on the  
4 settings of your machine. You can go up there. There is 400  
5 pounds per hour. That is according to what speed that you set  
6 this on of your three-step pulley operation. I set it within  
7 the 280 -- between 280 and 290, in this area here, after I  
8 determined exactly in this hour how many pounds of fiber I had  
9 delivered.

10 Q ~~Now, how many pounds had you delivered when you~~  
11 ~~ran your check?~~

12 A I had delivered 288 pounds of fiber.

13 Q Now, what pressure did you set the nozzle at?

14 A I set my nozzle at 80 pounds of pressure.

15 Q ~~Were you using a six-jet nozzle or eight-jet?~~

16 A I used an eight-jet nozzle.

17 Q All right. Now, what does your chart show for  
18 280 pounds of fiber coming? What pounds of pressure do they  
19 recommend?

20 A 78.

21 Q All right. Now, you had a little bit less than  
22 that in fiber, is that right, a little less than 290?

23 A Yes, 288.

24 Q Why did you set the pressure gauge at 80 instead



1 of 78?

2 A Because that gives me enough time and leeway  
3 until I determine exactly, after my guideline, after I got  
4 established my rpm rate, then after my hour and figuring up  
5 the pounds I had done delivered in this hour, I went back to  
6 my chart here and came up to the 78, which I set on 80 and left  
7 on 80 pounds of pressure. Any disturbance as foreign objects  
8 get into my filter body to plug it up, and it could still stay  
9 in the 78-pound range and be safe.

10 Q What is the effect of having a little bit higher  
11 pressure on your glue nozzle?

12 A Your effect is better, because you can have enough  
13 glue on the outside to pick up any loose fiber that might, you  
14 know, get away from you and cause fall-out problems.

15 Q Did you get more glue or less glue if you had  
16 higher pressure?

17 A You get more glue.

18 JUROR BURKE: I want to ask you, on setting the  
19 nozzle, did the inside of the building have any bearing  
20 on the pressure, the nozzle setting for your sticking of  
21 the glue?

22 THE WITNESS: I didn't understand you.

23 JUROR BURKE: In setting your nozzle --

24 THE WITNESS: Yes.

1 JUROR BURKE: I notice you are setting your  
2 pressure, you are getting your pressure up. What I am  
3 wanting to know, do the inside temperature have an  
4 effect, a bearing on the glue sticking?

5 THE WITNESS: No.

6 THE COURT: All right, sir. You can sit back  
7 down.

8 BY MR. BENNETT:

9 Q By the way, you were down here in June of '75.  
10 Do you recall whether it was warm? I presume --

11 A It was very nice and warm.

12 Q Now, these were the settings that you had the  
13 machines on while you were here in Richmond?

14 A Yes.

15 Q Training Mr. Weiler's crew?

16 A Yes.

17 Q Now, how many men did Weiler have on the job that  
18 you observed?

19 A Three.

20 Q I know you probably don't know the names, but  
21 what were their functions?

22 A Well, I had one particularly for a truckman. He  
23 is the hopper man, and I was supposed to be training two  
24 applicators.

1 Q Now, did one applicator indicate that he had  
2 experience before?

3 A Yes.

4 Q Do you know his name?

5 A No, I can't recall any of the people's names.  
6 The three days I was actually involved, I can't remember the  
7 names. Chalkley -- the names, I just can't remember.

8 Q Did you see a fellow out in the hall this  
9 morning, a big fellow named Bill Murphey?

10 A Yes.

11 Q Do you remember him?

12 A Yes.

13 Q What contact did you have with him on this job?

14 A Getting to the job and getting back to the motel.

15 Q Well, would he stay during the day?

16 A No, sir.

17 Q Was he there while you were actually training  
18 the man on how to apply this insulation?

19 A Once, one day, first day, he actually watched  
20 part of the application.

21 Q How much?

22 A Maybe an hour.

23 Q Now, what happened on Friday when you left. I  
24 mean, what shape did you leave this job in?

1           A           I left the job, people were actually applying.  
2           I felt like he was doing a pretty well job as far as his  
3           uniformity, because he left in the section I was still in, that  
4           I had worked with him on. And, as I said in my report, he was  
5           doing a pretty good application job.

6           Q           All right. Now, the first time that you returned  
7           to this building after you were here in 1975, was that yester-  
8           day? Is that correct?

9           A           Yes.

10          Q           Did you walk in yesterday, and could you tell  
11          where you had sprayed or where it had been sprayed while you  
12          were here?

13          A           Yes.

14          Q           How could you tell that after five years?

15          A           I can tell by my application, my uniformity and  
16          patternwise.

17          Q           All right. Well, the job was in pretty bad  
18          shape. Did you just pick out the good area and say that is  
19          where you sprayed?

20          A           No, sir.

21          Q           Now, when you were here in Richmond in 1975, was  
22          the roof of that building, was that complete, at that point?

23          A           No, sir.

24          Q           What was missing in what end of the building?

1           A       The roof, part of the roof on the -- that would  
2 be on your east side. The flashing and the guttering was not  
3 on, and this area I don't go into.

4           Q       Were the men up there working on the roof?

5           A       Yes.

6           Q       Can you spray while someone is working on the  
7 roof?

8           A       No, sir.

9           Q       Why not?

10          A       The vibration. During the period of this time,  
11 it was wet and freshly applicated. The vibration from the  
12 metal will tear it down immediately, loosen the bond.

13          Q       Is this something that is routinely known in your  
14 business?

15          A       Yes.

16          Q       Was that one reason that you started at the west  
17 end of the building?

18          A       Yes.

19          Q       And, again, the west end is the side next to the  
20 old gym?

21          A       Yes.

22          Q       Now, in your experience as an applicator in five  
23 years, have you seen situations where you end up with a low  
24 glue-to-fiber ratio in your sprayed-on material?

1           A       Yes.

2           Q       Can you tell the jury what type of -- or what  
3 possibilities there are as to how that would come about?

4           MR. TUCKER: Objection, Your Honor. That is  
5 entirely speculative. It has nothing to do with this  
6 particular job, unless he can link it in some manner to  
7 what happened on this job. I don't think it is proper  
8 for him to go into other jobs and what may have happened.

9           MR. BENNETT: I merely want to establish what can  
10 cause a job to go wrong and point out that there are  
11 numerous possibilities.

12          MR. TUCKER: If Your Honor please, if Mr. Bennett  
13 wants to establish something went wrong with this job  
14 other than not enough glue up there, he certainly had the  
15 opportunity to call him. And nothing was wrong other than  
16 enough glue, and to testify to other things that might  
17 have gone wrong, he is missing a link.

18          MR. BENNETT: You are missing what I am asking.  
19 I am asking him how do you end up with the situation of  
20 having enough glue, which is exactly what we are missing  
21 in this case.

22          THE COURT: Objection is overruled.

23 BY MR. BENNETT:

24          Q       What situations in this application process can

1 lead to a situation where you don't get enough glue mixed with  
2 your fiber?

3 MR. TUCKER: Same objection.

4 THE COURT: Overruled.

5 A It can be caused from foreign objects in your  
6 glue barrel, just dirtiness.

7 BY MR. BENNETT:

8 Q All right. How does that affect it?

9 A It affects the filter in the filter body that  
10 goes into your nozzle. This screen plugs up, your pressure  
11 automatically drops at your gauge on your nozzle. This  
12 eliminates getting enough glue to saturate this pound of fiber  
13 that is delivered to the hole.

14 Q Okay. Is there a filter down in the hose that  
15 sticks into the glue barrel?

16 A Yes, there is a T-stringer at the bottom.

17 Q Does that tend to get clogged up?

18 A Yes.

19 Q When you instruct the men, do you tell them that  
20 they have to wash these filters to make sure they don't get  
21 clogged?

22 A Constantly.

23 Q How about how you mix the glue and the water?  
24 Can that lead to a problem?

1           A       No, sir, not unless you don't put enough glue  
2 in the water.

3           Q       Well --

4           A       That would be taking the strength out of the  
5 bond. You would be getting more water than you would the glue,  
6 which is not proper.

7           Q       Well, let's assume we have a situation where a  
8 man was running short on materials, and you wanted to stretch  
9 it, and put a little bit more water in it, would that lead you  
10 to a situation where you had a low glue-to-fiber ratio?

11          A       Yes.

12               MR. TUCKER: Objection, asking a hypothetical  
13 question. There is no evidence of the fact that anybody  
14 put additional water in the glue. This man is not an  
15 expert. He has not been qualified as an expert witness.  
16 All he can testify to are the facts which he knows of  
17 his own personal knowledge about this job.

18               THE COURT: Objection is going to be overruled.

19               Ladies and gentlemen of the jury, this witness  
20 is not being asked to tell you in his opinion what  
21 happened on this occasion, he is being asked to tell  
22 you the kind of things that can happen, explanations of  
23 what can cause a low glue-to-fiber ratio. And that is  
24 all he has been asked to say. And he is not able to



1 give you testimony -- he is not trying, at this point --  
2 as to what happened on this job.

3 BY MR. BENNETT:

4 Q Let me ask one question before we get back into  
5 that. Mr. Giffin, do you have any way of knowing what happened  
6 on this job after you left?

7 A No, sir.

8 Q All right. Now, the question I asked, I think,  
9 was, assuming that you had a situation where an applicator was  
10 running away on your glue, and he wanted to stretch it a little  
11 bit and added a little bit too much water to it to make it go  
12 farther, how would that affect the glue-to-fiber ratio after it  
13 was sprayed up?

14 MR. TUCKER: Same objection.

15 A It would still be more water than it would be  
16 glue, and you still don't have the strength in the bonding.

17 BY MR. BENNETT:

18 Q Right. Would that lead to a situation where you  
19 would get fall-off?

20 A Yes.

21 Q All right. Now, explain, as best you can, to the  
22 jury, what the nozzle ends of this set-up look like.

23 A Well, it is just a round nozzle like this with  
24 eight jets on the outside circle of it that saturates the fiber,

1 which the jets are beveled in. Before the fiber can get to the  
2 roof area, it saturates in the air.

3 Q All right. Now, I think this is another page of  
4 the application manual. Does this generally show a drawing of  
5 the nozzle?

6 A Yes.

7 Q I think you-all can see that. What can happen  
8 with these jets to affect your glue ratio?

9 A One jet could plug up, which leaves dry material  
10 which would not be saturated, push those pressures over onto  
11 seven jets, you are not saturating out of one jet, which can  
12 cause you a dry problem, dry getting wet fiber, which your  
13 wet fiber against your dry fiber, it has no bond. And this can  
14 occur from dirtiness and foreign objects coming from your glue  
15 barrels, and they didn't change. The pressure should be  
16 checked periodically. As it passes through, you can see when  
17 your gauge will drop pressure if they don't stop and change the  
18 jet and clean the filter. You are asking for fall-out problems  
19 and not a good bond.

20 Q Right. Now, what is the procedure at the end of  
21 the day when you are finished spraying and you need to, I  
22 guess, you need to clean up your material so it will be all  
23 right for the next morning? Don't you?

24 A Yes. You take your nozzle and clean it off, your

1 jets. And I, myself, showed them, advised them to put their  
2 nozzle in water over the head of the gutter, then I run at  
3 least five gallons or better of water through my glue line and  
4 pump.

5 Q Could the nozzle jets get clogged up if you don't  
6 clean them out at night, or don't leave them in water?

7 A Yes.

8 Q Now, what other possibilities are there that  
9 would cause a low glue-to-fiber ratio? In other words, how can  
10 you change the amount of glue that you have got coming out  
11 there?

12 A Just by opening your valve at the ends of the  
13 nozzle.

14 Q That changes the pressure?

15 A That gives you more pressure or less pressure at  
16 the end of your nozzle, or you can adjust and regulate your  
17 pump. But you have to adjust your valve at the ends of the  
18 nozzle to let that pressure out at your nozzle.

19 Q So someone could change the pressure at the  
20 nozzle simply by turning a valve?

21 A Yes, higher or lower.

22 Q And get too little glue or too much glue?

23 A Yes.

24 Q Now, in your instruction, or in your knowledge,

1 does National Cellulose ever tell anyone that they can  
2 substitute any other materials they want to?

3 A No, sir.

4 Q Have you ever substituted an adhesive not made  
5 by National Cellulose on any job that you have ever worked on?

6 A No, sir.

7 Q Do you recall telling Mr. Weiler's men whether or  
8 not that was okay to do?

9 A No, sir.

10 Q When you were in Richmond, and during the time  
11 that you actually sprayed and observed Mr. Weiler's men  
12 spraying, can you tell us from your experience whether that  
13 material was going on correctly?

14 A The material I was using during my stay went on  
15 correctly and properly.

16 Q And has that material fallen off, to your  
17 observation?

18 A No, sir.

19 Q And you were out there yesterday?

20 A Yes, sir.

21 Q Has National Cellulose offered you any money to  
22 come here and testify today?

23 A No, sir. I tried to get out of coming.

24 MR. BENNETT: All right. Thank you. That is all

1 I have. Answer Mr. Tucker's questions.

3 CROSS-EXAMINATION

4 BY MR. TUCKER:

5 Q Mr. Giffin, I understand it was your job to  
6 train applicators of K-13; is that correct?

7 A Yes.

8 Q And it was your job to examine the equipment and  
9 determine whether the equipment was working properly; is that  
10 correct?

11 A Yes.

12 Q And that would have included a determination by  
13 you as to whether there was enough fiber going on the surface  
14 that was being sprayed; is that right?

15 A Yes.

16 Q And that would have also included a determination  
17 by you as to how much glue was being added to that fiber to be  
18 sprayed onto the surface; is that right?

19 A Yes.

20 Q And you actually, in fact, went to Richmond and  
21 trained the applicators on the site for the St. Christopher's  
22 job; did you not?

23 A Yes.

24 Q And you actually examined the equipment that they

1 had and made a determination as to how much glue was going on  
2 at that time?

3 A Yes.

4 Q Now, as I understand what you did, Mr. Giffin,  
5 you made, initially, a determination as to how much fiber that  
6 the machine was blowing out per minute, or per hour; is that  
7 correct?

8 A Yes.

9 Q And I believe you told me that you determined  
10 it was blowing out at 288 pounds of fiber?

11 A Yes.

12 Q All right. And you went to your chart, and you  
13 examined your chart under the eight-jet nozzle section and  
14 pounds per square inch that were supposed to be at that nozzle,  
15 and you determined that that reading was 78; is that correct?

16 A Yes.

17 Q All right. And then you set that nozzle on 80;  
18 didn't you?

19 A Yes.

20 Q All right. Now, isn't it a fact, Mr. Giffin,  
21 that your own manual recommends that you set that regulator  
22 pressure at approximately 25 pounds over that 78 psi nozzle  
23 reading?

24 A No, sir, I didn't read that.

1 Q Let me show it to you. Do you have your manual  
2 there?

3 A Yes.

4 Q Turn, if you will, to section two, page 9 of  
5 eighteen.

6 MR. BENNETT: I'm sorry, which page?

7 MR. TUCKER: Section two, page 9 of eighteen.

8 THE WITNESS: I haven't found it.

9 MR. TUCKER: Section two, page 9 of eighteen. I  
10 have a copy of the page here if you'd like to see it.

11 THE WITNESS: Okay.

12 THE COURT: Let him find it in the manual, if  
13 that is -- can you help him find it? Why don't you look  
14 for it, Mr. Tucker?

15 MR. TUCKER: Let me see if I can do it. Here  
16 you are.

17 BY MR. TUCKER:

18 Q Do you see paragraph C on that page, Mr. Giffin,  
19 liquid regulator?

20 A Yes.

21 Q Does that refer to the nozzle that you were  
22 talking about?

23 A Yes.

24 Q And do you see there that it says, "Set regulator  
184

1 pressure approximately 25 pounds over recommended nozzle  
2 pressure"?

3 A I see that.

4 Q All right. Now, if you had set it, your nozzle  
5 pressure, at 25 pounds over the recommended nozzle pressure,  
6 you would have set it at 103, would you not, sir, 25 plus 78?

7 A No, you are talking about the gauge at the pump.

8 Q All right, all right. Does this liquid regulator  
9 refer to the gauge at the pump?

10 A Yes.

11 Q All right. Is there any recommended -- or is  
12 there any excess recommendation for setting the guage at the  
13 nozzle that you are aware of?

14 A I determine that when I take the rpm reading off  
15 the machine.

16 Q I understand that. But is there any recommenda-  
17 tion by National Cellulose to set the gauge at the nozzle for  
18 any higher number other than the one that is in your chart  
19 here that you refer to?

20 A Not unless you change to get more fiber, but  
21 the only reason you would change any pressure --

22 Q All right. You told me that this -- or you  
23 testified, I believe, that this fiber machine runs with a  
24 pulley, and it has three speeds; is that correct?



1 A Yes.

2 Q Did the pulley break down while you were in  
3 Richmond?

4 A No.

5 Q You don't recall it breaking down?

6 A No.

7 Q You don't recall having to replace it?

8 A Not a pulley, I don't recall.

9 Q Do you remember Mr. Jim Coppage?

10 A No.

11 Q Do you remember Clankey Allen?

12 A The only name that sounds familiar, as I recall.  
13 He was the applicator that I might have been training.

14 Q But you trained him?

15 A Sir?

16 Q You trained him for the St. Christopher's job?

17 A I worked with him, yes.

18 Q Did you train the applicators?

19 A This was apparently the applicator.

20 Q Were there other applicators?

21 A Not all of them was applicators.

22 Q I believe you said that the men on the job  
23 included one man in the truck, or the hopper, and two applica-  
24 tors; is that right?

1 A Yes.

2 Q And your job was to train them?

3 A Yes.

4 Q And you trained the man who ran the truck, or the  
5 hopper?

6 A No, sir; he was not on the scaffold.

7 Q Well, did you train the applicators?

8 A Yes.

9 Q Did you teach these people how to set the glue  
10 setting at all?

11 A Yes.

12 Q All right. And did you set that glue setting on  
13 the first day that you were there?

14 A Yes.

15 Q Did you ever change it after you were there?

16 A Yes.

17 Q How many times did you change it?

18 A Once.

19 Q Why did you change the glue setting?

20 A I established the amount of fiber that was coming  
21 through the machine. At the speed I was setting on, I was not  
22 going over, above that or below it.

23 Q Did you tell them not to change it after you set  
24 it?

1 A Yes.

2 Q And you don't have any knowledge as to whether it  
3 was ever changed after you left there, do you?

4 A No, I do not.

5 Q You don't have any knowledge as to whether it was  
6 changed while you were there?

7 A It was not while I was there.

8 Q All right. And as far as these other possibili-  
9 ties that you refer to as to what could cause a low glue-to-  
10 fiber ratio, that is, a foreign object in the barrel or in the  
11 glue nozzle, filter that was clogged, or the jets that were  
12 clogged, you don't have any information to allow you to say  
13 that any of those things caused this low glue-fiber ratio at  
14 the St. Christopher's installation; do you?

15 A You say it is a possible thing that could happen?

16 Q Yes, but you don't have any knowledge that would  
17 lead you to believe that that is, in fact, what happened; do  
18 you?

19 A No, I don't.

20 Q Did you pay your own way here to Richmond?

21 A No, sir.

22 Q Who paid it?

23 A It was paid by the company.

24 Q Which company?

1 A National Cellulose.

2 Q Are they paying you for your lost time?

3 A I have no idea, sir.

4 Q Have you requested that they do so?

5 A No, sir.

6 Q Do you plan to request that they do?

7 A Yes, sir.

8 THE COURT: Any further questions of Mr. Giffin?

9 MR. BENNETT: No. Can we have a brief recess?

10 I think if we put our heads together, we could probably  
11 eliminate a lot of testimony.

12 THE COURT: That is a good idea.

13 JUROR BURKE: Can I ask him a question?

14 THE COURT: Let me hear it. Don't ask it directly  
15 to him. I have got to pass on whether it is a good  
16 question or not. What is the question?

17 JUROR BURKE: Where did he actually start  
18 spraying?

19 THE COURT: Do you want to get a clarification of  
20 that? Do you want him to use the chart, also,  
21 Mr. Burke?

22 JUROR BURKE: Yes, sir.

23 THE COURT: Where is that exhibit, please? It  
24 should be out. I don't have it, the chart, the little

1 map.

2 MR. TUCKER: I have got a question along that  
3 line, and perhaps I could just pick that up.

4 THE COURT: Let's get to the juror's question.

5 MR. TUCKER: That was what I was going to ask him.

6 THE COURT: Did you-all walk off with that plat?

7 MR. BENNETT: I may have it. Let me check. Here  
8 it is, I'm sorry.

9 THE COURT: They can see it. You don't have to  
10 come out of the jury box. I think he has already  
11 testified it was the west end of the building near the  
12 old gymnasium. Can you see this by looking overtop of  
13 it, to the side? Whereabouts was it?

14 THE WITNESS: This here back in this area here  
15 on three bays.

16 THE COURT: About a couple of bays or so out from  
17 the west end of the building.

18 THE WITNESS: And the one that faces right into  
19 the old gymnasium.

20 JUROR ADAMS: Did you do the front section?

21 THE WITNESS: This section in here?

22 JUROR ADAMS: That is the one.

23 JUROR APPLEWHITE: You didn't do the east at all?

24 THE WITNESS: No.

1 THE COURT: Or along these sides over here?

2 THE WITNESS: No, sir.

3 JUROR BURKE: In other words, from what you did  
4 in the west, that other way was done by the people that  
5 you had trained; is that correct?

6 THE WITNESS: Yes.

7 JUROR BURKE: Thank you.

8 THE COURT: Mr. Tucker?

9 BY MR. TUCKER:

10 Q Do I understand, Mr. Giffin, that you not only  
11 did some of the west wall but you did some on the south wall as  
12 well in that corner between the south and west?

13 A No, I sprayed right here on this eave from the  
14 back in the west. I came down to about halfway down, and I  
15 worked in the top area and up in the dome areas. The side  
16 walls, I did no --

17 Q Did you go all the way over to the south wall?

18 A I went over to the eave, this area in here, over  
19 to the eave, but not down the walls.

20 Q All right.

21 A This flat surface in here is what I applicated.

22 THE COURT: Let me ask this. Why don't you have  
23 a seat, Mrs. Applewhite? You have testified you went  
24 back out and looked at the building yesterday and saw

1 the areas where the insulation was on and the insulation  
2 where it was off.

3 THE WITNESS: Yes.

4 THE COURT: Did you work on any of the areas  
5 where the insulation was off?

6 THE WITNESS: No, sir.

7 BY MR. TUCKER:

8 Q Mr. Giffin, let me show you PLAINTIFF'S EXHIBIT 17  
9 and ask you if that shows the west end of the building and the  
10 south wall of the building, taking into account 1, 2, 3, and  
11 4 correspond with 1, 2, 3, and 4 on this drawing.

12 A Well, I didn't do much on these pictures here  
13 except I would preferably show you in the building. This  
14 picture, I just don't know about pictures.

15 Q Mr. Giffin, we can't go to the building today.  
16 And would you assume for me that this picture shows the west  
17 end of the building and the south wall of the building, and  
18 that 1, 2, 3, and 4 on the picture marked PLAINTIFF'S EXHIBIT 17  
19 correspond to the 1, 2, 3, and 4 on PLAINTIFF'S EXHIBIT 30?  
20 Tell me if that is the area where you sprayed.

21 A I can say in this area by looking that the  
22 application isn't my application.

23 Q Now, where is the eave that you sprayed over?

24 A The eave comes down to this side. In this area

1 will be an eave part in here.

2 Q Did you spray over to the south wall on this west  
3 side?

4 A No, I can just -- I don't understand you.

5 Q What I am trying to ask you, Mr. Giffin, is  
6 whether you sprayed the west end all the way over to the south  
7 wall.

8 A On this end here, I went to the eave, the west.  
9 And I went from the eave up in this area over to this eave  
10 here.

11 Q All right. And by the eave, do you mean the area  
12 where the roof and the side wall -- where the roof comes in  
13 contact with the side wall?

14 A Yes.

15 Q All right. So that would be all the way over to  
16 the area that is not sprayed; is that right?

17 MR. BENNETT: Judge, I am going to object. He  
18 is trying to confuse the man. I think he is meaning  
19 eaves to mean the dormer windows.

20 MR. TUCKER: What he is telling me is --

21 THE COURT: I think the jury has heard his  
22 testimony.

23 MR. TUCKER: All right.

24 THE COURT: He has him on cross-examination.



1 BY MR. TUCKER:

2 Q What I am trying to find out, Mr. Giffin, is  
3 from this picture right here whether you can tell me that you  
4 sprayed this entire west wall over to the south wall.

5 THE COURT: Now, you are talking about walls.  
6 I thought we were talking about ceilings. We'd better  
7 get it straight, ceilings and eaves and dormers, because  
8 walls don't relate to it.

9 MR. TUCKER: Well, I misspoke myself.

10 BY MR. TUCKER:

11 Q Did you spray the entire area of the west ceiling  
12 over to the south wall that is shown on PLAINTIFF'S EXHIBIT 17?

13 A I sprayed the west wall.

14 Q You sprayed the west ceiling?

15 A Down in the part of halfway, and this wall area,  
16 against the wall.

17 Q Did you go all the way over to the south wall?

18 A This is south over here.

19 Q Yes, sir.

20 A I went down to the eave, just the eave past the  
21 conduit area.

22 Q What is the eave? Is the eave shown in that  
23 picture?

24 A The eave is where the wall meets your eave.

1 Q Is it shown in that picture?

2 A I don't -- I don't --

3 Q You know what you are talking about. I am not  
4 sure what you are talking about when you are talking about eave.

5 A I am not sure about this eave.

6 THE COURT: Look through all of the photographs  
7 and see if you can find any that you think you can relate  
8 to.

9 Do you have a list, Mr. Tucker, of which pictures  
10 are taken toward the west end? Is that the only way?

11 MR. TUCKER: This is the only one that I find that  
12 is taken at the west, at the corner of the west end and  
13 south wall where Mr. Giffin said he sprayed.

14 THE COURT: I know what the witness said, and I  
15 am not going to let you proceed any further. He said he  
16 cannot relate his testimony to that photograph. He has  
17 told you in terms of eaves, and he has told you in terms  
18 of being down there. But he can't, in that photograph,  
19 tell you whether that does or does not represent his  
20 work. There is no point in keeping on pursuing the  
21 point.

22 MR. TUCKER: Well --

23 THE COURT: If the jury has any confusion about  
24 it, I will ask them, and we may end up taking a view,

1 but --

2 MR. TUCKER: I think if we can let me proceed, I  
3 could establish that he did do all the way over to the  
4 wall.

5 THE COURT: I will let you proceed a little bit,  
6 but I can't let you go past the point where the witness  
7 said he doesn't know.

8 BY MR. TUCKER:

9 Q Can you look at that photograph and tell me  
10 whether that shows any area that you sprayed?

11 A The ceiling area in here can indicate some of my  
12 application.

13 Q It does? Is that the west wall that you referred  
14 to that is next to the gymnasium where you sprayed?

15 A That would be the west wall I sprayed. I can't  
16 tell you from this picture, I am just telling you from the west  
17 wall to the eave.

18 Q All right. Will you assume for me, since we have  
19 got it established into evidence thus far, that that is the  
20 corner of the west wall and the south wall?

21 A If that picture is taken at the west wall, I  
22 sprayed the west wall.

23 Q All right. And can you further tell me that you  
24 sprayed that area between this beam here and the south wall?

1           A       No, I can't.

2           Q       You can't tell me whether you did that or not?

3           A       I can't tell by this picture, because there is  
4 nothing to show me what I can see.

5           MR. TUCKER: I don't understand the confusion,  
6 but that is all I have.

7           THE COURT: Anything further of Mr. Giffin?

8           MR. BENNETT: No, Your Honor.

9           THE COURT: You can step down, Mr. Giffin.

10                               (The witness stood aside.)

11  
12  
13           THE COURT: Did you-all want him to remain around?  
14 Is he free to go?

15           MR. BENNETT: Well, he will stay.

16           THE COURT: All right, sir. Do you want him to  
17 be in the Courtroom or stay outside?

18           MR. BENNETT: I may need to recall him as a  
19 witness. You'd better wait outside, Mr. Giffin, in case we  
20 need to call you further.

21                               (Recess.)

22  
23           MR. BENNETT: Call Mr. Harold Boyer.

1                    HAROLD BOYER was sworn and testified in behalf  
2 of the defendant, as follows:

3                    DIRECT EXAMINATION

4 BY MR. BENNETT:

5                    Q            Would you state your full name and home address,  
6 please, sir?

7                    A            Harold Boyer, 1948 North MacGregor's, Houston,  
8 Texas.

9                    Q            And where are you employed, Mr. Boyer?

10                   A            National Cellulose Corporation.

11                   Q            How long have you been with National Cellulose?

12                   A            About 15 years.

13                   Q            Did you start with the company when the company  
14 started, or was it already in existence?

15                   A            That is a tricky question, because they started  
16 in 1958. And I was working with them in 1958. Then, I left  
17 them in 1961 and returned back to them in '66.

18                   Q            Could you briefly describe your experience with  
19 National Cellulose and what types of positions you have held?

20                   A            I started out in National Cellulose with the  
21 specific purpose of organizing the application into some  
22 reasonable form and have moved up into the position of Vice-  
23 President in Technical Engineering Services.

24                   Q            What are your duties as Vice-President of

1     Technical Engineering Services?

2             A         Yes.

3             Q         What are your duties in that job?

4             A         Well, I still have a basic responsibility to see  
5     that application is viable. I also have the responsibilities  
6     to see that quality control procedures of the fibers are  
7     maintained. And I have the added duty of developing new  
8     products, or running tests on our existing products.

9             Q         All right. Now, in connection with this job,  
10    do you recall when Weiler Insulation became connected with  
11    National Cellulose in 1973?

12            A         If you are asking the specific date, no, I'm not.  
13    I'm aware of in the time frame of when Mr. Weiler became  
14    associated.

15            Q         When a company signs on to be a distributor for  
16    your product, what type of training goes on at that point? And,  
17    specifically, what type of training was given to Mr. Weiler's  
18    employees?

19            A         Well, National Cellulose maintains personnel in  
20    the field that are not located at our factory in Houston but  
21    are, instead, remotely located, to provide assistance in  
22    training in the sales field and to provide assistance in  
23    application techniques training. And, in addition to that, we  
24    maintain a program whereby we have certain training programs

1 that are held either semi-yearly or yearly.

2 Q All right. Now, did you send people specifically,  
3 or have Weiler's employees specifically come somewhere for  
4 training?

5 A No, I didn't. We had one or two training  
6 seminars in which they were invited to come, but they weren't  
7 required.

8 Q Prior to this time when Mr. Giffin came to  
9 Richmond in 1975, had Weiler employees had other training for  
10 other National Cellulose people?

11 A Yes, they -- Bill Murphey and Tony Weiler  
12 attended a training course in Houston, I believe it was, the  
13 following year. I may not be exact on the dates on this. We  
14 held an application meeting in Allentown, Pennsylvania; and  
15 Tony did not come. However, I believe, if I remember right, he  
16 sent three of his people to the meeting.

17 Q And, at that meeting, what type of training takes  
18 place?

19 A Well, the meeting is designed primarily to  
20 address the problem of controls. It is important that you  
21 get enough glue into the fibers to make it stick. A lot of  
22 our manuals are devoted to the importance of maintaining the  
23 proper ratio of fiber and adhesive. And, in addition to this,  
24 methods by which you can evaluate how well that you are doing

1 this as the job progresses.

2 Q Now, do you know a gentleman named Bill Harris  
3 who used to work for Weiler?

4 A I vaguely remember him, yes.

5 Q All right. Let me show you this letter, these  
6 two letters, and ask you if you can identify them.

7 MR. TUCKER: Your Honor, I don't have any objection  
8 to one of the letters, because it was written by  
9 Mr. Boyer himself. But, as to the other letter, I  
10 would certainly object to it in that it was written by  
11 Mr. Harris and is obviously hearsay.

12 THE COURT: Let me see the letters, Mr. Bennett.  
13 Mr. Bennett?

14 MR. BENNETT: Sir?

15 THE COURT: He objected to the first letter.

16 MR. BENNETT: Yes, well, Judge, I just want to  
17 introduce it for the purpose of showing it was received  
18 from a Weiler employee. It relates to the training  
19 program, and it seems to me they are trying to raise  
20 some issue of training improperly.

21 THE COURT: Well, I don't think the letter is  
22 really directed and is relevant to that issue. The  
23 objection he has to it is that it is hearsay.

24 MR. BENNETT: Oh, well, I withdraw it, then.



1 BY MR. BENNETT:

2 Q Now, Mr. Boyer, in connection with your job, are  
3 you familiar with the application techniques for your product?

4 A Yes, sir.

5 Q All right. Is that your area of responsibility?

6 A It is one of them, yes.

7 Q All right. Now, do you also have the responsi-  
8 bility of looking into problems that come up with various  
9 applications around the country?

10 A I would say probably yes to that, but I would not  
11 think that that is a primary responsibility. In other words, if  
12 I was to write a job description, that probably would not really  
13 show up as part of my job.

14 Q All right. Well, in connection with this case,  
15 did you examine some samples that were taken from the building  
16 and have been introduced here?

17 A Yes.

18 Q Can you tell the jury what conclusion you drew  
19 concerning those samples as far as whether or not they  
20 contained your glue?

21 A Part of the samples --

22 MR. TUCKER: I am going to object to this to the  
23 extent that Mr. Boyer has not been qualified as any  
24 chemist or analyst of these samples. I don't know what

1 he is about to testify to other than the fact that they  
2 did contain the glue. But as to whether he can identify  
3 it as to his or somebody else's --

4 THE COURT: That objection is sustained, at this  
5 point. There is not testimony to show on what basis  
6 he would know whether it is his or not.

7 BY MR. BENNETT:

8 Q Is there a method by which you can tell your  
9 particular K-13 glue, when it is contained in a sample of  
10 insulation?

11 A Two methods.

12 Q Can you describe those?

13 A One is spectrophotometry, which is based on the  
14 fact that you can put a known sample of a product into the  
15 machine and you can analyze that product and compare the  
16 results. Now, like products give like results, of course.

17 Another test which I use frequently in the field  
18 is that acrylic, when it is burned, gives off a very distinc-  
19 tive odor. I don't know how else to describe it except sweetly  
20 acidic.

21 Q In connection with your work at National  
22 Cellulose, do you have experience in terms of testing samples  
23 of insulation to determine whether or not they contain your  
24 adhesive or your glue?

1 A Yes.

2 Q And how long have you been doing that, and how  
3 many times would you say?

4 A About 15 years.

5 Q All right. Now, in connection with the samples  
6 from the job, did you make that type of test on those samples?

7 MR. TUCKER: Your Honor, let's identify the  
8 samples we are talking about. I don't think he has  
9 made that determination as to all the samples we have  
10 introduced. I think it has only been one.

11 MR. BENNETT: He can differentiate it.

12 THE COURT: I think that goes, right now, to  
13 weight rather than admissibility. The samples in  
14 evidence, you are referring to, were what?

15 MR. BENNETT: Yes.

16 BY MR. BENNETT:

17 Q Some of these samples in evidence you actually  
18 had in Texas; is that correct?

19 A I don't know that for sure.

20 Q Well, you were here at the end of July, 1980, and  
21 took some samples with Mr. Newman?

22 A Yes.

23 Q Those samples have been marked, I think, as  
24 EXHIBITS 1 through 7, or 8, in the little bags. Those are the

1 same samples. Did you take tests on those samples, or other  
2 samples from this job, to determine whether or not they  
3 contained National Cellulose glue?

4 A No, not specifically to that answer. I made  
5 tests on one or two of those samples.

6 Q Right. What did those tests reveal?

7 A That the burning smell which came from the  
8 insulation was not what we would normally find in our product.

9 Q What conclusion did you draw from that test?

10 A That the product is not the same as our product.

11 Q You are talking about glue or fiber?

12 A Glue.

13 Q Now, have you had a chance to see the pictures  
14 that Mr. Newman has been showing here today showing the brown  
15 areas and the green areas and the blue areas?

16 A Yes, sir.

17 Q Have you personally been to this building to  
18 inspect it?

19 A Yes, sir.

20 Q How many occasions?

21 A I believe on four separate occasions.

22 Q Did you observe the areas where the brown stuff  
23 is sticking to the metal, or next to the metal, and then has  
24 blue stuff overtop of it?

A Yes, sir.

1 Q Can you explain to the jury how such a condition  
2 would come into being?

3 MR. TUCKER: Objection, Your Honor. That calls  
4 for speculation on behalf of the witness, unless he  
5 knows.

6 BY MR. BENNETT:

7 Q Well, is there any application method whereby in  
8 one spraying you can get two colors up there?

9 A No.

10 MR. TUCKER: Objection, Your Honor. That calls  
11 for speculation, if he is trying to show that that is  
12 what happened on this particular job, unless he can  
13 establish what happened on this job.

14 THE COURT: That objection is overruled. I think  
15 he knows his product.

16 BY MR. BENNETT:

17 Q How do you get this condition of having two-toned  
18 type effect?

19 A Well, you first apply one product to the area,  
20 then if you do it correctly, you let it dry completely before  
21 you add the second product, the second product over the bottom  
22 of that. If you don't allow it to dry completely, then the  
23 weight of your new insulation is probably going to pull your  
24 fibers loose, and it is just not going to stick to it.

1 Q Do you have to use a different application method  
2 when you come over with the second layer of the blue color?

3 A Yes. We do not recommend that procedure, but  
4 when we have found it necessary because of -- probably because  
5 of the new energy laws that they are passing in the country now,  
6 which require more insulation, we have required them to use a  
7 special nozzle, a special design nozzle, or another nozzle that  
8 we have, which is fitted with air jets.

9 Q All right. Did Mr. Weiler have those nozzles?

10 A Not to my knowledge.

11 Q All right. Does that require a different mixture  
12 of glue to fiber when you are coming over that second layer?

13 A No, the mixture of the glue to fiber would  
14 probably still remain the same if you had everything set  
15 correctly, with the exception of the fact that we try to  
16 increase the velocity of the fibers so that it impacts with  
17 the material at a greater rate of speed so that it will attach  
18 itself better.

19 Q Is it recommended by your company in a one-inch  
20 application such as we have in this job that under any circum-  
21 stances you use a two-layer method to get one inch of  
22 insulation?

23 A No, sir.

24 Q Why don't you allow that?

1 Q Well, what you are really trying to get is you  
2 are trying to get a complete entanglement of the fibers  
3 throughout the entire mass, or the matrix of the insulation.  
4 This is what gives it its resiliency, and this is what gives  
5 it its strength.

6 If you come back in two layers, it is very easy  
7 to see that you have one definitive live, and you have a second  
8 line, then, which attaches to it so that second line cannot be  
9 as strong as the first line.

10 Q In your job, is part of your responsibility  
11 production of this application manual we have been referring to?

12 A Yes, sir.

13 Q All right. Is that your personal responsibility  
14 in terms of what goes in it?

15 A Yes.

16 Q All right. ~~Now, you have heard Mr. Giffin testify~~  
17 ~~earlier today about what he did when he was here in Richmond in~~  
18 ~~1975. Was there anything in that testimony that is contrary to~~  
19 ~~your manual instructions?~~

20 A ~~No, sir.~~

21 Q ~~Did he use proper settings on the machine to get~~  
22 ~~the proper mixture of glue to fiber?~~

23 A ~~Yes, sir.~~

24 Q All right. In your experience of 15 years, if

1 the entire job had been sprayed in that fashion, would it have  
2 fallen off?

3 A If there is no other circumstances to effect it  
4 besides the condition of the application, and the building,  
5 there would be no reason for it to come off.

6 Q And you would have plenty of glue in your fiber,  
7 and it would stick up there indefinitely?

8 A Yes. I think here, if I could, for just one  
9 second, the nozzle that we have is designed so that it has  
10 eight jets. The two end jets are 15-degree angle jets, and they  
11 are tilted in towards the material at an angle. When the  
12 nozzle is held at the proper distance from the surface, and  
13 held at the proper angle, you can't help but precoat the metal  
14 ahead of your fiber with about a six-inch layer of glue. Now,  
15 this glue is very visible. There is no way to mistake it. The  
16 reason that we designed the nozzle that way is our attempt to  
17 preclude the fact of having a weakened bond between the sub-  
18 strate and the fiber.

19 Q Well, if you have a flow rate of 288 pounds, and  
20 if you have your glue pump operating with 200 pounds of  
21 pressure at the pump and 80 pounds of pressure up at your  
22 nozzle where you are spraying, does that provide you with a  
23 proper mixture?

24 A Yes.



1 Q And that would give you the effect of spraying  
2 that six-inch layer of glue before you start hitting the fiber?

3 A Yes, yes.

4 MR. BENNETT: All right. Judge, I think that's  
5 all I have.

6 THE COURT: Mr. Tucker?

7  
8 CROSS-EXAMINATION

9 BY MR. TUCKER:

10 Q Mr. Boyer, is it not true that at this Houston  
11 seminar that Mr. Weiler attended and Mr. Murphey attended that  
12 they advised you of the fact that they had gotten the  
13 St. Christopher's job?

14 A I don't remember.

15 Q Then you wouldn't recall whether they requested  
16 your assistance in any way for the St. Christopher's job; is  
17 that right?

18 A At that time?

19 Q Or anytime.

20 A Yes, I do know that I was requested to provide  
21 some help for the St. Christopher's job, and I have a specific  
22 way of knowing that I was contacted, because none of the men  
23 will leave without my authority.

24 Q And you were requested to provide technical

1 assistance for that job; were you not?

2 A Yes, sir.

3 Q And you were requested to provide somebody on the  
4 scene to train the applicators; isn't that true?

5 A Yes, sir.

6 Q ~~And you were requested to provide somebody from~~  
7 ~~National Cellulose on the scene to set up the equipment; isn't~~  
8 ~~that true?~~

9 A Yes, sir.

10 Q ~~And Mr. Giffin was that man; is that correct?~~

11 A ~~Yes.~~

12 Q Now, these tests that you ran on the samples,  
13 Mr. Boyer, you concluded they were not your fiber and not your  
14 glue in some of these samples? Well, strike that.

15 On these tests that you ran where you concluded  
16 that it was not your glue, you nor anybody else at National  
17 Cellulose further concluded that that was the cause of the  
18 failure of that particular sample; did you?

19 A No, sir.

20 Q All right. And isn't it true that if enough of  
21 that glue, whether it was National Cellulose glue or some other  
22 glue, had been used with the fiber, it would have stuck up  
23 there; wouldn't it?

24 A No, sir.

1 Q That is not true?

2 A No, sir, not necessarily true.

3 Q It is true, however, that a proper mixture of  
4 that glue and your fiber would have adhered to the ceiling; isn't  
5 that true?

6 A No, sir, not necessarily so.

7 Q All right. And why is that not so?

8 A I am glad you asked that. Fuller Manufacturing  
9 supplies several different brands of glue. One of the products  
10 that they supply is not compatible with the borax product.

11 Q Were you able to determine that that was the  
12 product that was, in fact, in the sample?

13 A No, sir, I did not even attempt it.

14 Q Could you have done that?

15 A Can I answer the question in its entirety?  
16 The only way that you could do it --

17 THE COURT: Let him complete the answer.

18 A The only way that you could do it and be abso-  
19 lutely certain that you were correct would be to have a sample  
20 of the original product and then go, probably, through the  
21 spectrophotometry, which would give you, then -- a like result  
22 means like product.

23 BY MR. TUCKER:

24 Q Does National Cellulose have a laboratory where

1 it employs chemists?

2 A Yes.

3 Q And those chemists are capable of making such  
4 tests; are they not?

5 A They are capable of making the tests. They do  
6 not have the equipment.

7 Q You had certain tests done by outside  
8 laboratories; didn't you?

9 A Yes.

10 Q And that is not one of the tests you had conducted  
11 by an outside laboratory?

12 A Yes, we did have the adhesive analyzed by an out-  
13 side laboratory.

14 Q But you did not have the outside laboratory  
15 determine that the particular adhesive was the type of Fuller  
16 adhesive that would not combine with your product?

17 A No, sir, I did not.

18 Q All right. And you did not conclude from your  
19 tests that if this brown fiber had been mixed with the proper  
20 proportion of your glue, or anybody else's, that it would not  
21 have adhered; did you?

22 A No, sir.

23 Q So you can't say here today and tell these ladies  
24 and gentlemen of the jury that any of that brown fiber fell

1 down just because it was brown rather than blue fiber?

2 A No, sir.

3 MR. TUCKER: That's all I have.

4  
5 REDIRECT EXAMINATION

6 BY MR. BENNETT:

7 Q Let me ask you this, Mr. Boyer: Does your  
8 company ever attempt to determine whether you can substitute  
9 glue, other types of glue, for National Cellulose glue?

10 A Yes, we have a continuing research program.  
11 Our company uses tank carloads of adhesive. And almost every  
12 adhesive company in the country will send us a sample of their  
13 product to try. So I can almost say that we probably had tried,  
14 if I go back through the records, almost everything on the  
15 market.

16 Q Do the results vary in terms of how much glue,  
17 one type of glue you would need to keep it up there as opposed  
18 to another type?

19 A Yes, the percent of solids, the percent of solids  
20 that you end up with in your fibers is the only thing that  
21 holds your product in place. You are mixing it with water,  
22 which has no benefits at all as far as adhesion. So, if you  
23 reduce an emulsion, and you reduce it three and a half to one  
24 with water, and you spray it up at .23 of a gallon per pound

1 of fiber, you end up with a certain amount of solids. I really  
2 didn't want to get too far into this, but if you have an  
3 adhesion that has a solids content of a low capacity, and you  
4 mix them at the same ratios, then the end product will have  
5 less solids in it to hold it up, because the water is going to  
6 evaporate out anyway.

7 Q But if you switch brands of glue, do you have any  
8 way of knowing whether that is going to stick or not until you  
9 test it?

10 A No, you really -- we have a total program that we  
11 go through before we would ever approve anything.

12 Q And you have not done so with any Fuller adhesive?

13 A No, no other one.

14 MR. BENNETT: Thank you. That's all I have.

15 THE COURT: Yes, Mr. Burke?

16 JUROR BURKE: Could I ask him a question, please?

17 THE COURT: Let me hear it.

18 JUROR BURKE: I would like to know how long does  
19 it take a trainee to complete the course to be an  
20 applicator in the event something went wrong where he  
21 could detect it right away.

22 THE COURT: I guess the question is how long does  
23 it take somebody to be trained to be an applicator. Is  
24 that what you are basically asking?

1 JUROR BURKE: Right.

2 THE WITNESS: Well, it is a good question. It  
3 just kind of goes back to how much effort he puts into  
4 learning. And I have been working with guys where I  
5 have been able to get them applying good and maintaining  
6 the controls on it in two to three days. And I have  
7 seen other men that are never going to make it.

8 THE COURT: Was that the nature of your question?

9 JUROR BURKE: Yes, sir. Thank you.

10 THE COURT: Any further questions?

11 MR. TUCKER: I have none, sir.

12 THE COURT: Mr. Bennett?

13 MR. BENNETT: No, sir.

14 THE COURT: You can step down, Mr. Boyer.

15 (The witness stood aside.)  
16  
17

18 THE COURT: Any other witnesses?

19 MR. BENNETT: ~~Judge, I think I would like to~~  
20 ~~introduce the application manual into evidence.~~ I don't think  
21 that has been introduced. Certainly, I don't want to burden  
22 the jury with a big manual, but why don't we leave it all  
23 together?  
24

THE COURT: The pages you-all both referred to,

1 the two pages in there, can they be marked with a paper clip?  
2 I think that you referred to a chart, and I think that  
3 Mr. Tucker referred to a page in section nine out of eighteen.

4 MR. BENNETT: The chart is section eighteen,  
5 page 6 of eight.

6 THE COURT: Have you got a clip on it? Leave it  
7 on.

8 MR. BENNETT: That is a different copy. What did  
9 you do with the application manual? Oh, here it is.

10 THE COURT: Do you need another clip?

11 MR. BENNETT: Yes, sir. I have got another one.

12 THE COURT: All right, this will be DEFENDANT'S  
13 EXHIBIT 3.

14 (A National Cellulose application manual  
15 was marked DEFENDANT'S EXHIBIT 3 and received in  
16 evidence.)

17  
18 THE COURT: Ladies and gentlemen, this is in here  
19 for the purpose of you-all referring to the two pages that are  
20 marked with a paper clip. Well, there are so many pages, now,  
21 they have got paper clips on the top. It is the ones you have  
22 got on the side.

23 MR. BENNETT: Oh, yes, sir. I didn't realize  
24 there were some on the top.



1 THE COURT: I don't want you trying to go through  
2 this whole book. I don't really think you are going to want to.  
3 But there are two pages here that are marked with a paper clip  
4 on the right-hand side sticking straight into the thing. One  
5 of them is marked page 6 of eight in section one. The other is  
6 marked page 9 of eighteen, section two. And there was testi-  
7 mony in relation to these. You may have to refer back to them.  
8 If you do, they will be available to you. You may not need to.

9 Any other evidence?

10 MR. BENNETT: No, sir; that is our case.

11 THE COURT: Any rebuttal?

12 MR. TUCKER: Could I have just one moment, Your  
13 Honor? I would call Mr. Graves, briefly, Your Honor.

14  
15  
16 THOMAS M. GRAVES was sworn and testified in  
17 behalf of the plaintiff, in rebuttal, as follows:

18 DIRECT EXAMINATION

19 BY MR. TUCKER:

20 Q Would you state your name, please?

21 A Thomas M. Graves.

22 Q Mr. Graves, are you the Graves in T. M. Graves  
23 Construction, Incorporated?

24 A Yes, sir, I am.

1 Q And were you the general contractor for the  
2 St. Christopher's field house?

3 A Yes, sir, I was.

4 Q And were you there on the site of the construc-  
5 tion each day that it was under construction?

6 A Yes, sir, I was.

7 Q And were you there during the period of time when  
8 the insulation was being installed on this job?

9 A Yes, sir, I was.

10 Q Were you there during the period of time when  
11 Mr. Giffin from National Cellulose Corporation was on the job?

12 A Yes, I was.

13 Q All right. Did you, in fact, see Mr. Giffin  
14 spraying any of the areas of the roof?

15 A Yes, sir, I did.

16 Q All right. Did you see him spraying any of the  
17 west wall?

18 A To the best of my recollection, no, sir.

19 Q All right. Let me show you what has been marked  
20 as PLAINTIFF'S EXHIBIT 30 and ask you if you can identify on  
21 that drawing where it was that you saw Mr. Giffin spraying  
22 insulation.

23 A The reason -- can I say why I remember this?

24 Q Yes, sir, please do.

1           A       This is the far of the school. The existing  
2 gymnasium is on this side right here to the right. We had an  
3 opening, access opening in the building right here. That is  
4 not there, now. We finished it up, but we had access through  
5 the building through here. My trailer was parked at this place  
6 in the field, my job trailer. And I made periodic inspections  
7 throughout the day, three to four times a day. I went into the  
8 building and spent a half hour to 45 minutes to an hour and a  
9 half, then went back to the office, or to my trailer.

10                   To the best of my recollection, the gentleman from  
11 Houston that was working on the job at that time -- and another  
12 reason I remember this is because I was told he had insulated  
13 the Texas Dome where the Dallas Cowboys play. This is what made  
14 me interested, and why this has stuck in my mind. He was work-  
15 ing in this area right here.

16           Q       All right. And would that area that you are  
17 pointing to on PLAINTIFF'S EXHIBIT 30 be in the neighborhood of  
18 areas 6, 7, and 8?

19           A       That is the area I saw him working in, yes.

20           Q       All right. Now, can you relate where he was  
21 working to PLAINTIFF'S EXHIBIT 16, Mr. Graves?

22           A       He was working in this dormer area right here.  
23 And I cannot say 100 percent that he went down this far,  
24 because he wasn't working on the job that long. But he was

1 working in this dormer area, and in this area adjacent to the  
2 dormer.

3 Q And they would be in the areas between --

4 A 6, 7, and 8, that general area.

5 Q 6, 7, and 8?

6 A Yes, sir.

7 MR. TUCKER: Thank you, sir. That's all I have,  
8 Your Honor.

9 THE COURT: Any cross, Mr. Bennett?

10  
11 CROSS-EXAMINATION

12 BY MR. BENNETT:

13 Q Where you are indicating is in the middle of the  
14 building?

15 A Yes, sir, towards the end of the building,  
16 towards the east end of the building, not the west end.

17 Q Well, you said 6, 7, and 8.

18 A According to that.

19 Q Not 9, 10, and 11 -- 6, 7, and 8 out of a total  
20 of eleven bays was where you remember seeing him?

21 A Right, right.

22 Q And, at this time, you, the general contractor,  
23 were concerned with everything that was going on in that  
24 building?

1           A           Yes, only because of this one thing that was  
2 going on. It wasn't too much going on other than that, because  
3 we had been waiting a long time to get this done.

4           Q           Men still working up on the roof, at that time?

5           A           At the far end, yes, sir.

6           MR. BENNETT: Right. Okay, that's all I have.

7           THE COURT: You can step down, Mr. Graves.

8  
9                               (The witness stood aside.)

10  
11           MR. TUCKER: We have no further evidence, Your  
12 Honor.

13           THE COURT: All right.

14           Ladies and gentlemen, let me ask you-all to step  
15 on into the jury room just for a few minutes. And I think I  
16 will be with you in just a moment.

17                               (The jury retired from the Courtroom.)

18  
19           MR. BENNETT: Judge, may I renew my motion? And  
20 I would like to address myself to the Court on that.

21           THE COURT: Well, before you do that, because we  
22 might let the jury get an early start out of here, I don't  
23 believe that with our going over instructions and possibly  
24 having to redraw some instructions, and then argument, we can

1 get this case to the jury at a reasonable time this evening.

2 It is my policy not to keep a jury down here at  
3 night, you know, after suppertime, if we can avoid it. And  
4 we will have to hear your motion, first, Mr. Bennett, then we  
5 will have to take up instructions. Then we may have to have  
6 some redrafted.

7 My experience is telling me more and more that I  
8 never ask you-all for estimates, because it always means it will  
9 be twice as long as we think they will be. But I am getting,  
10 right now, that it would be unlikely we get it to the jury by  
11 5:00 o'clock, even for arguments. Certainly, it is going to be  
12 close to that by the time we give you-all time to argue, and  
13 the jury is going to get the case coming up to close to 6:00.  
14 And I really don't know that we want to keep them down here.

15 If you-all want to push on, I don't mind. I will  
16 stay down here until midnight if we have to. We may be better  
17 to bring them all back in the morning, and give us time to get  
18 the instructions done and not take up their time.

19 MR. TUCKER: I prefer to do that.

20 THE COURT: Mr. Bennett.

21 MR. BENNETT: That is fine with me.

22 THE COURT: Makes sense.

23 All right, bring the jury back in and tell them  
24 when they come in they are going home, in case they have got

1 some stuff to do.

2 (The jury returned to the Courtroom.)  
3

4 THE COURT: I am going to let you-all go on home  
5 before we do some more work, when we get everybody out here.  
6 Ladies and gentlemen, we have to do some more work in the case  
7 on some legal matters. Particularly, counsel have to work with  
8 the Court and advise me, and we have to come up with proper  
9 instructions on the law. This frequently takes much longer  
10 than we like it to, but it does.

11 And if you want to sit here for the next hour and  
12 a half while we did that, that would be dead time for you. On  
13 top of that, then, the arguments wouldn't start until maybe  
14 after 5:00 o'clock, and you would be down here after supper  
15 before you got the case.

16 I think it might make more sense if counsel and I  
17 stayed on and worked the rest of the afternoon until we finish  
18 the instructions, and then bring you back in the morning and  
19 be ready for you so that when you come back, you will be able  
20 to get the arguments and have the case in your hands immediately  
21 rather than have you sit around and wait and have you down here  
22 at night.

23 So, unless somebody is going to make a loud  
24 protest for the jury, I am going to let you-all go home. And

1 this also avoids you being down here after dark. Some people  
2 don't like to be getting in their cars after dark.

3 Ladies and gentlemen, what I told you earlier,  
4 I would like to repeat, now, and I will do it in this fashion:  
5 When you come back here in the morning, I want all seven of you,  
6 but I don't want to see but seven of you. I don't want to look  
7 at you tomorrow and get this uneasy feeling that I am also  
8 seeing your husband, your wife, your neighbor, or your friends.  
9 They can't help you, and they don't know anything about this  
10 case. You have heard the evidence, so don't go polling the  
11 neighborhood about what you ought to do.

12 In short, don't talk about the case.

13 JUROR APPLEWHITE: We are not supposed to talk  
14 about it at all, are we?

15 THE COURT: No, ma'am. Sometimes people think it  
16 is okay to talk at home and tell family members about it and get  
17 their views, but they can't give you any advice, because they  
18 weren't here today. They will give it to you, but it won't be  
19 worth anything, so just keep your own counsel and let your  
20 thoughts be absorbed in your own mind of what you think.

21 The lawyers will give you a lot of help tomorrow,  
22 I am sure, in their arguments, trying to remind you of what they  
23 said. But my guess is you will remember this evidence tomorrow  
24 without any trouble. But don't try to decide the case right now.



1 Wait until you have gotten the whole picture. The evidence is  
2 before you, but we have got to give you the law, and also,  
3 counsel have to argue the case.

4 You-all have a nice night. I would suggest,  
5 gentlemen, if you don't have any conflicts, that we start at  
6 9:00, because I might have another jury case at 10:00 tomorrow.  
7 I would like to be ready for that. 9:00 o'clock. Is that all  
8 right with you-all?

9 JUROR BURKE: Did you want us to report in here?

10 THE COURT: Straight back to this courtroom. You  
11 can leave your badges with the bailiff. They will be up here in  
12 the jury room. Just come right on back up here at 9:00. Hope-  
13 fully, we will be ready to start right into the case. You  
14 should be out of here in pretty good order tomorrow.

15 Thank you very much. You-all have a nice evening.

16 JUROR APPLEWHITE: 9:00 o'clock?

17 THE COURT: Let's all rise while the jury retires,  
18 please.

19 (The jury retired from the Courtroom.)

20 THE COURT: Mr. Bennett, you wanted to make a  
21 motion?

22 MR. BENNETT: Judge, I would like, at the  
23 conclusion of all the evidence, to renew my Motion to Strike.  
24 What we have got in this case, now, is affirmative evidence of

1 what happened when Mr. Giffin was there in 1975, and that is  
2 the only evidence in the case. And there is nothing in that  
3 testimony that the jury could reach a conclusion that he was  
4 negligent.

5 He has testified, and we have got records, as to  
6 where he set the machines. It is uncontradicted that these  
7 settings are correct. They provide the correct glue-to-fiber  
8 ratio. And it just seems incredible to me that there is any  
9 issue in this case for a jury to decide on. There is no showing  
10 of any negligence, and certainly no connection with the entire  
11 fall-off problem.

12 We have also got the problem of whether we are  
13 going to allow the jury, even if you overrule that part of it,  
14 to conclude -- there is no evidence that would allow this jury  
15 to conclude that what we did during the two days that we  
16 sprayed caused the entire problem. And, certainly, the only  
17 allegation that we have got is that we negligently applied the  
18 insulation. We have still got to deal with that problem.

19 Certainly, we are limited to the 3,000 square  
20 feet that the plaintiff's evidence showed that was sprayed  
21 while we were here in Richmond. And how do we get around that,  
22 if that is the allegation, and there is no evidence in the case  
23 that that particular stuff was misapplied? I don't see how --  
24 you are going to ask the jury to speculate on a lot in this

1 case. And a verdict, if it is against us, is going to have to  
2 be based on speculation that maybe he didn't do something quite  
3 right when he was here in Richmond. But there is no evidence  
4 to show that he did something wrong.

5 We further have got the problem that the only  
6 evidence of damages in the case are these estimates to com-  
7 pletely tear down and respray the entire building. There is no  
8 method in this case for the jury to allocate portions of the  
9 building that they think we are responsible for.

10 We have got substitutions of glue, substitutions  
11 of different color fiber. Bill Murphey said he didn't use any  
12 brown fiber, and yet we know there is a lot of brown. How  
13 could the jury possibly sort all that out? There is no proof  
14 of damages that would relate to any potential negligence that  
15 could be charged to National Cellulose.

16 But the main reason is that we just don't have  
17 any evidence that Mr. Giffin did anything wrong. And I don't  
18 see how they could possibly conclude that National Cellulose  
19 was negligent unless they speculate. And I don't think they  
20 should be allowed to do that.

21 This really is not a case that should go to the  
22 jury, because it is a complex-type factual situation. But  
23 when you get down to the evidence of negligence, there is only  
24 one man that has testified and said what actually went on in

1 terms of machine settings. And there is no evidence that that  
2 was wrong.

3 THE COURT: All right. Before you speak on this,  
4 Mr. Tucker, let me say, with reference to Paragraph 9(a) of the  
5 Amended Third-Party Motion for Judgment, that in order to be as  
6 fair as you can be to the plaintiff without requiring that there  
7 be some amendment, or say that there is a deviation between  
8 allegation and proof, I am going to accept the concept that  
9 "apply," as you put in that allegation, refers to the total  
10 application technique, that is, meaning the setting up of the  
11 equipment which, admittedly, was done initially by Mr. Giffin.

12 Mr. Bennett is right that no one else but  
13 Mr. Giffin himself knows how it was done, and he has testified  
14 as to how it was done.

15 I am not willing, Mr. Tucker, under that allega-  
16 tion, to stretch it to say -- to give you a cause of action  
17 under that allegation in the Motion for Judgment that there is  
18 an issue in this case that Mr. Giffin didn't give these people  
19 enough instruction, that he was negligent in the manner of his  
20 instructions to the employees. I don't think there is any  
21 evidence of that, either, but I don't think the allegation under  
22 any interpretation can be broad enough to say that he did.  
23 Something came up in the trial that raised that, especially  
24 about how many days would it take somebody to learn to do the

1 work. There are other little peripheral pieces of evidence of  
2 how to get training, and what location. But the allegation is  
3 not broad enough to say that the negligence is predicated upon  
4 not having given enough, or having stayed there long enough to  
5 have given more, or having stayed on the job for another month  
6 to make sure they didn't mess it up, not in that sense of the  
7 word. Your allegation is -- I am going to say, reluctantly,  
8 that it is broad enough to say that those things which,  
9 admittedly, they did can relate to the whole job, not just to  
10 the 3,000 square feet. I think the witness actually said  
11 3,500 to 6,500, he thought, by estimate. But that is the  
12 setting up of the pressure, the pump, and things of that  
13 nature.

14 But I think what probably, Mr. Bennett, troubles  
15 me, and that is, where is the evidence that there is any  
16 correlation between what Mr. Giffin did in setting up the pump  
17 and setting up the mixture and the falling down of the insula-  
18 tion except for the fact that it did, in fact, fall? And it  
19 did, in fact, fall because there was insufficient glue,  
20 according to the testimony of most everybody, for that matter.  
21 Where do we avoid this leap of faith that the Supreme Court is  
22 wont to call speculation? I am, too.

23 MR. TUCKER: Bill Murphey testified, Your Honor,  
24 that he was present when Mr. Giffin set up this equipment, and

1 that he set it up, Mr. Giffin set up this equipment by a field  
2 test, and a field test only -- not field, feel, that he  
3 sprayed some out of there, and it felt fine. That is what he  
4 said. I asked him if he did anything else, and he said no.

5 Based on that, and on the evidence that has been  
6 offered so far, what he should have done is what Mr. Giffin  
7 says he, in fact, did, he made these kinds of calculations,  
8 looked at the manual and made the calculation.

9 THE COURT: How would Mr. Murphey have any idea  
10 of that? He is talking about testing, whether he ran a test  
11 sample. I think you said he put it in a bucket and tested it.  
12 There is no way Mr. Murphey can testify as to what the mental  
13 processes were in Mr. Giffin's mind. That evidence is not  
14 uncontradicted as to how he set up the machine.

15 MR. TUCKER: No, sir, it is not in that  
16 Mr. Giffin says that he made some calculations as to how much  
17 fiber he had, and he determined by just the flow of the fiber  
18 that he had 288 pounds of fiber per hour coming out of that,  
19 and this was solely by testing the amount of fiber. Then he  
20 said he went to the chart, and he determined how much glue  
21 that should be going into that. He set his nozzle according  
22 to this, and the nozzle readings were such and such, and that  
23 is the way he said he did it.

24 Now, that is the way, according to the manual,

1 that it is supposed to be done. But Mr. Murphey said that the  
2 only thing he did in setting that up was to use this feel  
3 test, that is, some of it came out, he reached up, and he  
4 squeezed it, he said, "Yes, that feels fine," and he went on.  
5 And that is all he did. So there is the conflict in the  
6 evidence. And that, maybe, I think, goes to the weight as to  
7 whether Mr. Giffin is more believable than Mr. Murphey. And  
8 Mr. Bennett can certainly argue that. But to take it away from  
9 the jury on that basis, I think it totally ignores the testi-  
10 mony of Mr. Murphey.

11 THE COURT: It is thin. I am going to let it go  
12 to the jury, Mr. Bennett. Let's see what they do, first, then  
13 we will take a look at it.

14 (The Court and counsel retired to the  
15 conference room, where the following objections  
16 and exceptions were made:)

17  
18 MR. BENNETT: Judge, just so the record will be  
19 clear, I have got two that were refused.

20 THE COURT: You do. You have two that were  
21 refused. They are marked A and B. Now, it might be a good  
22 idea, since we are so early, if you go ahead, since the  
23 reporter is still here, if you go ahead now and state your  
24 objections that you may not have stated in the record on the

1 grounds of refusal of instructions, or your objection on the  
2 motion, of course.

3 MR. BENNETT: Right.

4 THE COURT: Here are the refused instructions, and  
5 here are the ones that are given.

6 MR. BENNETT: I would, of course, object to the  
7 Court's refusal to give the instruction which has been marked A  
8 and the instruction which has been marked B. I think there is  
9 a duty in this case to minimize the damages on the part of the  
10 general contractor. And, certainly, the measurement of the  
11 damages in this case should be the cost of having the defect  
12 remedied at the approximate time of the failure to perform, or  
13 as soon thereafter as he can, reasonably. This allows the  
14 jury to let the contractor -- not to let it run for five years,  
15 which he has done in this case, let his damages go through the  
16 roof.

17 I would also object to the giving of any  
18 instruction on negligence for the reasons stated in the Motion  
19 to Strike.

20 MR. TUCKER: I object to the refusal of  
21 instruction No. C and D on the basis that I think it is proper  
22 to tell the jury about the distinction between primary negli-  
23 gence and secondary negligence.

24 THE COURT: Any other? Is that it?



1 MR. TUCKER: That's it.

2 THE COURT: All right, gentlemen. See you-all in  
3 the morning at 9:00.  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24

November 7, 1980  
Richmond, Virginia

THE COURT: Good morning, ladies and gentlemen.  
I trust you-all had a good night and nobody tried to influence  
you about your verdict or anything like that.

Please give me your attention for the instructions  
on the law of the case. The law is contained in this par-  
ticular case in ten separate instructions written out on paper.  
And you'll have these with you in the jury room, if you need  
to refer to them. And counsel, of course, will probably make  
reference to them in their closing arguments.

The law is, of course, expressed in general terms,  
and it tells you, in effect, what to do, depending on what  
you believe the facts to be. It doesn't tell you anything  
about the facts. You have to decide the facts, then the law  
gives you the principles that you will apply to those facts.

There are also general principles as to what  
type of things you should take into account and should not  
take into account in deciding your verdict. It tries to ex-  
plain the issues in the case, what you really are trying,  
from the evidence.

And I think you'll see that they flow together  
pretty easily. You really should consider these as if it's  
all one continuous piece of paper. There are different

1 theories expressed, because there are different sides of the  
2 case. And it's a decision on the facts that will determine  
3 how the law is to be applied.

4  
5 (At this time, the written instructions  
6 of law were read to the jury by the Court.)

7 THE COURT: Mr. Tucker?

8 MR. TUCKER: I just want to say at the end of  
9 the case how much Mr. Graves and Mr. Winston and I do  
10 appreciate your serving. Just as the Judge told you at the  
11 beginning, it's an important service that you perform by  
12 serving on the jury. And, certainly, we, on behalf of Mr.  
13 Graves, are grateful for your sitting here and listening to  
14 what is very important to him.

15 What is important to him is that he's been found  
16 responsible, and he's admitted responsibility for a contract  
17 that he had with Church Schools for this construction job.  
18 And that place out there, that insulation, has to be repaired.  
19 And Mr. Graves has been found to be liable for \$55,900.00 by  
20 this Court; and Mr. Graves shouldn't have to pay that  
21 \$55,900.00, because Mr. Graves, although he was the general  
22 contractor on this job, was not the one that was primarily  
23 at fault for putting that insulation up there. Other people  
24 were at fault.

1                   National Cellulose, in this case, has made  
2 every attempt in the world to put Weiler Insulation Company  
3 on trial here, to shift the focus from them to Weiler  
4 Insulation.

5                   Now, Weiler Insulation is not on trial here;  
6 and don't be deceived by that tactic to put Weiler Insulation  
7 on trial. Who is on trial here is National Cellulose Corp-  
8 oration.

9                   Now, what we are saying is that National Cellulose  
10 Corporation did this, that they were negligent in getting that  
11 glue up to that insulation, and they were negligent in setting  
12 up the machinery that spit this glue out and put it up there  
13 with the fiber.

14                  Now, focusing on National Cellulose, as we have  
15 to do in this case, and what they did wrong, and what the  
16 evidence shows they did wrong, I'm not going to start at the  
17 beginning, what I've got to do is start at the end, actually  
18 what happened.

19                  What we know is uncontradicted evidence that  
20 this insulation is coming down. It's been coming down for  
21 five years, ever since this thing was constructed. From 1975  
22 it's been falling off. The only reason that it's been falling  
23 off is because there's not enough glue in that mixture of  
24 binder and adhesive. And we know that; that's uncontradicted.

1                   The question is why. All right. So we go back.  
2 We are still moving backwards, now, to the point between the  
3 time when Mr. Giffin left that job, left it in the hands of  
4 the Weiler employees.

5                   And the time of the completion of that job, when  
6 this mixture lacking enough glue to stay up there, was put up,  
7 the evidence in this case is uncontradicted as to what happened  
8 during that period of time, also. The only evidence that we  
9 have got in this case as to what happened during that period  
10 of time comes from Mr. Murphey. And Mr. Murphey said, you  
11 will recall, that they did nothing to change the settings on  
12 the machine that sprayed the glue and the fiber onto that  
13 ceiling; nothing was done by him or by his men to his know-  
14 ledge during that period of time.

15                  Now, you can bet that if that had not been so  
16 that if something had been done during that period of time,  
17 National Cellulose would have had somebody in here to say  
18 that that's not so. But there's no evidence here to indicate  
19 that anything during that period of time was done other than  
20 what Mr. Murphey says was done. And that was nothing, other  
21 than change some nozzles from time to time. And he said he  
22 changed the nozzles two, three times. He doesn't recall how  
23 many times they were changed, but you have the manual here,  
24 and you will find in the manual that the manual recommends

1 that these nozzles be changed every 40,000-something. It  
2 doesn't say. You can assume, and I think we all can assume  
3 that it's probably 40,000 square feet.

4 All right, now, if they changed it two to three  
5 times, that's certainly adequate to cover this building. So  
6 I don't think that you can find, on the evidence in this  
7 case, that Weiler, during that period of time, did anything  
8 wrong.

9 Now, they have tried in their evidence to give  
10 you situations based on the experience of Mr. Boyer and based  
11 on the experience of Mr. Giffin as to what went wrong, or  
12 what could possibly go wrong.—well, what went wrong in other  
13 jobs and, therefore, what could possibly have gone wrong in  
14 this job. You heard some evidence to the effect that maybe  
15 there was something in the glue barrle that stopped it up,  
16 as may have happened in some other case. Maybe the nozzle  
17 got stopped up. Maybe something else happened. Maybe some-  
18 body deliberately turned the switch, or changed the valve.  
19 I don't know that that's true, but the thing of it is you've  
20 got to decide the case on the evidence that's presented.

21 Now, they offered that to put in your mind the  
22 possibility that something else occurred other than what  
23 actually did occur; and you've got to sift through that, and  
24 you've got to remember that the evidence in this case shows

1 only that nothing occurred during that period of time, that  
2 these people who were working for Weiler who were out there  
3 spraying, who were running those machines did nothing during  
4 that period of time other than change those nozzles. And  
5 that's the only evidence we have. All right?

6 So then, we back up a little bit further. We  
7 back up to the period of time when Mr. Giffin was here, the  
8 week when the job began. Now, what happened then? The  
9 evidence is uncontradicted that Mr. Giffin, National  
10 Cellulose's employee, set up that machine. He says he did  
11 it. Mr. Murphey says he did it. There's no indication that  
12 anybody else set it up. There is no indication that anybody  
13 else tampered with it at all.

14 In setting up that machine, Mr. Giffin says  
15 that he set up the glue flow through that machine. That's  
16 uncontradicted. He's the one who set it up. Mr. Weiler  
17 didn't; Mr. Murphey didn't; Mr. Allen didn't; nobody else did.  
18 So that's where it started, right there.

19 Now, the only issue which is really in dispute  
20 here is whether it was set up properly, how it was set up.  
21 And you've got a conflict in the evidence on that, because  
22 Mr. Murphey says that he saw Mr. Giffin set this glue and  
23 binder machine going. And he says that the way the man tested  
24 it to find out whether it was operating properly was he squirted

1 some out, and he felt it. He squeezed it in his hand to see  
2 if it felt like it was all right to him, and that's all he  
3 did. That's what Mr. Murphey says. Mr. Giffin, of course,  
4 you've heard, has said something different, something that  
5 perhaps went by during the trial, and it was not very--was  
6 not emphasized a great deal. I want to make sure you under-  
7 stand, now.

8           There's some other evidence in the case as to  
9 what was done. I read you some Answers to Interrogatories,  
10 as you recall, and told you I apologized for doing it, it was  
11 tedious. One of those Answers to Interrogatories, No. 5 that  
12 I read you, National Cellulose Corporation was asked in  
13 writing to respond under oath to the following question:  
14 "State what, if anything, your representatives did to assure  
15 the proper mixture of K-13 product and binder sold to Weiler  
16 for application in the St. Christopher's field house." Now,  
17 that's a question that they had an opportunity to respond to,  
18 to consult with their lawyers with, to have their lawyers  
19 write, which is very often the case, and to answer under oath.

20           The Chairman of the Board answered in this way:  
21 "Nothing specifically was done for this job." They go on to  
22 say that all K-13 is applied with standard procedures as out-  
23 lined in our application manuals. We know that is not so,  
24 because if all that K-13 on this job had been applied in



1 accordance with the procedures outlined in the application  
2 manual, it wouldn't be coming off, it would be up there.

3 National Cellulose itself says nothing  
4 specifically was done at this job.

5 Now, Mr. Giffin comes in, and Mr. Giffin comes  
6 here from Missouri, or Colorado, or wherever it was that he  
7 came from, paid to come here by National Cellulose and  
8 testify. He comes and tells you he went through all these  
9 elaborate procedures to determine how much glue was going  
10 into that machine, and it all sounds good until you analyze  
11 it a little bit more closely.

12 Now, you recall that where Mr. Giffin started  
13 was he had to determine how much fiber was coming through  
14 that blower machine, and he had to determine how much fiber  
15 was coming through there because the amount of fiber that you  
16 have coming through makes a difference as to how much glue  
17 you are going to have coming through the machine. The more  
18 fiber coming through, the more glue you need.

19 Now, Mr. Giffin says that he tested that machine  
20 first of all. He says he put it on medium speed. Remember  
21 that it was on the slower speed, and he moved it to medium,  
22 tested it and said he got 288 pounds of fiber coming through  
23 that machine. I'm sure you-all recall that. And that was  
24 the basis for his determination as to how much glue he needed.

1 Well, you take a look at the application manual  
2 that's in evidence, and you take a look at the section,  
3 Section 2, page 6 of 18, pages 5 and 6. Now, I'm going to  
4 put a red clip on it for you. It talks about the medium  
5 speed of the blower machine, and it says the medium speed is  
6 used in most K-13 applications, and it says that the average  
7 delivery in pounds of fiber per machine hour is 350 to 360  
8 pounds per hour. Now, if that machine had been operating  
9 properly, I assume that we would have gotten somewhere close  
10 to that average; we wouldn't have been 70 to 80 pounds off.  
11 And I think the inference you can draw there is either he  
12 misread it, or the machine wasn't working properly, or it  
13 fluctuated in some way. If it fluctuated in some way, then  
14 I assume the glue had to fluctuate. If he misread it, then  
15 he misread it, and we got too little glue in there. But the  
16 medium speed for their standard machine, which is what they  
17 were using in this case, puts out 350 to 360 pounds of fiber.  
18 And he says it's got 288 pounds of fiber.

19 There's nothing in the record; there's nothing  
20 in the evidence to indicate that that machine was operating  
21 improperly. There isn't anything that fluctuates. I think  
22 the only inference we can draw is perhaps that Mr. Giffin  
23 misread that. Now, if he started with a reading that was  
24 improper, that wasn't close to the average machine, then he

1 is bound to have come up with too little glue, because, you  
2 see, if it's 350 or 360 on the average, then he's got to  
3 have enough glue to take into account that extra 70 or 80  
4 pounds an hour that come out of the machine.

5 Now, Mr. Giffin told you, also, that he sprayed  
6 only one area. Now, I'm sure it's some confusion to you.  
7 He said he sprayed only the west wall. He was able to  
8 determine after five years exactly where he sprayed. And  
9 every piece of material he put up there is fine, now. Well,  
10 you recall that there's a conflict in that. Mr. Graves, the  
11 general contractor on the job, says he was out there every  
12 day; and he remembers Mr. Giffin being there. And he  
13 remembers exactly where Mr. Giffin was when he saw him. Mr.  
14 Giffin was in the middle of that building, and he was around  
15 the area of bays 6, 7 and 8 spraying. He wasn't on the west  
16 wall. And that's not the only area Mr. Giffin sprayed.

17 And, if you'll look at the pictures on bays 6,  
18 7 and 8, you'll see that stuff's coming down; insulation is  
19 coming down in that area. And I think you could conclude  
20 from that that perhaps Mr. Giffin did spray some up on the  
21 west wall that's staying up there, but he also sprayed some  
22 up there in certain other areas that's coming down. And  
23 that's consistent with what's happening in the building. For  
24 five years, this stuff has been falling off in different places

1 with no rhyme or reason in areas that had been sprayed with  
2 blue and brown, with areas that had been sprayed with blue  
3 only. There's no rhyme or reason to it. It hasn't come off  
4 the west wall yet, but we know that it's been coming off for  
5 five years. And who's to know or say whether it's going to  
6 come off in the future. Certainly, St. Christopher's can't  
7 be sure of that.

8 If St. Christopher's is to be made whole again  
9 in this case, the only way in the world that they can be  
10 made whole is to take all of that stuff off--

11 MR. BENNETT: I'm going to object. This is not  
12 St. Christopher's, it's T. M. Graves versus my client. St.  
13 Christopher's has their judgment.

14 THE COURT: Most certainly, that's true.

15 MR. TUCKER: All right.

16 Backing up one step from St. Christopher's to  
17 Mr. Graves, the only way that anybody can be made whole, if  
18 Mr. Graves has to pay for this entire operation--and he must--  
19 is to have the entire thing resprayed, to have all of that  
20 taken down and to respray it.

21 Now, I have told you that we have gotten estimates.  
22 There is evidence in the record that we have estimates over  
23 a course of time from 1979 until now which range anywhere from  
24 \$41,000.00 to \$55,900.00. The most recent estimate we have is

1 \$55,900.00, and that comes from National Cellulose's own  
2 distributor/applicator in the area, Waco, Incorporated, who  
3 has said, as we agreed, that in order to put up one-inch of  
4 this National Cellulose spray-on insulation properly is to  
5 take down everything that's up there. It's going to cost  
6 \$55,900.00. That's what Mr. Graves has been found to be  
7 responsible for. We think that that's what National Cellulose  
8 should be responsible for.

9 Now, just because Mr. Graves has been determined  
10 to be at fault in this situation doesn't mean he's the only  
11 one. There can be more than one person at fault. Waco may  
12 be at fault. We're not trying Weiler today, we are trying  
13 National Cellulose Corporation. And I submit to you that  
14 National Cellulose Corporation was negligent in setting up  
15 this equipment by Mr. Giffin, and they left that equipment  
16 there. And the uncontradicted evidence is it was never  
17 changed during the period of time that Mr. Giffin left, or  
18 the time that the job was completed. And what's happened  
19 since is evidence of the fact that it wasn't done properly.

20 And, on that basis, I would ask you to return  
21 your verdict in favor of Mr. Graves in the amount of  
22 \$55,900.00.

23 THE COURT: Counsel, let me see you at the  
24 bench a second before you go on.

(Side-bar discussion off the record.)

THE COURT: Mrs. Applewhite, could I see you for a moment at the bench?

(Side-bar discussion off the record.)

THE COURT: Ladies and gentlemen, insulation is not an emotional issue. Unfortunately, an emotional issue has come up, and we are real sorry about that. We will go forward and hopefully this will not distract you from what we have to decide here today.

JUROR APPLEWHITE: I knew that before I come in here this morning.

MR. BENNETT: I'd like to start off just by thanking all of you for being here again, as Mr. Tucker has done.

This case, as I say, is not an emotional-type case. No one was hurt. But we are talking about a construction job. But it's important to the people here today, National Cellulose and Mr. Graves' construction company, and it's very important to both of those parties. And we do appreciate your attention to this case.

And I've never had a jury ask as many questions as you-all asked; and it indicates to me that you really want to know what happened out there and want to understand this situation. And that is gratifying to me, because it is

1 important to my client that you do understand it.

2 Spray-on insulation is not as simple as it  
3 might seem at first glance. Mr. Tucker wants you to believe  
4 that if you just set this nozzle here and set this nozzle  
5 here, you can spray forever and it'll be the same. This is  
6 just not the case, and I think you-all appreciate that.

7 Now, it seems to me we have really got only  
8 two witnesses in this case. One is this Mr. Murphey, who says  
9 he knew everything that went on on that job, while Marvin  
10 Giffin was there. And the second person is Marvin Giffin.  
11 Those are the only two people who have testified here that  
12 were actually there in 1975 and have any knowledge of what  
13 went on.

14 Now, the Judge has given you an instruction  
15 on credibility of witnesses, and that's really an important  
16 part of this case. I'd just like to read a portion of that  
17 to you. And I don't want to belabor the point, but in this  
18 instruction, Instruction No. 4 on credibility of witnesses,  
19 in deciding who to believe, one of the things that is very  
20 important is the witness's opportunity for knowing the truth  
21 and for having observed the things about which they testify.

22 Now, Mr. Murphey was supposedly a supervisor  
23 on this job. And I would assume that part of his job is to  
24 know what's going on. And yet he comes in here, and he tells

1 you we only sprayed blue fiber up there. And yet you know  
2 that's not true, because you can look at the pictures, and  
3 you see all this brown stuff. Where did that come from?  
4 And why did Mr. Murphey not know about that?

5 Well, it's obvious that his men were doing  
6 something behind his back, if he didn't know about it. And  
7 I submit to you that this is more reasonable to assume that  
8 he did know what was going on.

9 Now, we've also got the situation that not only  
10 did they substitute some different-colored fiber made by a  
11 different manufacturer, but they, in fact, substituted glue  
12 from another manufacturer.

13 Now, I don't pretend to be able to tell you  
14 exactly why they went wrong, because we weren't there when  
15 it went wrong; but that's not our burden in this case. Our  
16 burden is merely to show that Marvin Giffin came in, and what  
17 Marvin Giffin did was proper. And we have done that.

18 Now, it's important how you set up these machines.  
19 Mr. Giffin has told you essentially what he did there that  
20 day. And he sets up the fiber machine, and he started it up.  
21 And he weighed out the bags. And, after an hour, he deter-  
22 mined that he had 238 pounds of fiber per hour blowing out  
23 of that machine. Now, he wrote that down at the time, and  
24 he submitted a report, which is in evidence, to National



1 Cellulose Corporation. It's Defendant's Exhibit No. 2.

2 And, if you read this, it's not a great copy,  
3 but you can see the readings down here at the bottom. If  
4 you read the language that he wrote, Mr. Giffin is not an  
5 author, and he's not a highly educated man; but he does know  
6 one thing in his life, and that is how you spray on insulation  
7 properly. And this is the only evidence in this case that  
8 comes from 1975 as to how those machines were set up.

9 Now, I don't believe that Mr. Giffin was  
10 anticipating a lawsuit after he was here in Richmond and  
11 wrote his report, which was received by National Cellulose  
12 on June 25, 1975, stamped right on there. I don't think he  
13 was thinking about a lawsuit. I don't think he was thinking  
14 about testifying.

15 Now, this is where he set the machines when he  
16 was in Richmond. He was here trying to train these men; but  
17 it wasn't their first experience with National Cellulose  
18 product. Weiler Insulation Company had been doing this type  
19 of work since 1973. You've heard testimony that various  
20 applicators went to various training sessions and that  
21 Clankey Allen, who is the foreman on this job, had been doing  
22 it for a number of years and knew what he was doing.

23 Now, why is it that we don't hear from Clankey  
24 Allen today about the fact that he didn't change the machines?

1 We've only heard from Bill Murphey. That's rather curious,  
2 when Mr. Murphey is the guy that comes in in the morning,  
3 checks out, makes sure everybody is there and they are blowing  
4 up some stuff. And then he comes back in the afternoon to  
5 make sure that nobody's left during the day. And that is  
6 essentially his role, as I can see it, from his testimony.

7 It's awfully difficult for me to believe that  
8 Mr. Murphey really knows what Mr. Giffin did when he didn't  
9 even bother to stay the entire time Mr. Giffin was there.  
10 If Mr. Murphey was really interested in this application  
11 process, I would think that he would stay when the repre-  
12 sentative from National Cellulose was there to learn whatever  
13 it was that Mr. Giffin had to teach. But he didn't do that.

14 MR. TUCKER: I'm sorry to interrupt, and I  
15 apologize to the Court and to everybody, but I don't think  
16 it's proper for counsel to state his own personal beliefs as  
17 to the evidence in the case.

18 THE COURT: Well, it's a fine line, Mr. Tucker.  
19 What counsel is saying is this is what the evidence shows  
20 rather than what he himself concludes.

21 MR. BENNETT: Right.

22 But it is important for you to realize that  
23 Mr. Giffin's function here in Richmond was to train these  
24 people; and that's exactly what he was doing for the people

1 who were really going to be in charge, the two applicators  
2 and the man on the truck.

3 Mr. Murphey did not bother to stay. He stayed  
4 for about an hour the first day, then he came back the second  
5 day at the end of the job.

6 Now, if Mr. Murphey knows everything Mr. Giffin  
7 did while he was in Richmond, then he's got some gift that  
8 I don't know about and I wish I had, because he cannot know  
9 what went on when he wasn't there. And he admits that he  
10 wasn't there very much. That's also indicated by the fact  
11 that he didn't know that this brown fiber was blown up. All  
12 of these things should lead you to conclude that Mr. Murphey,  
13 while I don't think he's trying to deceive you, is not in a  
14 position to tell you what went on. The only person in that  
15 position to tell you that is Marvin Giffin.

16 Now, let's talk about Marvin for a minute,  
17 because he is an important witness. You've got to decide  
18 whether he's the type of man who's going to come in here  
19 and try to deceive you about what he did. He no longer  
20 works for National Cellulose, but he's still in the spray-on  
21 insulation business. And we brought him here from Missouri  
22 to testify.

23 And I would submit to you he's the type of man  
24 who is a simple, straightforward man and does not have the

1 ability to deceive anyone.

2 He tried to explain where on those pictures he  
3 sprayed, and he may not have done a good job of answering  
4 Mr. Tucker's questions, because he didn't really understand  
5 Mr. Tucker's questions, what he was asking. But, if you con-  
6 clude that generally he is a believable person, there is  
7 no other decision you can make in this case.

8 Now, the only way that, under the Court's  
9 instructions, that Mr. Graves--and I say "Mr. Graves," and  
10 Mr. Tucker said "Mr. Graves." But let's not forget we're  
11 talking about T. M. Graves Construction Company, Inc., which  
12 is a corporation, and who was the general contractor for  
13 this half-million-dollar job.

14 The only way that Graves Construction can recover  
15 is for you to conclude that Marvin Giffin set the machines  
16 wrong, and they stayed that way the entire job, and that's  
17 what caused the whole problem.

18 Now, we've shown you various possibilities as  
19 to how you can go wrong in this procedure. I'm not telling  
20 you any one of these happened, because we don't know. We  
21 weren't there. But there are numerous possibilities as to  
22 how you get too little glue up there. And I think we went  
23 through them fairly quickly with Mr. Giffin, but I'd like  
24 to remind you of it.

1                    Obviously, you can change the blowing machine  
2 that blows up fiber. If you speed that machine up, you'll  
3 get too much fiber. If you don't change the glue setting,  
4 then you're going to have too much fiber and too little glue.  
5 That's obvious that could have happened. We don't know. But  
6 Mr. Murphey does not know, because he didn't even know that  
7 they changed color fibers.

8                    A second possibility which I think is a likelihood  
9 in this case is that you mix too much water in with your glue.  
10 Let's not forget that the glue comes in a concentrated state,  
11 and it has to be mixed, 3.5 parts water to one part glue.  
12 And the way the man on the job does that is he gets a 55-gallon  
13 drum, he puts in 12 gallons of glue and fills it up. It gives  
14 him a proper mixture.

15                   Now, what do you think might happen if you start  
16 to run low on glue? Well, it's certainly a possibility that  
17 they started to cut this glue. "Hey, we're running out of  
18 glue. We got to stretch it. We know that even if we cut  
19 it with a little more water, that stuff's going to stick up  
20 there, and it won't hurt anything." That's a possibility.  
21 We don't know that that happened, but that's certainly  
22 possible.

23                   Third possibility: The jets on your nozzle get  
24 clogged up. Now, we know that that happened on this job.

1 And Mr. Murphey says that his men changed them a few times.  
2 If you're not careful in this process, your glue will cause  
3 you problems.

4 And we can train these men, and we can lead a  
5 horse to water, but we cannot make them drink. If they don't  
6 want to listen to us, that's not our fault, that's their  
7 problem, Weiler Insulation Company.

8 Now, let's go through the glue as it comes from  
9 the drum and gets up to the nozzle. The first point of entry  
10 is the hose from the pump into this barrel that's mixed up  
11 with glue and water. At the end of that hose, there's a  
12 filter. Now, things on a construction job are generally  
13 fairly dusty and dirty. And dust and dirt and other particles  
14 get into this mixture, and that's why we have a filter on  
15 the end of that hose that sucks up the glue. If the man on  
16 the truck is not careful and checks that filter periodically  
17 to make sure that that doesn't get clogged up, that can cause  
18 a decrease in pressure at the end of the line.

19 Second point: You get into the machine that's  
20 pumping the glue. It pumps the glue from the machine up to  
21 a nozzle. At the nozzle, there's a second filter that can  
22 also get clogged up. It goes through that filter, then it  
23 gets to a point where it's being measured by the pressure  
24 gauge, which was set at 80 when Mr. Giffin was there. That

1 pressure gauge can be adjusted by a little nozzle valve right  
2 there on the nozzle where the man is spraying. The only  
3 person who would know whether or not he changed that would  
4 be the actual person who was spraying, either Mr. Allen or  
5 Mr. Coppage. No testimony from them.

6 I would submit to you that that could have been  
7 changed, and that's up to the applicator. If the pressure  
8 drops, you're not going to get enough glue coming out, and  
9 you're going to get an improper mixture.

10 Now, we've also got this matter of the Fuller  
11 glue that was substituted. Mr. Murphey, I believe, said  
12 they bought two 55-gallon drums. Well, if you go through  
13 all the math, two 55-gallon drums is a lot of adhesive and  
14 will go a long way. I haven't calculated actually how much  
15 of that would go on this job, but it's a substantial portion  
16 of it.

17 Now, we don't know what happens when you sub-  
18 stitute another manufacturer's glue. We sell a glue, and  
19 we have tested that over the years, and we know that it works.  
20 We don't know what happens if you start substituting things,  
21 but that's certainly a change that we know happened in this  
22 job. And we don't know what the effect was.

23 Now, when you get right down to the bottom line  
24 of this case--and Mr. Tucker has done a nice job of trying to

1 put National Cellulose in the spotlight, because we are the  
2 only defendant left. And it's too bad that Weiler Insulation  
3 has gone bankrupt the day before this trial started. But  
4 they are obviously the people who are responsible for the  
5 condition out there. And I think that's as obvious as any-  
6 thing in the world.

7 Now, they are the contractor. They bear the  
8 responsibility for getting the material up there. Yes, we  
9 provided technical advice. Yes, we provided training, because  
10 we want them to do a good job. But, as I said before, you  
11 can lead a horse to water but you cannot make him drink.

12 Now, this is a business proposition; and there  
13 is nothing emotional about it. But it makes me a little  
14 angry that all of a sudden, we are the only people left in  
15 this case, and we are sort of the tail-end defendant; and  
16 everybody is trying to point to us, because, obviously,  
17 Weiler Insulation Company is not worth much when they are  
18 bankrupt. That case has not been decided. It's stayed by  
19 the fact that he filed bankruptcy yesterday, or the day  
20 before yesterday. And that will have to be decided later.  
21 And I think the outcome of that case is obvious.

22 Now, I'm going to sit down, now. And I probably  
23 have not said a lot of the things that I thought of at  
24 6 o'clock this morning when my eyes bugged open. And it's



1 the most difficult time of the case for a defense lawyer,  
2 because Mr. Tucker gets to get up and say some things that  
3 I probably would disagree with. I assume I would. But, if  
4 you see me over there squirming, you'll know that I want to  
5 get up and say something else. But, under our system, I  
6 don't have another shot; and there's nothing in the world  
7 that's harder for a trial lawyer than to be told to sit down  
8 and shut up. But I'm going to do that. Thank you.

9 JUROR APPLEWHITE: He can finish his argument,  
10 because it's not going to--

11 THE COURT: He's not doing it in account of  
12 you. He feels like he's said all he thinks he needs to say.  
13 Thank you for your consideration, though.

14 Mr. Tucker?

15 MR. TUCKER: Yes, sir. I'm going to sit down  
16 and shut up in a minute, also. I just have a few things  
17 that I want to point out to you. The first thing is I want  
18 to take out the red herrings in the case. The red herrings  
19 are the blue insulation and the brown insulation. That's a  
20 ploy to get you to think that Weiler's at fault.

21 Now, the reason this stuff's falling down is  
22 because there's not enough glue in it. It doesn't make any  
23 difference whether it's brown, whether it's blue, whether  
24 it's green, whether it's purple, or whatever. Whatever was

1 put up there didn't have enough glue.

2 Mr. Cox said he examined the samples, and the  
3 samples you'll see here and are going to take back into the  
4 jury room, he said all of them don't have enough glue,  
5 that's why they are down. You'll see some of them are brown;  
6 some of them are blue. That's a red herring.

7 Second red herring he's trying to get you to  
8 focus on is that this stuff is coming down in some way  
9 because there is not National Cellulose glue in some portions  
10 of it, that this man bought some other kind of glue. Well,  
11 somebody testified, I believe, that it's possible, it's  
12 possible to put another kind of glue with National Cellulose  
13 fiber and to make it stick, if you got enough glue in it. I  
14 don't care what kind of glue it is, it'll stick as long as  
15 it's not incompatible. And National Cellulose had the oppor-  
16 tunity to examine these elements to determine whether they  
17 were incompatible or not; and they didn't do it. And the  
18 reason they didn't do it, I submit to you, is because they  
19 are afraid of what they'd find. The reason that this stuff  
20 came down is because it does not have enough glue, not any  
21 of these other reasons Mr. Bennett is trying to make you  
22 believe happened.

23 Now, he's also pointed out to you, just as I  
24 told you, there are other possibilities as to why this might

1 have come down. But you can bet your bottom dollar that if  
2 any of those possibilities had been actual fact, there would  
3 have been somebody on this stand from National Cellulose to  
4 tell you exactly what happened. And they are raising red  
5 herrings there, too.

6 You don't have to believe Mr. Giffin. Mr.  
7 Murphey's testimony is in direct contradiction as to what  
8 he did. National Cellulose's own Answers, sworn Answers,  
9 signed by their Chairman of the Board, in contradiction of  
10 it. But you can take his testimony, and you can believe it,  
11 and you can still find for us on the basis of what I told  
12 you before as to what fiber rate ought to be coming out of  
13 here. And you also can look at this manual. And I'd challenge  
14 any one of you to look at this manual and find in there the  
15 proper procedure for setting out the amount of glue. And you  
16 can look at the manual. The manual says--

17 MR. BENNETT: Judge, I'm going to have to  
18 interrupt here. He's going to refer to the parts of the manual  
19 that he did not refer to in the opening argument, and I have  
20 no chance to get up and explain that. I think it's improper.

21 THE COURT: I understood the only part of the  
22 manual were those pages marked with a clip. And I told the  
23 jury not to bother about reading the manual. I'm not going  
24 to let you go into something on rebuttal that was not brought

1 up on direct. Objection sustained.

2 MR. TUCKER: All right.

3 Well, as I understand it, Your Honor, the entire  
4 manual is in evidence. I'll not refer to it.

5 THE COURT: Do you both understand that?

6 MR. TUCKER: Yes, sir; it was offered by Mr.  
7 Bennett and accepted, the entire manual.

8 THE COURT: All right, sir.

9 MR. TUCKER: At any rate, look at the provisions  
10 in there, if you can, to find out how much glue is in there,  
11 and see what you can find. I'm not going to argue it, as  
12 I've not been permitted to do. But I am permitted to tell  
13 you to look at the flow average I've pointed out to you  
14 before as to what the recommended--or what the average flow  
15 of fiber is for the medium setting on this machine. And  
16 you will see that it's 360 to 370--350 to 360, and that's  
17 60 to 70 pounds in excess of what Mr. Giffin found. And I  
18 think if you really consider this, and you really focus on  
19 who is responsible for this, you'll find that National  
20 Cellulose has some responsibility in setting up this machine.  
21 And it's really not all Weiler's fault, as they would have  
22 you believe.

23 Now, just because Weiler might have some  
24 responsibility doesn't relieve National Cellulose if they are

1 negligent, also. And I think, on the evidence that we've  
2 got here, you can find, and you will find, that National  
3 Cellulose was negligent in setting this up and causing what  
4 happened out there.

5 I thank you for your attention.

6 THE COURT: Ladies and gentlemen, that is the  
7 case. The matter is now in your hands. You will have the  
8 written instructions of the Court, as well as all of the  
9 exhibits, with you in the jury room. You will also have, on  
10 this yellow paper, I've written out in the simplest possible  
11 form two verdicts. The order of these verdicts has no  
12 meaning, because when you put two things in a row, you've  
13 got to put something first and something second. But it  
14 doesn't indicate about how I feel. I reverse these every  
15 case and turn it around.

16 The two I've written out, and I want you to  
17 copy one of these two onto a yellow pad in there, the foreman  
18 of the jury, and to sign that verdict. The two verdicts are  
19 "We, the jury, find for the defendant," signed by the fore-  
20 person. The other one is, "We find for the plaintiff and  
21 fix damages at--" blank dollars, signed by the foreman. One  
22 of those should be written down onto another piece of paper  
23 by the foreman of the jury and then brought back in and  
24 dated, please, if you would.

1                   Also, the first order of business will be for  
2 you to select one from your number to serve as what we used  
3 to call foreman, we now call foreperson of the jury. But  
4 whatever it is, it's whoever is going to help control the  
5 traffic and the flow of conversation, to keep order. The  
6 person who serves as foreman has no superior vote or position  
7 in the jury. You're all equal on the jury. Each of you have  
8 the same rights, the same votes. But this is required so  
9 that someone will be responsible to speak for the jury and  
10 to sign the verdict. So select one from your number to serve  
11 in that capacity.

12                   And the court will now stand in recess waiting  
13 for the jury to return. Once again, please rise while the  
14 jury goes out.

15                   (The jury retired from the courtroom  
16 at 9:50 a.m. to deliberate.)

17                   (The jury returned to the courtroom  
18 at 10:56 with a written question, and the  
19 following discussion occurred out of the  
20 presence of the jury:)

21                   THE COURT: The question is: "If we agree  
22 with Mr. Graves, that National Cellulose is responsible, do  
23 we find for the plaintiff and set the amount we feel that  
24 National Cellulose has to pay?"

1                   That's an unlegalistic way of asking the very  
2 simple question. The answer to it, of course, is yes. But  
3 I think the way the question is written that a yes answer  
4 is misleading.

5                   I believe that the thing for me to do is to  
6 probably re-read and refer them to the last instruction,  
7 Instruction No. 10, of the Court, which tells them under what-  
8 circumstances they find for the plaintiff and under what  
9 circumstances they find for the defendant. I don't know of  
10 anything else to do. Or I could just say it.

11                   What do you-all think about the question?  
12 Answering questions of the jury is a very tricky business.

13                   MR. TUCKER: I think, Your Honor, what they're  
14 asking for is covered by Instruction No. 8.

15                   THE COURT: Well, it's certainly covered by 10.  
16 If 10 is the finding instruction, that's the one that tells  
17 them specifically and answers the question. I don't have 10  
18 in front of me, but I know what it says, you shall find for  
19 the plaintiff if you find that the defendant was negligent,  
20 and if that negligence was the proximate cause of the damages.  
21 You shall find for the defendant if you find that plaintiff  
22 has not proved negligence and has not proved proximate cause.

23                   MR. TUCKER: What they are assuming is that they  
24 find for the plaintiff, and then they want to know--as I

1 understand it, they want to further know whether they set  
2 the amount that he's got--that National Cellulose is liable  
3 for.

4 Instruction No. 10 doesn't cover that, that  
5 just says you find them liable if you find them negligent,  
6 and that the negligence was the proximate cause.

7 THE COURT: Joe, get the original of the  
8 instructions from the jury and let me have them, please. Mr.  
9 Bennett?

10 MR. BENNETT: Judge, I would prefer that you  
11 re-read the instructions and not simply answer that question.  
12 To answer that question yes implies that that's the way they  
13 should find.

14 MR. TUCKER: It appears that 8 and 9 are the  
15 two damage instructions.

16 THE COURT: Bring the jury in.

17 (The jury returned to the courtroom.)

18 THE COURT: You-all don't have to sit down, you  
19 can remain standing. I think the most I could probably do  
20 that would not be violating some of the rules would be to  
21 re-read to you some of the instructions of the Court. And,  
22 if this doesn't clarify it, then perhaps I'll try to do some  
23 more. I'm going to read from several instructions of the  
24 Court.



1                   If you believe from the greater weight of the  
2 evidence that Mr. Giffin, the employee of National Cellulose,  
3 failed to use reasonable care in setting up the equipment  
4 used in the application process, then National Cellulose was  
5 negligent. Reasonable care, or ordinary care, is the care a  
6 reasonable person would have used under the circumstances of  
7 this case. You shall find for the plaintiff, Graves Con-  
8 struction Company, if the plaintiff has proven that the  
9 defendant, National Cellulose, was negligent, and if that  
10 negligence, if any, was a proximate cause of the plaintiff's  
11 damages. You shall find your verdict for the defendant,  
12 National Cellulose, if the plaintiff fails to prove that  
13 Cellulose was negligent, or fails to prove that such negli-  
14 gence was a proximate cause of the failure of the insulation  
15 or fails to prove that such negligence was a cause of the  
16 damage to the insulation.

17                   And then, Instruction No. 8, if you find your  
18 verdict for the plaintiff, in this case, Graves Construction  
19 Company, then, in assessing the damages that Graves would be  
20 entitled to from National Cellulose, you take into consider-  
21 ation the reasonable cost to Graves of correcting the damages.

22                   And I hope that that clarifies what you are  
23 asking. The reason I don't just answer your question in some  
24 simple way is that you use words in here that have different

1 legal meanings than my instructions, and I have a hesitancy  
2 to use the word "responsibility." And that's not part of my  
3 instruction language. I don't believe I can amplify on that  
4 a great deal more. I have given you in these instructions  
5 the def-nitions of what constitutes negligence. This is a  
6 failure to use reasonable care, and I've defined what  
7 reasonable care is. I've also told you that it has to be not  
8 only negligence but that the negligence must also be found by  
9 you to be a cause, a proximate cause of the damages. And if  
10 you were to conclude that that was so, you obviously would  
11 then find damages in favor of Graves against National  
12 Cellulose and fix the amount. If you were to find that that  
13 was not so, that the negligence had not been proven, or  
14 proximate cause had not been proven, then you would find your  
15 verdict in favor of the defendant. You would not find any  
16 money owed from National Cellulose to Graves Construction  
17 Company.

18 Does that help at all?

19 JUROR ADAMS: Yes, sir.

20 JUROR APPLEWHITE: Yes, thank you very much.

21 (The jury retired at 10:56 a.m., and  
22 returned to the courtroom at 11:00 a.m., when  
23 the following occurred:)

24 THE COURT: Ladies and gentlemen, have you agreed

1 upon a verdict? Ms. Brown, would you hand it to the bailiff,  
2 please, ma'am?

3 "We, the jury, find for plaintiff and fix  
4 damages at \$45,000.00." Signed Terry L. Brown, foreperson.

5 Ladies and gentlemen of the jury, is that your  
6 verdict?

7 Any motions before the jury is discharged?

8 MR. BENNETT: Yes, Your Honor. I'd like to ask  
9 the jury be polled.

10 THE COURT: Ladies and gentlemen, this is a  
11 legitimate request that you be polled individually to ascertain  
12 if you each agree that this is your verdict. And, simply,  
13 that is the question. I'm just going to call your name.  
14 Answer yes or no.

15 Ms. Adams, is this your verdict?

16 JUROR ADAMS: Yes.

17 THE COURT: Ms. Calder?

18 JUROR CALDER: Yes.

19 THE COURT: Mr. Brackett?

20 JUROR BRACKETT: Yes.

21 THE COURT: Mr. Byrd?

22 JUROR BYRD: Yes.

23 THE COURT: Ms. Applewhite?

24 JUROR APPLEWHITE: Yes.

1 THE COURT: Ms. Brown?

2 JUROR BROWN: Yes.

3 THE COURT: Ms. Brooks?

4 JUROR BROOKS: Yes.

5 THE COURT: Any further motions before the  
6 jury is discharged?

7 MR. BENNETT: No.

8 THE COURT: Ladies and gentlemen, thank you very  
9 much for your service in the court. Sorry about your problem,  
10 Mrs. Applewhite. I know you got to face that, and I'm glad  
11 you stayed to finish the case with us.

12 JUROR APPLEWHITE: Well, I knew it before I  
13 came in.

14 THE COURT? Yes. So I'm glad it wasn't--it put  
15 me in a pinch. I didn't know what to do. I wanted to stop  
16 the case, but I couldn't afford to sit here and not tell you.  
17 I'm glad it wasn't any worse than it might have been. Our  
18 wishes for you and your family in this situation.

19 I want you-all to leave here knowing that I  
20 meant everything I told you yesterday morning. You can go  
21 out of here with a feeling of accomplishment and pride in  
22 having served your community. Without the services of people  
23 like you, we cannot run this system. If anybody talks about  
24 what the system is down here, you tell them you know all about

1 it because you have been part of it. It's not some mystery  
2 that goes on behind closed doors. It's something that happens  
3 out in the open, and you jurors have the decisions to make.

4 You-all have a real nice week; and, if I don't  
5 see you before, have a nice Thanksgiving.

6 JUROR APPLEWHITE: Your Honor, you introduced  
7 the clerk, and you introduced the stenographer--

8 THE COURT: And I didn't introduce myself.  
9 Well, that's because you-all were late. I open the court at  
10 10 o'clock, and you-all hadn't gotten up here yet. When  
11 court is opened, my bailiff goes through a big spiel. I  
12 always come in with a big fanfare. And he tells everybody  
13 to rise while the Honorable Willard I Walker--and you'd have  
14 stood. But you-all weren't here. I forgot that you weren't  
15 here. It isn't too important what my name is, just my  
16 function. Thank you all very much.

17 JUROR APPLEWHITE: Thank you.

18 THE COURT: Drop your badges off downstairs.

19 (The jury retired from the courtroom.)

20 THE COURT: Any motions?

21 MR. BENNETT: Yes, sir, Your Honor.

22 THE COURT: Mr. Bennett?

23 MR. BENNETT: Judge, on behalf of National

24 Cellulose, obviously, I would move the Court to set aside this

1 verdict as contrary to the law and evidence. Where to start?

2 THE COURT: At the beginning.

3 MR. BENNETT: Yes, sir.

4 Primary negligence has never been shown in this  
5 case, and it's just--it's plain as day that the jury did what  
6 you did not expect them to do. But the have done it, now,  
7 and we've got to face this question.

8 Again, I would reiterate what I said at the  
9 initial motion to strike. There's only evidence in this  
10 case that Marvin Giffin set the job up, and he set it up as  
11 he said he did. and that that's in accordance with the way  
12 he was supposed to do it.

13 And, there's no evidence to contradict that.  
14 Mr. Murphey, his testimony really has no value to this jury.  
15 He said some things that Marvin did, but how could they  
16 possibly conclude, on the basis of his testimony, that that's  
17 what led to the entire problem? It's just--it had to be  
18 speculation.

19 And I know that they wanted to come to the  
20 result that it fell off, and somebody had to pay; but that's  
21 the whole problem. They don't have anywhere in between to  
22 supply them the basis to reach that decision. What is  
23 missing in this case is certain testimony to allow the jury  
24 to reach a conclusion that what he did was wrong and that

1        what that wrong was caused the entire problem.

2                Now, if they wanted to prove that, they could  
3        have gotten someone who was expert in the field of applying  
4        insulation, and they could have come in here and said if he  
5        did this, then that was negligent, or that was wrong, and  
6        that that's what caused the low glue-to-fiber ratio through-  
7        out the whole job.

8                We have got the problem of the amount of the  
9        verdict alone. It bears no relationship to the evidence.  
10       This is not a personal injury case. You can't just set an  
11       amount and say that sounds pretty good. The only evidence  
12       on damages that I know of is the \$57,900.00 estimate. I  
13       think there was one for \$54,700.00 using a different material.  
14       Then there's one for \$40,000.00. And these are different  
15       periods of time. But those estimates are all for breaking  
16       down the entire insulation that's up there and respraying  
17       it with another inch layer of spray-on insulation. There is  
18       no evidence in this case by which the jury can conclude, one,  
19       that all of it is defective, no evidence of that. The only  
20       evidence that I recall hearing was to the effect that I think  
21       that Mr. Newman said 40 to 50 percent of it has fallen off.  
22       And, of course, they have no way of knowing whether the rest  
23       will fall off.

24               But, on that basis, on the statute of limitations

1 basis, on the basis that the Court allowed them to go beyond  
2 the scope of the pleadings, it's just sheer speculation to  
3 say that what Marvin Giffin did led to the entire problem.

4 Now, I think what they may have done is not  
5 that Marvin might not have trained these men adequately,  
6 and that he left the job with some inexperienced men, and  
7 that's how they got into trouble but, as the Court tried to  
8 instruct them, there was no evidence of that. There was no  
9 allegation of that.

10 Judge, I really feel that you're compelled to  
11 set this verdict aside, because it's just unconscionable to  
12 have us defend a case and not have anyone come in and say we  
13 did something wrong and then allow the jury to find against  
14 us. It's just--it's shocking to me, and I think it's  
15 shocking to you.

16 THE COURT: Mr. Tucker?

17 MR. TUCKER: If Your Honor please, I submit that  
18 primary negligence was shown in the case. There was some  
19 evidence of it which the jury could have taken.

20 Mr. Murphey, as I told the jury, testified that  
21 he came in, that Mr. Giffin came in, and all he did was to  
22 feel this stuff to find out whether it was correct. Mr.  
23 Giffin came in and contradicted that. National Cellulose  
24 said nothing in particular was done on the job, so you had a



1 conflict as to really what was done on the job.

2 As to what should have been done on the job,  
3 the manual which they introduced into evidence, the entire  
4 manual was in evidence, submitted to the jury. And I was  
5 about to argue to the jury but did not have the opportunity  
6 to. With that manual in evidence, they can certainly go to  
7 it and attempt to determine what are the proper procedures  
8 for finding how to go about settting the glue on the machine.  
9 And I defy anybody to find it in this book.

10 On page 16 of Section 2 of this book, under the  
11 chart that we talked about that Mr. Giffin relied on, it  
12 says, "The complete description of how to establish flow  
13 rates and compute nozzle pressure are included in this manual  
14 in product information data, Section 5."

15 Well, you go to product information data, Section  
16 5, and this is what you come up with, some strange graph that  
17 is in there for the purpose of showing people, or showing  
18 these applicators how they go about computing how many bags  
19 of glue they will need, or how many bags of fiber they'll  
20 need for a particular job. And Mr. Giffin said he set it up  
21 in a particular way, that's true. But this manual, which  
22 they say is the proper way to do it, doesn't indicate in it,  
23 in the manual, that that's the way it is.

24 On another page in the manual, it indicates

1 to this psi reading that Mr. Giffin is supposed to have  
2 taken, you are supposed to add 20 to 25 pounds. In another  
3 area of the manual here, it says this machine is supposed  
4 to come up with, at this particular setting, as I told the  
5 jury, fiber flow ratings of much in excess of what Mr. Giffin  
6 said he got.

7 So, I think that they could take that testimony  
8 and certainly conclude that Mr. Giffin did not set this  
9 machinery up properly. I think they can take his own  
10 testimony, and the manual, just in and of itself, and conclude  
11 that. But, in addition to that, they've got the Answers from  
12 National Cellulose, which contradict their own witness and say  
13 nothing was done in particular on the job. And they've got  
14 Mr. Murphey, who was the only witness provided by anybody to  
15 say, in contradiction of Mr. Giffin, how this job was set  
16 up and what happened after it. And Mr. Murphey said that the  
17 job was set up by Mr. Giffin, no contradiction about that.  
18 But he said, also, that the only thing that was done was Mr.  
19 Giffin felt the stuff as it came out, and that was it.

20 So I think they have plenty of evidence on which  
21 to conclude something was done wrong here. And the only  
22 evidence we've got of what happened thereafter is from Mr.  
23 Murphey. They introduced no evidence whatsoever on that  
24 point. And Mr. Murphey said we did it just like Mr. Giffin

1 told us to. And then, to get to the point of it falling  
2 down, and the reason it's falling down is because there's no  
3 glue. And the inescapable conclusion is that somebody did  
4 something in the very beginning that was wrong. And that  
5 wrong was what Mr. Giffin did. And there's plenty of evidence  
6 on which to base a verdict.

7 As far as damages go, we don't have to prove  
8 damages with any mathematical precision. We established a  
9 range of estimates from 41,000 to approximately 56,000. And  
10 the jury took that range, and they awarded what they thought  
11 was appropriate to give us. I don't think they had to pick  
12 a particular estimate. If that were true, we'd have to prove  
13 the estimate, or mathematic precision. You instructed them  
14 all I had to do was prove it with reasonable certainty. I  
15 think I certainly did that. I don't believe it's any basis  
16 for setting it aside.

17 The statute of limitations argument hasn't  
18 changed a bit. I don't have anything else to say about that.

19 MR. BENNETT: Judge, just briefly in rebuttal,  
20 you focused on the issue, but this is not--if we went through  
21 and tried to explain everything in this manual, we would be  
22 here for several weeks. Obviously, it's very complicated. It  
23 does tell them in there how you set your glue flow, and it's  
24 on the one page we referred them to, 6 of 8, that tells them

1        what pressure you need, how many gpm per jet, gallons per  
2        minute, per jet, of glue that you need to have coming out.  
3        And this is not the type of matter that a lay jury can  
4        decide unless they are aided by expert testimony. And there  
5        is no expert testimony in this case that Mr. Giffin did any-  
6        thing that caused the eventual condition that they had. It  
7        is totally a bootstrapping argument to say this is what we  
8        ended up with, therefore, you must have set it up wrong in  
9        the beginning. There is nothing that they can make a  
10       connection with, and they've got to have expert testimony.  
11       And they just don't have it. And that was the whole point  
12       of limiting Mr. Cox, because Mr. Cox was not an expert in  
13       the field of how you get it up there.

14                It's just inconceiveable that this jury verdict  
15       can stand under the evidence that we have.

16                THE COURT: ~~Gentlemen, do you all agree with~~  
17       ~~this analysis--and I think it's true--that considering a~~  
18       ~~motion to set aside the verdict, the Court is, in actuality,~~  
19       ~~reconsidering the motion to strike? That is the view of the~~  
20       evidence that the Court must take, at this point, not only,  
21       of course, looking into the evidence in the light most  
22       favorable to the plaintiff, which would naturally be true on  
23       a motion to strike, but also the evidence that I'm looking  
24       at, at this point in time, is the evidence of the plaintiff,

1 which concluded with the closing of the plaintiff's case. I  
2 believe that is the correct analysis of the law on a motion  
3 to set aside.

4 ~~There are cases in which the Court, the Supreme~~  
5 Court has said that the Court is allowed to take into account  
6 the defendant's evidence at the conclusion of all the evidence  
7 and, again, on a motion to set aside where the defendant's  
8 evidence is uncontradictory and adds to the case and enhances  
9 the defendant's position on the motion to strike. But I  
10 don't believe that the Court--I think that if I should have  
11 stricken the evidence at the close of the plaintiff's case,  
12 I would have done so on the evidence presented; I would not  
13 have done so on evidence that came in later. That, I believe,  
14 is the correct analysis. I don't know whether you think  
15 there's some law to the contrary. If you do, let me know.  
16 But I think that's where the matter stands. And I feel that  
17 I should have stricken the evidence at the close of the  
18 plaintiff's case.

19 And this verdict will be set aside for the  
20 following reasons: Number one, on the question of the  
21 allegations contained in Paragraph 9-A of the Amended Third-  
22 Party Motion for Judgment of Graves, I am of the opinion,  
23 and I was always of the opinion--and I did not throw the  
24 plaintiff out of the case, at that point--that it's a

1        tremendous strain to put this issue to the jury in this case  
2        on the basis of a negligent setting up of equipment on an  
3        allegation that talks about negligent application, negligent  
4        applying of the material to the ceiling.

5                Quite coincidentally, the third-party plaintiff  
6        at no time asked the Court to allow it to further amend. It  
7        was not precluded from doing so as late as the pretrial  
8        conference on November 3 when we took the matter up. The  
9        plaintiff opted not to do it. I don't know what the legal  
10       effect of it is. I can tell you this: If the plaintiff  
11       had opted to ask the Court for leave to amend, at that  
12       point, it would have been denied. In any event, it would  
13       not have related back to the original filing the Amended  
14       Third-Party Motion for Judgment.

15               I believe under the evidence of the case and  
16       the stipulations that are in the Court file that the statute  
17       of limitations would have expired had this claim been  
18       asserted for the first time on November 3 or November 4 or  
19       November 6 of 1980. I think that would have been true  
20       certainly as to the five-year statute that we have been  
21       discussing.

22               I'm not going to change my ruling with respect  
23       to the running of the five-year statute of limitations from  
24       the completion of the project. I think that is the correct

1 law as stated in King, the V.M.I. case, and also in the  
2 case of Marcellus Wright and the Federal Reserve Board. Nor  
3 am I going to reverse my ruling, although I have some very  
4 uneasy feelings about it that, based on the statute of  
5 limitations as to the plaintiff's claim, particularly as to  
6 9-A, on the indemnity concept, that is, the statute had not  
7 even run as of now, in that respect. I'm not going to say  
8 that the statute of limitations expired on actions of this  
9 nature, unless the statute of limitations that we are going  
10 to be talking about is the one dealing with no action may  
11 be brought more than five years after the making of the  
12 approval. Five years from what date? From the rendering  
13 of services--which I conclude, along with the cases that  
14 have been cited to me--the completion of the project, in  
15 acceptance thereof.

16 Now, going into the evidence of the case, it  
17 seems to me that at the close of the plaintiff's case, at  
18 which time we did not have the testimony of Mr. Giffin, we  
19 did not have the testimony of Mr. Graves; that testimony  
20 came in on rebuttal, if I recollect correctly. We did not  
21 have the manual in evidence, at that point. All we had, at  
22 that point, seems to me, was evidence that National Cellulose  
23 had been there, that they had, in fact, set up the equip-  
24 ment, that they had given certain instructions to the

1 employees of Weiler, and that the insulation on the ceiling  
2 fell down because there was insufficient glue. At that  
3 stage in the case, I can find no inference that does not  
4 require speculation or inference on assumption that would  
5 take this case to the jury. It seems to me it's tantamount  
6 to--I think Mr. Bennett made this point earlier--to a res  
7 ipsa concent, or perhaps more appropriately, I think of the  
8 case of Saunders v. Murphy. This is the premises case where  
9 the little drink cans fell off the shelf when the lady  
10 reached up and put her hand on the shelf, the little three-inch  
11 can fell down and hit her on the hand. The Court there said  
12 that what was really happening was we were treating it much  
13 like res ipsa, and you were basing an inference on an  
14 assumption. I think that the posture of the case, at that  
15 point, in the posture of the case, the Court should have  
16 stricken the evidence.

17 And the only reason I didn't, frankly, was  
18 because I'm mindful of the desirability, when a case has gone  
19 that far, to let the matter go onto the jury and get the  
20 results before the Court takes action. And that's exactly  
21 why I did not act. Had it been not for that concept, which  
22 I would perceive to be the feeling of the Supreme Court, I  
23 would have stricken the evidence yesterday. And, certainly,  
24 I'm not going to let this verdict stand. It came down to a



1 factual situation which no reasonable inference could be  
2 drawn, at that point. I think upon the part of the jury  
3 that did not involve speculation, all they had before them  
4 was the material came down because it was not enough glue  
5 in it. But there was nothing there that, even on the  
6 theory that I allowed the plaintiff to go forward on it, on  
7 this concept of negligent setting up of the equipment,  
8 there was nothing in the evidence, at that point, that led  
9 the jury to leap over that chasm of proof. It became pure  
10 speculation. And, without asking for any further memoranda  
11 or further arguments, the verdict of this jury will be set  
12 aside and judgment will be entered in this case in favor  
13 of the defendant.

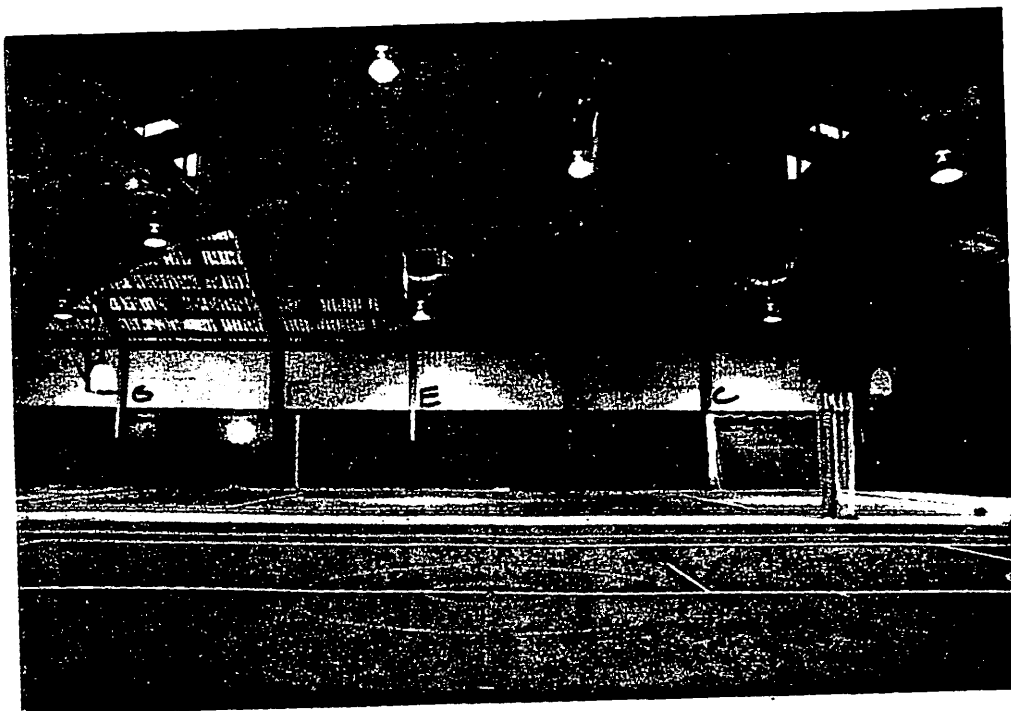
14 Court stands adjourned.

15  
16 (The hearing was concluded.)  
17  
18  
19  
20  
21  
22  
23  
24

Reporter's Certificate

I, Mary Ann McGhee, notary public in and for the Commonwealth of Virginia at large, certify that the foregoing 273 pages is a true, correct and full transcript of my notes taken in the case of Church Schools in the Diocese of Virginia v. T. M. Graves Construction Company, Inc., before the Honorable Willard I. Walker and a jury of seven on November 6 and 7, 1980, in the Circuit Court of the City of Richmond, Virginia, Division I.

  
Mary Ann McGhee - Notary Public  
Commonwealth of Virginia at Large



BAY 11-12 EAST WALL

27

PLAINTIFFS  
EXHIBIT:

# 10

11-6-80



BAY 6-7

PLAINTIFFS  
EXHIBIT  
# 11

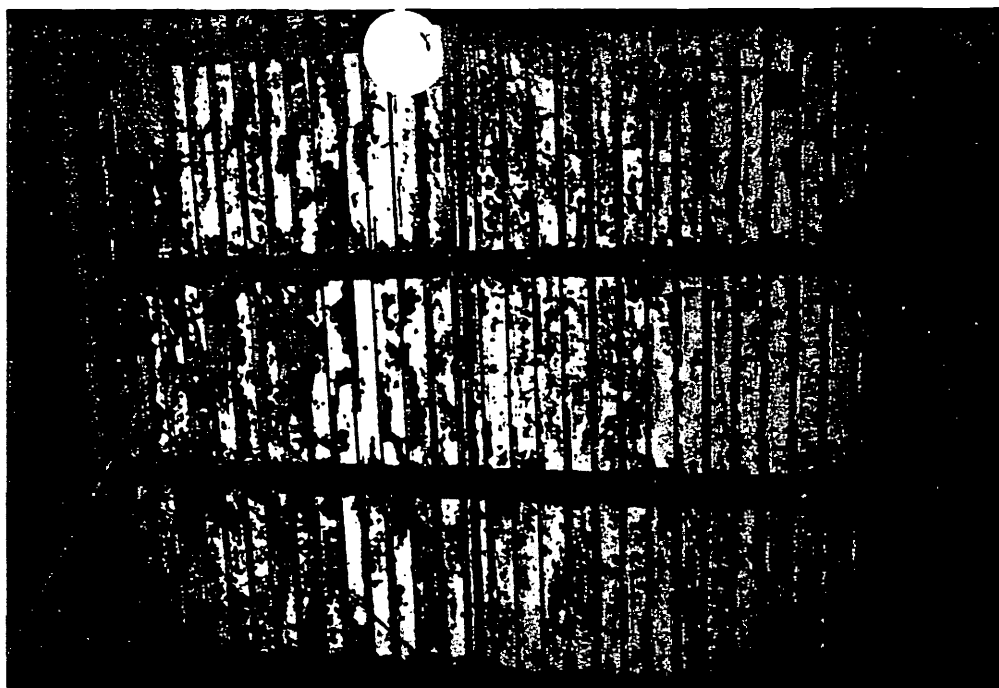
11-6-80



BAY 6-7 SOUTH WALL

PLAINTIFF'S  
EXHIBIT  
#12

11-6-80

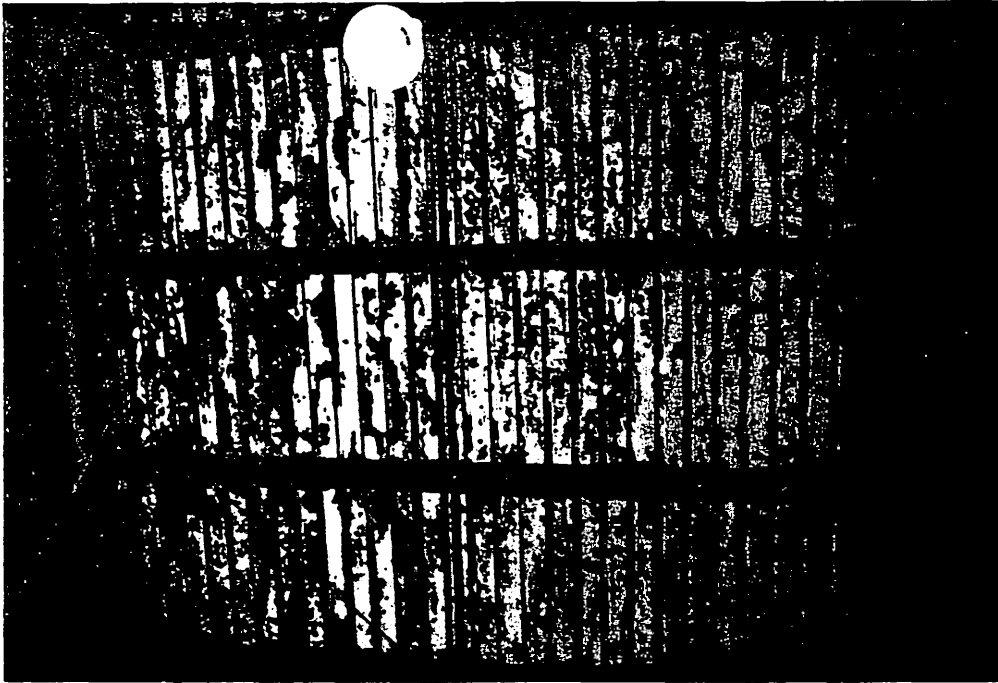


BAY 6-7 (WALL)

PLAINTIFF'S  
EXHIBIT

#13

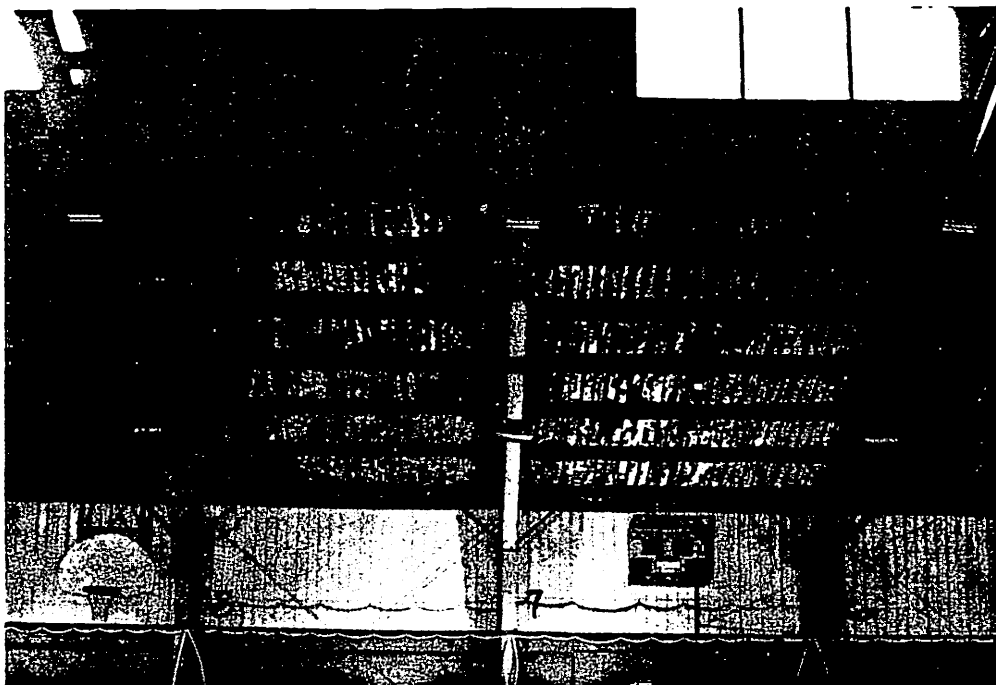
11-6-80



BAY 6-7 SOUTH WALL

PLAINTIFF'S  
EXHIBIT  
#14

11-6-80



PLAINTIFF'S  
EXHIBIT  
# 15

11-6-80





BAY 5-6, 6-7 SOUTH WALL

PLAINTIFF'S  
EXHIBIT  
#16

11-6-80



BAY 1-2, 2-3, 3-4  
SOUTH WALL:

PLAINTIFF'S  
EXHIBIT  
#17

11-6-80



BAY 1-2, 2-3, 3-4, 4-5, 5-6

NORTH WALL  
;

PLAINTIFF'S  
EXHIBIT

#18

11-6-80



BAY 3-4, 4-5, 5-6, 6-7, 7-8  
NORTH WALL

PLAINTIFF'S  
EXHIBIT  
# 19

11-6-80



BAY 5-6, 6-7, 7-8, 8-9, 9-10, 10-11  
NORTH WALL

PLAINTIFF'S  
EXHIBIT  
#20

11-6-80



BAY 8-9, 9-10, 10-11, 11-12  
NORTH WALL

PLAINTIFF'S  
EXHIBIT  
#21

11-6-80



SOUTH WALL

PLAINTIFF'S  
EXHIBIT  
#22

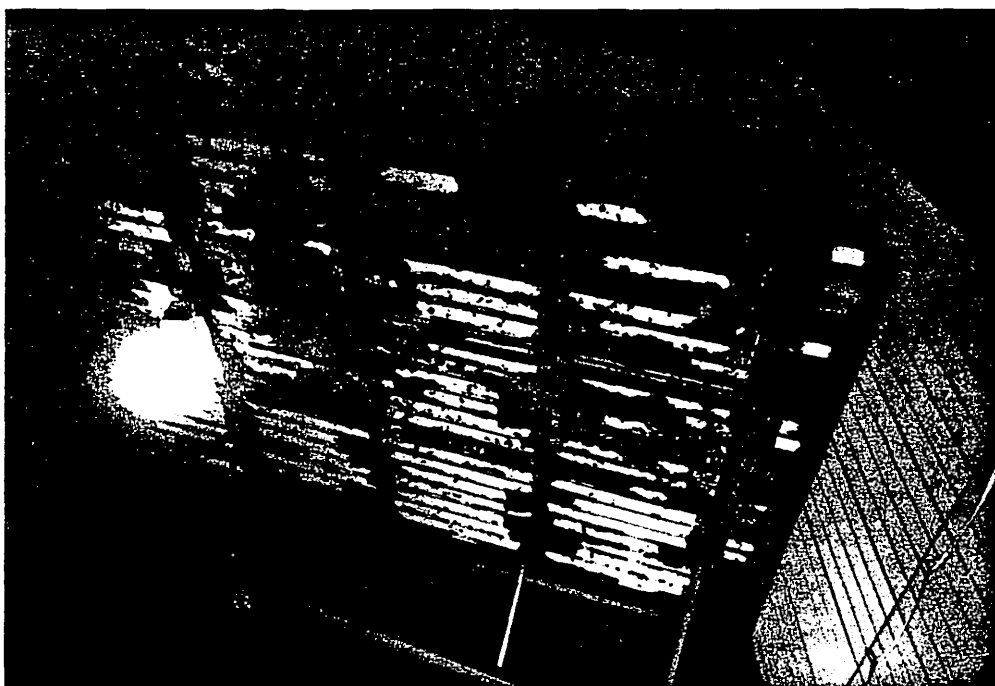
11-6-80



PLAINTIFF'S  
EXHIBIT  
#23

11-6-80





PLAINTIFF'S  
EXHIBIT  
#24



PLAINTIFF'S  
EXHIBIT  
# 25



PLAINTIFF'S  
EXHIBIT  
# 26

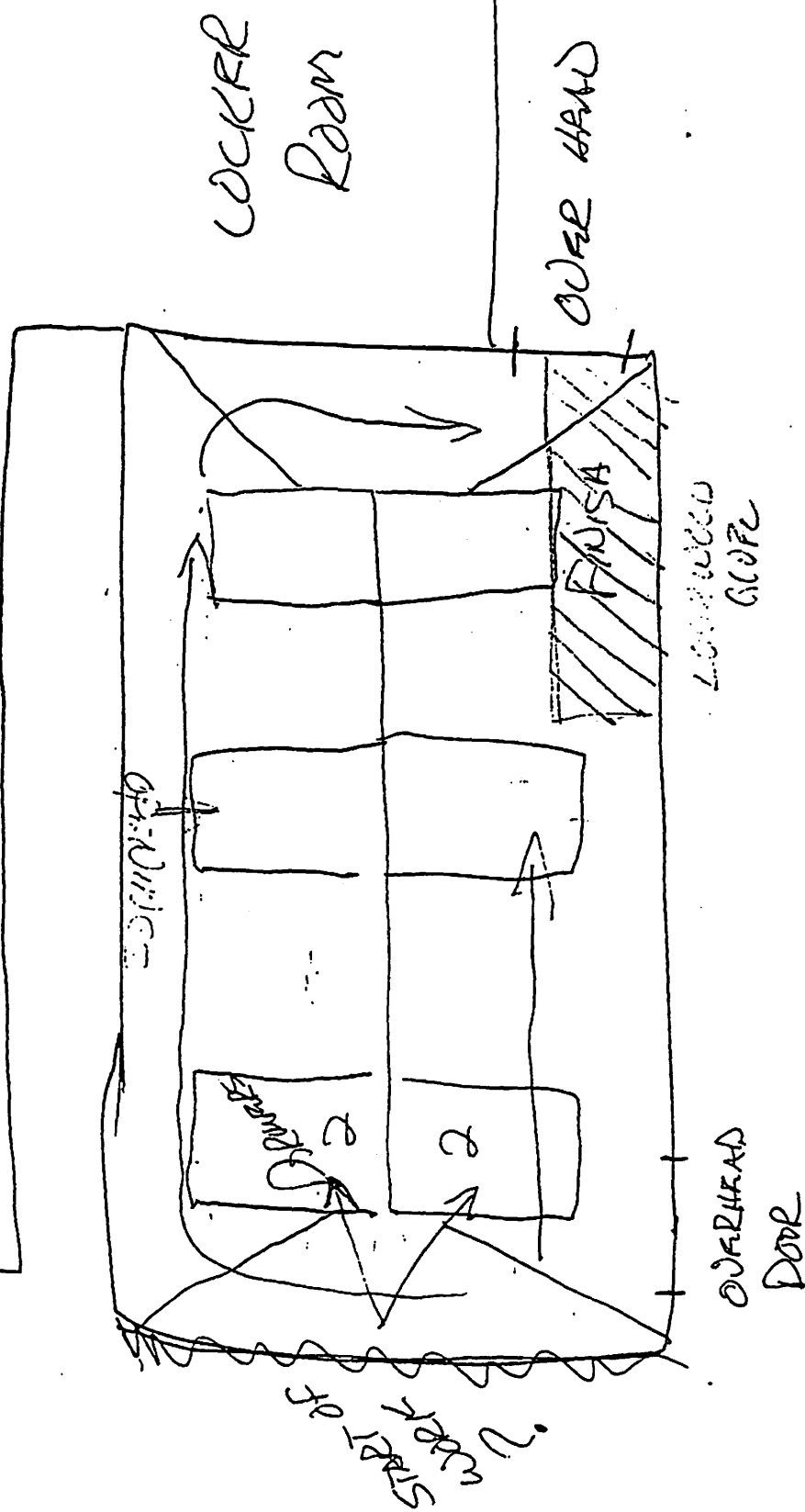


PLAINTIFF'S  
EXHIBIT  
# 27

Murphy Depo. Ex #2

PLAINTIFF'S  
EXHIBIT  
#8  
11/1/80 waw

School

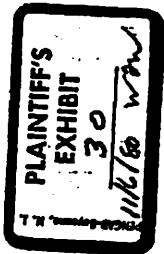


FOOT-BALL FIELD

132  
20  
2640

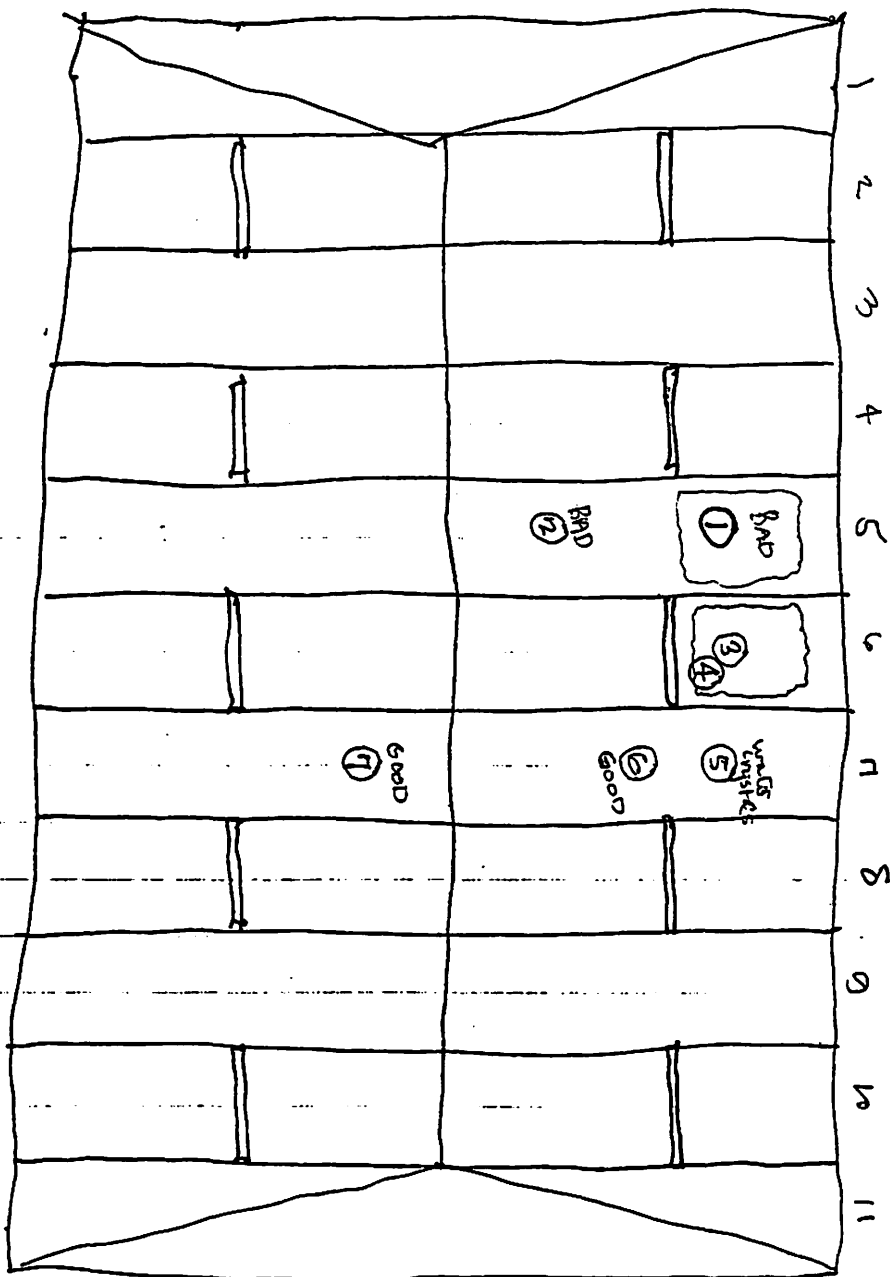
132  
220  
264  
264  
29040

St Christopher's



old gym

2



302

① Samples

NAME OF TRIP—NAME OF CONVENTION—ETC.		DEPARTMENT		WEEK ENDING	
HARVIN C. FIN		R-13 INSULATION		6-20-70	
DATE FROM TO					
LUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY TOTALS					
188.72					
Gasoline					
Tolls, Parking & Storage					
Other Auto Expense (Explain Below) (Attach Receipts)					
Bus - Plane - RR					
Taxi - Local Bus					
Hotel (Attach Receipt)					
Breakfast					
Lunch					
Dinner					
Other (Itemize)					
Entertainment (Itemize Below)					
Telephone					
TOTALS					

[illegible]

ROLLED  OR ACCOUNTING DEPT USE) CH      ACC1. NO      AMOUNT			Speedometer Readings	End of Period			TOTAL ABOVE EXPENSES		
				Beginning of Period			Mileage (      miles at      \$/mile)		
				Total Miles			Net Expenses		
				Less Extended Personal Trip			Less Advances (Cash and Checks)		
				Net Mileage			Balance Due: <input checked="" type="checkbox"/> Employee <input type="checkbox"/> Company		

ATTACH RECEIPTS AS INDICATED AND FOR ALL CLUB EXPENSES. ALSO ATTACH RECEIPTS FOR ALL OTHER EXPENDITURES OF \$25 OR MORE IN THE CASE OF ENTERTAINMENT INCLUDING BUSINESS MEALS. INDICATE THE PLACE AND TYPE OF ENTERTAINMENT, THE IDENTIFICATION OF THE PERSONS ENTERTAINED AND THEIR RELATIONSHIP TO THE FIRM. IN ADDITION, WHERE ENTERTAINMENT PRECEDES OR FOLLOWS A BUSINESS DISCUSSION, INDICATE DATE, DURATION, PLACE AND NATURE OF BUSINESS DISCUSSION. USE REVERSE SIDE IF NEEDED.

(  
the work not completed Roots to spray  
was not there until 1.0 clock.  
we were still on Roof putting on flashing  
buttering off light on Reolam Rod to be  
rel the fore spraying ridged frame did not spray  
were not covered suggested they should  
be aware of the clean up but they thought  
work nearer would be used so one hell of  
cleaning it will be after job.

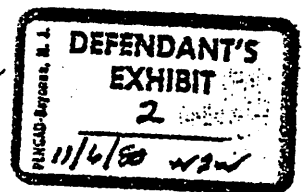
RECEIVED

JUN 25 1975

blems on equipment

open; Blow force constantly so run direct  
did not find short so it told them  
the shorted Replace clutch  
call you for more info.

NATIONAL CELLULOSE  
CORP.



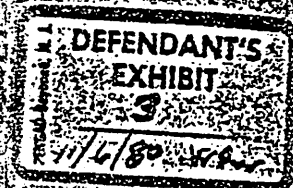
the line was in bad shape replaced it  
with a new one work much better and would  
pressure without blowing off the line  
pressure ~~400~~ 200  
3 to 11 80 yd  
1/6 - 288 yd per hr



minutes of (year  
to Repair and get equipment needed  
bed to train to men one had sprayed some  
3 job and was doing pretty good  
other and said to hell with it  
quit left one sprayer told them  
get more men and we could keep them  
each man was not good could not  
pick up the work cost me many unnecessary  
up and down left could not keep track  
Boy or Blue mix I think he was  
old.

Very poor for my time  
in trying to get production

Marvin



APPLICATION MANUAL OF

K-13 SPRAY-ON-SYSTEMS

(September 1, 1974)

## INDEX

<u>SECTION</u>	<u>PAGE</u>
----------------	-------------

	INTRODUCTION
	TERMINOLOGY USED IN K-13 SPRAY-ON SYSTEMS

- |      |   |
|------|---|
| I.   | PRODUCT INFORMATION DATA                              |
|      | 1 Materials and Equipment General                     |
|      | 2-3 Spec Sheet  |
|      | 4 Conversion Factors                                  |
|      | 5 Graph for Material Usage and Yield                  |
|      | 6 Instruction Sheet for Airless Application           |
|      | 7-8 Quick Reference Chart for Substrate and Thickness |
| II.  | COMPONENT EQUIPMENT AND FUNCTIONS                     |
|      | 1-2 Equipment Operational Outline                     |
|      | 3-4 Schematic of System Equipment Set-Up              |
|      | 5-7 Blowing Machine                                   |
|      | 8-10 Liquid Pressure Systems                          |
|      | 11-15 Conventional Air Nozzle                         |
|      | 15-18 Airless Nozzle                                  |
| III. | MAINTENANCE SCHEDULE                                  |
|      | 1-3 Blowing Machine                                   |
|      | A. Belts B. Chains                                    |
|      | C. Roots Blower D. Gear Box                           |
|      | E. Electric Motor F. Clutch                           |
|      | G. Bearings   |
|      | 3-4 Airless Nozzle                                    |
|      | A. Head B. Tips                                       |
|      | C. Filter D. Valve                                    |
|      | E. Gauge F. Sleeve                                    |
|      | 4-5 Conventional Nozzle                               |
|      | A. Head B. Tips                                       |
|      | C. Valve D. Gauge                                     |
| IV.  | REPAIR AND REPLACEMENT BLOWING MACHINE                |
|      | 1-7 Start-Up and Check Out Procedures                 |
|      | 8-9 Air System  |
|      | 10-12 Mechanical -                                    |
|      | A. Motor B. Clutch                                    |
|      | C. Gear Box D. Feeder                                 |
|      | 10-14 Lubrication                                     |
|      | 15-16 Schematic of Mechanical System                  |
|      | 17 Drawing of Clutch Assembly                         |

## INDEX

<u>SECTION</u>	<u>PAGE</u>
	18 Safety Guards
	19-25 Feeder Seal Replacement Detail
	26-31 Feeder and Plates
	32-46 Rootes Blower w/Trouble Shooting Check List Page 40
V.	LIQUID PRESSURE DATA
	1-2 Pump Data
	3-8 Myers Pump
	9 N.C.C. Rotary Pump
	10 Pump Set-Up - Showing Filter and Regulator Placement
	11 Piping Suggestions for 2 Barrel Hookup
	12 Piping Suggestions for Large Tanks
	13 1 Pump - 2 Barrel Set-Up Drawing
	14 Filtration from Barrel and Nozzle
	15 Tee Strainer Detail
	16 Pressure Tank (Single)
	17 Pressure Tank (Dual)
	18 Pressure Tank (Partitioned)
	19 Pressure Tank with Control Panel
VI.	ORGANIZATION OF A k-13 JOB
	1-4 Locating and Moving on to Job - Assigning Duties - Scheduling and Applying - Clean-Up
VII.	TROUBLE SHOOTING JOBS - (12 MOST COMPLAINED ABOUT PROBLEMS)
	1 Tips - Pressures - Curing and Drying
	2 Scaffolds - Clean-up - Jobs Not Ready - Spray Technique
	3-4 Organization - Personnel - Appearance - Winterization
VIII.	WINTER APPLICATION CURE & DRYING
	1-8 Phase I - Application
	9 Winterizing Equipment
	10-17 Phase II - Curing and Drying
IX.	ARCTIC WHITE APPLICATION PROCEDURE
	1 Precautions for Various Substrate
	2 Equipment
	3 Troubleshooting Problems
X.	FIREWALL
	1-3 Seven Step Outline of How to Apply
XI.	DRAWING AND SCHEMATICS
	1-2 Typical Truck Layout
	2-3 Typical Van Layout - (Bobtail)
	4 Water Supply to Trucks
	5 Electrical System Layout
	6 Heater Installation For SK-13 Binder
	7 Valve Maintenance
	8 Panel Box and Elapsed Time Hookup

## INDEX

<u>SECTION</u>	<u>PAGE</u>
9	Compressor Mounting for Ventilation
10	Speed Change For Clutch To Gear Box
11	Conventional Nozzle (Exploded View)
12	In-Line Filter - (From Readily Available Parts)
13	Tee Strainer
14	Location of Filters and Types For Airless Operation
15	Chart For Material Use
16	Liquid Flow Chart for 8 Jet Nozzle

APPLICATION MANUAL OF K-13 SPRAY-ON-SYSTEMS  
SEPTEMBER 1, 1974

SUPERCEDES ALL OTHER APPLICATION MANUAL OF K-13 SYSTEMS

INTRODUCTION

The K-13 Spray-On-System is engineered to properly apply a mixture of chemically treated cellulose dry fibers and a water based emulsion to a surface area for Thermal Barrier - Acoustic Control and Fire Protection.

The dry fiber is pneumatically conveyed through a 2 1/2" hose exited through a special design nozzle head where it is mixed with the special emulsion which adheres to the desired substrate.

Head pressure on the binder to the spray nozzle head is accomplished by use of electric powered high pressure pump or a total pressurized system using air to provide pressure to a tank or tanks capable of withstanding 200 to 300 pounds of pressure.

Atomization of the binder may be accomplished by air through a conventional air and liquid jet system or by the air-less system using special design jets and pressure only.

The operation and use of component parts of the K-13 system are explained in the following manual.

As the applicator becomes more familiar with the system and the application procedures, he will improve in his efficiency and provide a more professional job.

Please read the manual carefully before starting your first job. Familiarize yourself as thoroughly as possible with the K-13 System and the K-13 Procedural Guide.

NATIONAL CELLULOSE CORPORATION

NOTICE

THIS MANUAL MAY NOT BE REPRODUCED WITHOUT AUTHORIZATION FROM N.C.C., NOR MAY EXCERPTS BE PROMOTED AND DISTRIBUTED.

## TERMINOLOGY USED IN K-13 SYSTEMS

Air & Liquid Lines -	Normally 3/8" hose from liquid source and air source to nozzle head
Airless System -	Use of special nozzle tips of small orifice size and pressure for atomization of liquid binder
Angle of Spray -	The angle at which gun is held to apply K-13 to the surface; ideally, the angle should not be greater than 3-5 degrees from perpendicular
Bags and Barrels -	An expression meaning ratio of bags of K-13 fiber sprayed to one 55 gallon drum of SK-13 C
Barrel System -	Refers to barrel used to mix SK-13 M, also used as holding tank for pressure pump supplying the liquid in the K-13 System
Binder Overspray -	SK-13 M used as an overspray on surface of K-13 after drying
Blowing Machine -	Delivers dry fiber to surface thru 2 1/2" blowing hose
Board Foot of K-13 -	An area 12" x 12" sprayed with K-13 to a thickness of 1". 1 Board Foot equals 12" x 12" x 1".
Conventional System -	Use of nozzle head, using tips designed to use air to atomize liquid binder
Crew Hours -	Hours entire crew, regardless of number, work
Density -	Refers to tightness of material - the higher the density, the less footage per pound of material
Dew Point -	Temperature at which condensation of water from the air begins
Diffuser Tubes -	Clear plastic tubes with fine stainless steel wires traversing the diameter at random increments to provide an aid in the prevention of lumps from reaching sprayed surface
Extension Nozzle -	Special nozzle set-up that allows sprayer to be approximately 12' at maximum, away from surface
F. M. Overspray -	Special solution used to coat K-13 (after drying) in critical areas as defined in F. M. specifications - shipped in 5 gallon cans - coverage 250 per gallon
Feet Per Bag -	Number of square feet surface area covered by one bag of K-13 dry mix

Job Set-Up -	Involves all elements - spotting truck, hooking up services, cover up and masking, scaffold erection and hose layouts
K-13 Dry Mix -	The chemically treated dry fiber
K-13 Firewall -	One hour fire rating on K-13 and 26 gauge steel
K.F.M. Additive -	An additive to SK-13 C as per specifications on Factory Mutual Systems job - 5 gallons per 55 gallons of concentrate.
"K-Kleaner" or Degreaser -	Concentrated solution used to soak equipment, used in spraying, to remove or loosen binder
Machine Hours -	Actual time the Blowing Machine is working and delivering dry mix to nozzle
Man Hours -	Total of hours each crew member works; man hours are normally posted to specific job
Mixing Tank -	Large tank used, same as barrel system except larger amounts can be mixed at one time. Normally mixing tanks cannot be pressurized.
Nozzle Head -	Special design nozzle through which dry fiber-air and liquid come together and are mixed before coming into contact with spray surface.
Pressure Tanks -	Tanks that can be pressurized by air from air compressor; this, in turn, will provide pressure on liquid system. Provides mixing and pressure for liquid.
Relative Humidity -	Ratio of water in the air at a given temperature to what the air would hold at the same temperature at 100% saturation.
Saturation -	Refers to penetration of K-13 dry fiber with SK-13 M binder.
SK-13 C -	Binder concentrate before dilution with water
SK-13 M -	Binder mix - SK-13 C and water in proper ratio
Spraying Heights -	Refers to height at which the scaffold should be built to provide comfortable position for sprayman to maintain approximately 32 to 34" from nozzle to ceiling. This is critical to good application
Tamping or rolling -	A special treatment to the applied K-13, usually to provide smoother surface or a greater density
T.D. or Temperature Difference -	Refers to temperature difference between inside temperatures and outside temperatures



I. Materials - Designed for most substrates

A. K-13 Spray-On Fibers Standard Colors

1. Off-White - 30 lb. bags
2. Arctic White- 30 lb. bags
3. Grey - 35 lb. bags
4. Black - 35 lb. bags
5. Special colors are available on order. Most will be shipped in 30 lb. bags unless otherwise arranged.

B. Metal-K - Designed primarily for metal buildings

1. Metal-K - 35 lb. bags

Protection - Must be kept dry. Store off ground. Do not store in humid areas.

C. Emulsion SK-13-1A - Shipped in 55 gallon drums

1. Tinted very slightly blue
2. Used with all K-13 fiber
3. Mixed 3.5 water to 1 emulsion concentrate

General

Must be kept from freezing. When frozen, solids will separate out of the emulsion and settle to bottom. If this occurs, clearly mark the drum, set it aside and send a sample to NCC for analysis. Recommendations of how to use the damaged binder will be returned to you.

Mixture of SK-13-1A concentrate to water is 1 part SK-13-1A to 3.5 of water. You may mix with a higher binder to water ratio for tougher, more durable surface, but never lower.

If you have any questions, please refer to National Cellulose.

II. Equipment

A. Blowing Machine

Especially engineered to provide a consistent product in all types of conditions - feed rates and pressures are correlated with the other spray components.

B. Nozzle

Designed to provide recommended coverage per pound of fiber when used with K-13 blowing machine - the nozzle is engineered to provide maximum penetration of binder through the K-13 fibers and pre-wet the substrate being insulated.

## K-13 Specification Sheet

### SURFACES

K-13 may be applied to all types of porous or non-porous surfaces. An exception is transparent glass or plastic that allows penetration of ultra-violet light from the sun. The ultra-violet ray deteriorates the binder.

Rough porous surfaces such as galvanized steel, concrete, wood, etc., provide excellent surfaces for bonding, while the non-porous surfaces such as plastic, glass, ceramic or epoxy coated may require pre-treating.

All surfaces must be cleaned of dust, dirt, oil, grease or waxy films. Some steel panel manufacturers use wax to protect the sheets while in transit. Make your spray and sales people aware of this possible problem, so that steps can be taken to clean the panels before application begins.

Special care must be taken with concrete. If the surface is dry and dusty, pre-spraying with binder or pre-wetting with the water will be required.

Do not apply on surfaces that are scaling, flaking or peeling. These conditions must be corrected before K-13 can be applied. Other conditions that will have to be corrected before application are: condensation, frost or ice. K-13 Bond is only as strong as the surface it is applied to.

### TEMPERATURES

Application below freezing requires special conditions - check Winter Application Procedure section of this manual for complete data.

DO NOT USE in temperatures where 150 degrees F or above will be the normal ambient conditions, and in no case, should K-13 be used where it will be exposed to 200 degrees or over.

Long exposures to high temperatures deteriorate the product and lessens longevity by as much as 20-30%. Excessive temperature will char K-13 and can even cause it to ash to the substrate.

### CONDENSATION

K-13 can be used as an aid to condensation control. In many cases, K-13 will be the only control needed. But if conditions indicate high temperature differences and high humidities, some type of powered ventilation must also be used. In most cases, humidities above 50 per cent will require some type of powered ventilation. For additional information, see ASHRAE GUIDE.

#### THICKNESS

K-13 may be applied on ceiling in a single pass operation to 1 3/4" and on the wall a semi-experienced applicator can build to 2 1/2".

## CONVERSION TABLES FOR K-13 SPRAY-ON SYSTEMS

The K-13 fiber is manufactured within design tolerances to provide a uniform fiber impregnated with fire retardant chemicals.

The SK-13-1A concentrate shipped from NCC for use with the K-13 fibers is formulated to be mixed at a ratio of 3 1/2 water to 1 concentrate to provide SK-13 M (binder mix).

The K-13 Spray-On equipment (specifically, the blowing machine and special design nozzle) is engineered to provide a yield of 3 square feet - 1" thick using .23 gallons of SK-13 M per pound of fiber.

The following conversion factors are all based upon these figures:

Pounds of Fiber x .23 = Gallons of SK-13 M  
Pounds of Fiber x 3 = Board Feet (12" x 12" x 1")  
Sq. Ft. @ 1" thick ÷ 3 = Pounds of Fiber  
Sq. Ft. @ 1 1/4" thick ÷ 2.4 = Pounds of Fiber  
Sq. Ft. @ 3/4" thick ÷ 4 = Pounds of Fiber  
Sq. Ft. @ 1 1/2" thick ÷ 2 = Pounds of Fiber  
Sq. Ft. @ 1" x .077 = Gallon SK-13 Mix  
Gallons of SK-13 M x .225 = Gallons SK-13 Concentrate  
Pounds of Fiber x .051 = Gallons SK-13 Concentrate  
Gallons of SK-13 Concentrate x 4.5 = Gallons SK-13 Mix

### LABOR FACTORS

The blowing machine supplied by NCC for use in K-13 Spray-On will provide pounds of fiber at a consistent rate. The speed of application will be dependent upon the length of time that the machine operates and the pounds of fiber delivered per operating hour.

Machine Hr. x Lbs. per Machine Hr. x 3 = Sq. Ft. per day @ 1" thick  
Machine Hr. x Lbs. per Machine Hr. x 2.4 = Sq. Ft. per day @ 1 1/4" thick  
Machine Hr. x Lbs. per Machine Hr. x 4 = Sq. Ft. per day @ 3/4" thick  
Machine Hr. x Lbs. per Machine Hr. x 2 = Sq. Ft. per day @ 1 1/2" thick

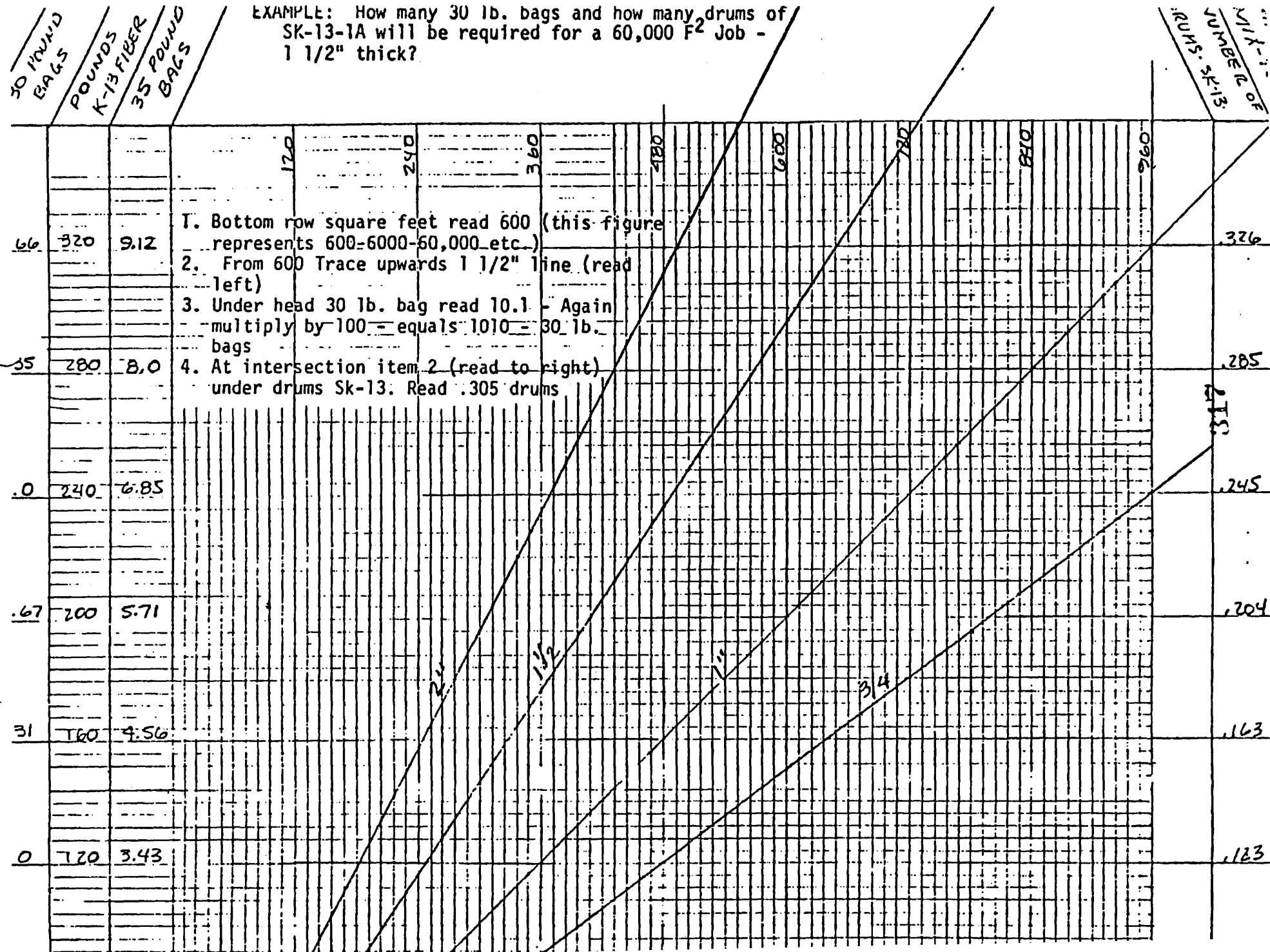
### EXAMPLE

Crew spraying a 1" application at medium speed of 300 lbs. per hour and their machine time per day equals 5 hours.

5 machine hours x 300 lbs. per hour x 3 for 1" application equals 4500 square feet per day.

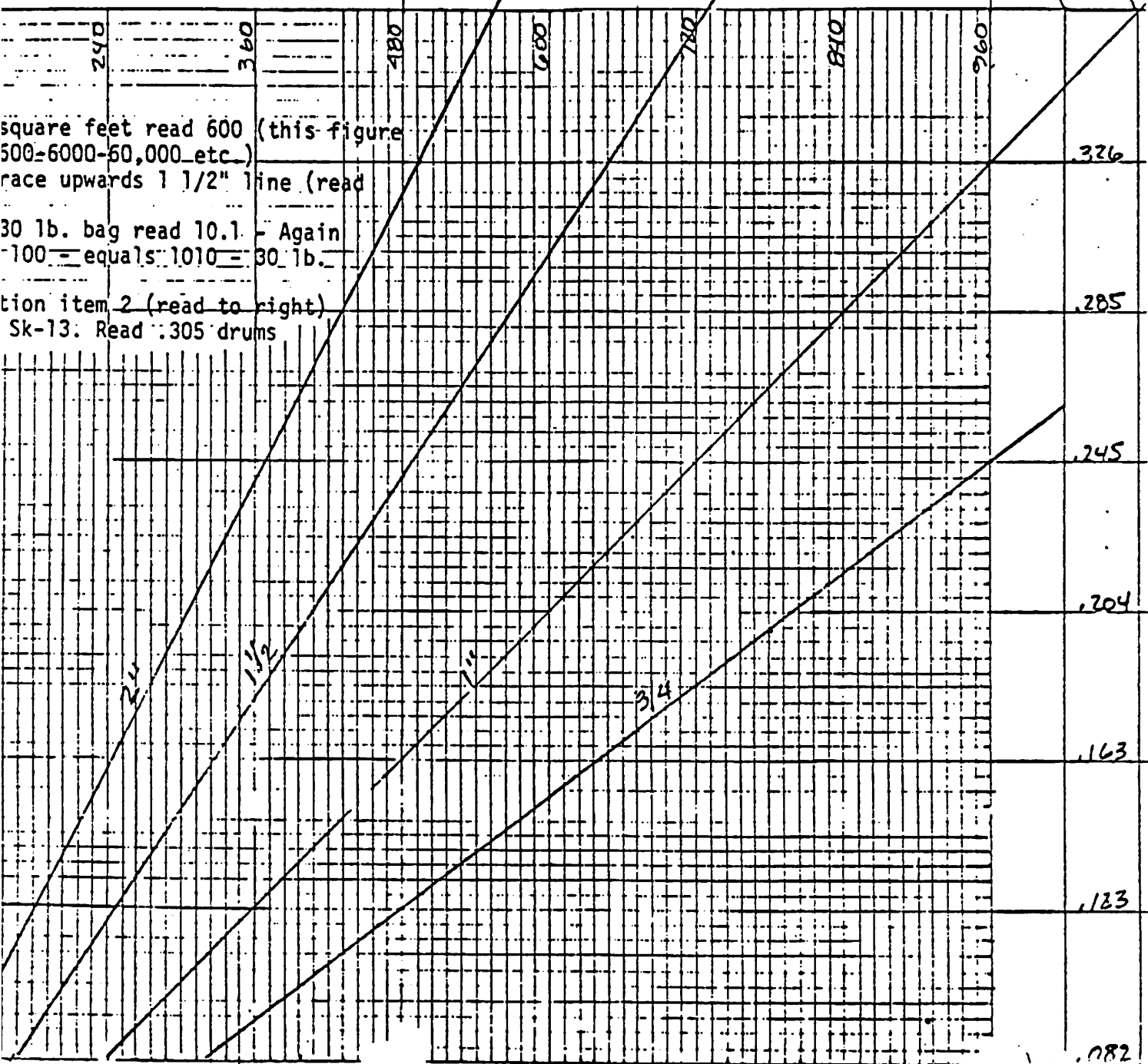
Same machine - same crew - same time at 1 1/2" equals 5 machine hours x 300 pounds per hour x 2 for 1 1/2" application equals 3000 square feet per day.

EXAMPLE: How many 30 lb. bags and how many drums of SK-13-1A will be required for a 60,000 F<sup>2</sup> Job - 1 1/2" thick?



: How many 30 lb. bags and how many drums of  
 3-1A will be required for a 60,000 F<sup>2</sup> Job -  
 2" thick?

Section I  
 N.C.C.  
 Page 5 of 8



INSTRUCTION SHEET FOR AIRLESS NOZZLE USING TIP # NCC-1501  
Effective September 1, 1974

#1 - Establish rate of fiber delivery through each machine in pounds per hour.

- a. Fill nopper level full (do not pack material).
- b. Engage clutch for spraying. Start timing flow (use stop watch or elapsed time indicator wired to clutch).
- c. Let material run down approximately 4 to 5 inches.
- d. Refill to beginning level while running (be careful not to overfill or tamp).
- e. File each bag used in special place for easy accurate count.
- f. Start and stop watch each time machine is stopped and started.
- g. Maintain check program for at least 1 machine hour (full day if possible).
- h. Count number of bags used and multiply by average pounds per bag.
- i. This should be done for each speed - high, medium and low.
- j. Record information and check periodically to evaluate efficiency of machine.

#2 - On chart below, in column 1, locate pounds per hour of fiber flow.

#3 - Read to right under appropriate nozzle, the P.S.I. @ nozzle head.

#4 - Column titled GPM per jet relates to performance of each nozzle jet in GPM's.

S. Fiber Per Machine Hr.	G.P.H. Required	GPM Required	6 Jet Nozzle		8 Jet Nozzle	
			GPM Per Jet	PSI @ Nozzle	GPM Per Jet	PSI @ Nozzle
240	55.2	.920	.153	92	.115	55
250	57.5	.958	.160	99	.120	60
260	59.8	.997	.166	106	.125	65
270	62.1	1.035	.173	112	.129	69
280	64.4	1.073	.179	119	.134	73
290	66.7	1.112	.185	140	.139	78
300	69.0	1.150	.192	152	.144	83
310	71.3	1.188	.198	163	.149	87
320	73.6	1.227	.205	174	.153	92
330	75.9	1.265	.211	184	.158	97
340	78.2	1.303	.217	195	.163	104
350	80.5	1.342	.224	207	.168	114
360	82.8	1.380	.230	220	.173	122
370	85.1	1.418	.236	234	.178	130
380	87.4	1.457	.243	249	.183	138
390	89.7	1.495	.249	264	.187	145
400	92.0	1.533	.256	279	.192	153

## Useful Conversion Factors

.23 X Lbs of Fiber = Gals of Mix Binder      Sq.Ft. @ 3/4" ÷ 4 = Lbs. of Fiber  
 .015 X Lbs of Fiber = Gals SK-13-1A C      Sq.Ft. @ 1" ÷ 3 = Lbs. of Fiber  
 3 X Lbs of Fiber = Sq. Ft. 1" Thick      Sq.Ft. @ 1 1/2" ÷ 2 = Lbs. of Fiber

One gallon of SK-13-1A Concentrate yields 58.9 Board Feet.

Section I  
N.C.C.

Page 6 of 8

QUICK REFERENCE CHART FOR K-13 APPLICATIONS\*

Type Surface	Required Special Preparation	Thickness Applied			
		One Wall	Pass Ceiling	Two Pass Walls	Pass Ceil.
Sheet Steel	All to be clean and free of contaminants	3"	1 3/4"	4 1/2"	3"
Galvanized	**None	3"	1 3/4"	4 1/2"	3"
Painted	**None	3"	1 3/4"	4 1/2"	3"
Aluminum	Check for excess oil or humidity	2 1/2"	1 3/4"	4 1/2"	3"
Concrete	If dry and dusty, an overspray is recommended or pre-wet with water	3"	1 1/2"	4 1/2"	3"
Pre-cast	Pre-wet with water or light overspray binder	3"	1 1/2"	4 1/2"	3"
Block	Pre-wet with lite spray w/water	3"	1 1/2"	4 1/2"	3"
Painted Concrete	None - if paint is not peeling	3"	1"	4 1/2"	3"
Painted Metal Lath	Check the wires and edges of lath for rust	3"	1 1/2"	4"	3"
Galvanized	Cut ends and tie wires, may rust if not primed	3"	1 1/2"	4 1/2"	3"

\* This chart is not intended for a complete guide to what, where or how K-13 may be applied. It is intended only to provide a reference guideline through which some special requirements are pointed out. If you need additional or specific information, please contact National Cellulose Corporation.



Type Surface	Required Special Preparation	Thickness Applied			
		One Wall	Pass Ceiling	Two Passes Walls	Passes Ceil.
Plastic	Epoxies with smooth surfaces need roughing - lite sanding, etc.	2 1/2	1 1/2	4"	3"
Non-porous Glick-surfaced	Scratch surface or pre-treat	2 1/2	1 1/2	4"	3"
Styro-foam	None	2 1/2	1 1/4	4"	2 1/2
Urethane	None	2 1/2	1 1/2	4"	2 1/2
Skylights, etc.	Do not spray where sun rays penetrate				
Wood Untreated	Overspray with binder when bleed through is critical	3"	1 1/2	4"	3"
Wood Painted	None	3"	2"	4"	3"
Gypsum Board or Dry Wall	None	2 1/2	2"	4"	3"
K-13*** Existing	Blow dust and loose particles, may have to overspray with binder. Use high pressures	2"	1"	2 1/2	1 1/4

\* When applying 3-3 1/2" on ceiling, the use of stick clips and metal lathe may be required.

\*\* All surfaces should be checked for oil, grease, wax or excessive dust or dirt.

\*\*\* Do not apply over fresh sprayed K-13 where it has not had a chance to dry completely. N.C.C. recommends the exclusive use of the conventional nozzle when applying a 2nd layer of K-13 over another previous application of K-13.

## EQUIPMENT SET-UP FUNCTIONS AND TYPES

To apply K-13 properly, certain types of equipment must be used as illustrated Figures I and II. Pages 3 & 4, this section.

To spray the fiber, we use a blowing machine which meters the flow of the fiber both volume and speed - (See Figures I or II).

To bond the fibers to a substrate, we use a special emulsion which mixes with the blowing machine (See Figures I & II).

The liquid used must be atomized to such a degree the fibers are coated and laminated together. To accomplish this-N.C.C. used 2 types of nozzles.

- A. Conventional - in which air at the nozzle tips is used to atomize the liquid - this system is illustrated Figure II. Both air liquid lines are attached to the nozzle head. Details of which are shown (Sec II Pages 13 & 14).
- B. Airless - in which the nozzle jets are of a special design to atomize the liquid by the use of pressure only. This system requires only the liquid line to the nozzle head as illustrated Figure I. Details of the airless nozzle head are shown (Sec II Page 17).

To provide the necessary pressure to the liquid, an electric pressure pump or a totally pressurized system can be utilized.

- A. The electric pump when used to pressurize the liquid must meet the requirements as outlined in Section V, Page 1 of this Manual.

When the conventional system is used (as described above), an air compressor is required. The air compressor must be large enough to provide 50 CFM (cubic feet of air) @ 125 PSI, which will operate 6 nozzle jets .

The components - their function and a maintenance outline are provided in this section.

- A. Blowing Machine
  - 1. Function
  - 2. Maintenance
- B. Air Compressor
  - 1. Function
  - 2. Maintenance

C. Liquid Pressure By Pump or Pressure Tanks

1. Function
2. Maintenance

D. Nozzle (Conventional)

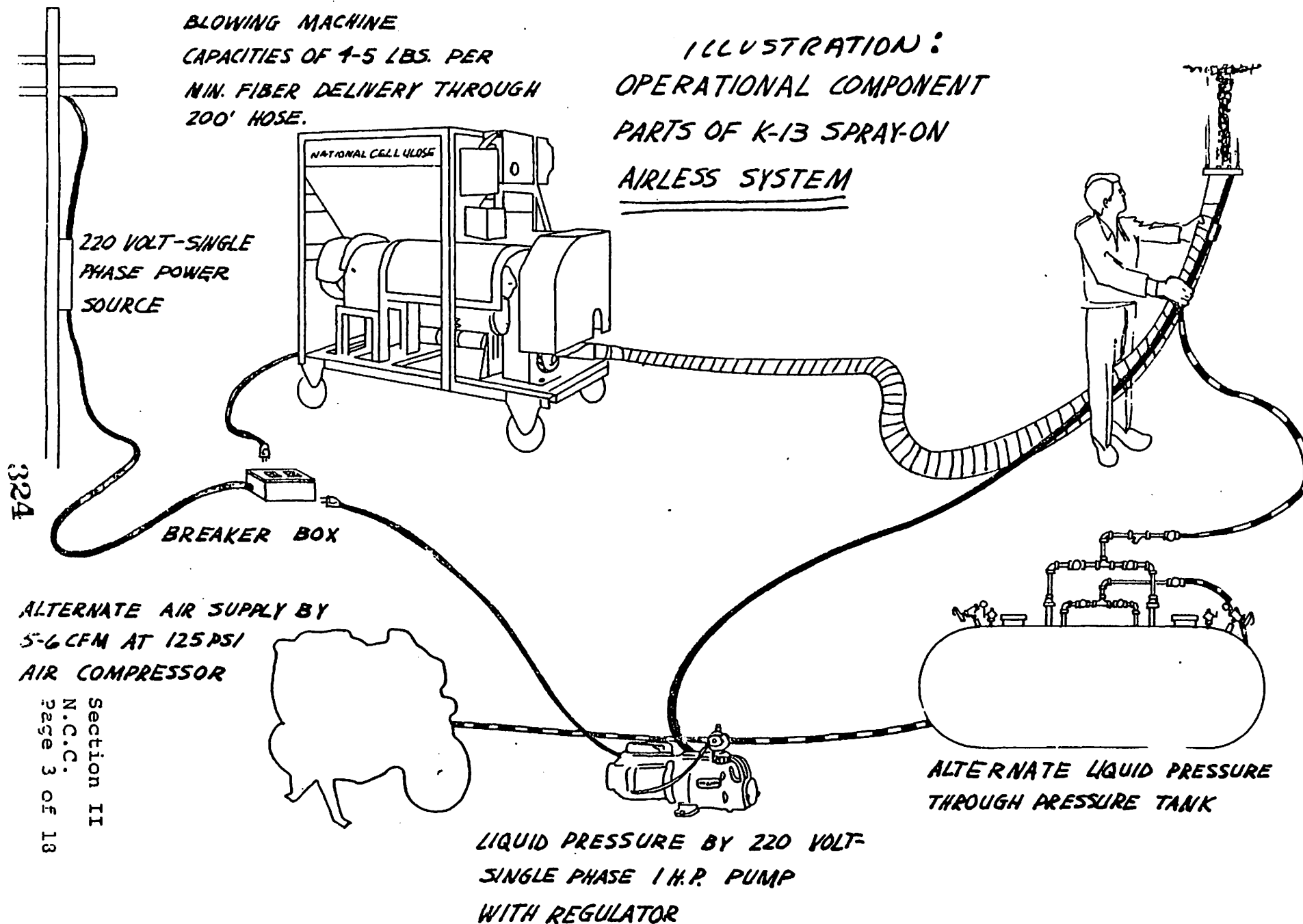
1. Function
2. Maintenance

E. Nozzle (Airless)

1. Function
2. Maintenance

220 VOLT-SINGLE PHASE  
BLOWING MACHINE  
CAPACITIES OF 4-5 LBS. PER  
MIN. FIBER DELIVERY THROUGH  
200' HOSE.

ILLUSTRATION:  
OPERATIONAL COMPONENT  
PARTS OF K-13 SPRAY-ON  
AIRLESS SYSTEM



324

BLOWING MACHINE  
CAPACITIES OF 4-5 LBS. PER  
MIN. FIBER DELIVERY THROUGH  
200' HOSE.

ILLUSTRATING:  
OPERATIONAL COMPONENT PARTS  
OF K-13 SPRAY-ON SYSTEM  
CONVENTIONAL

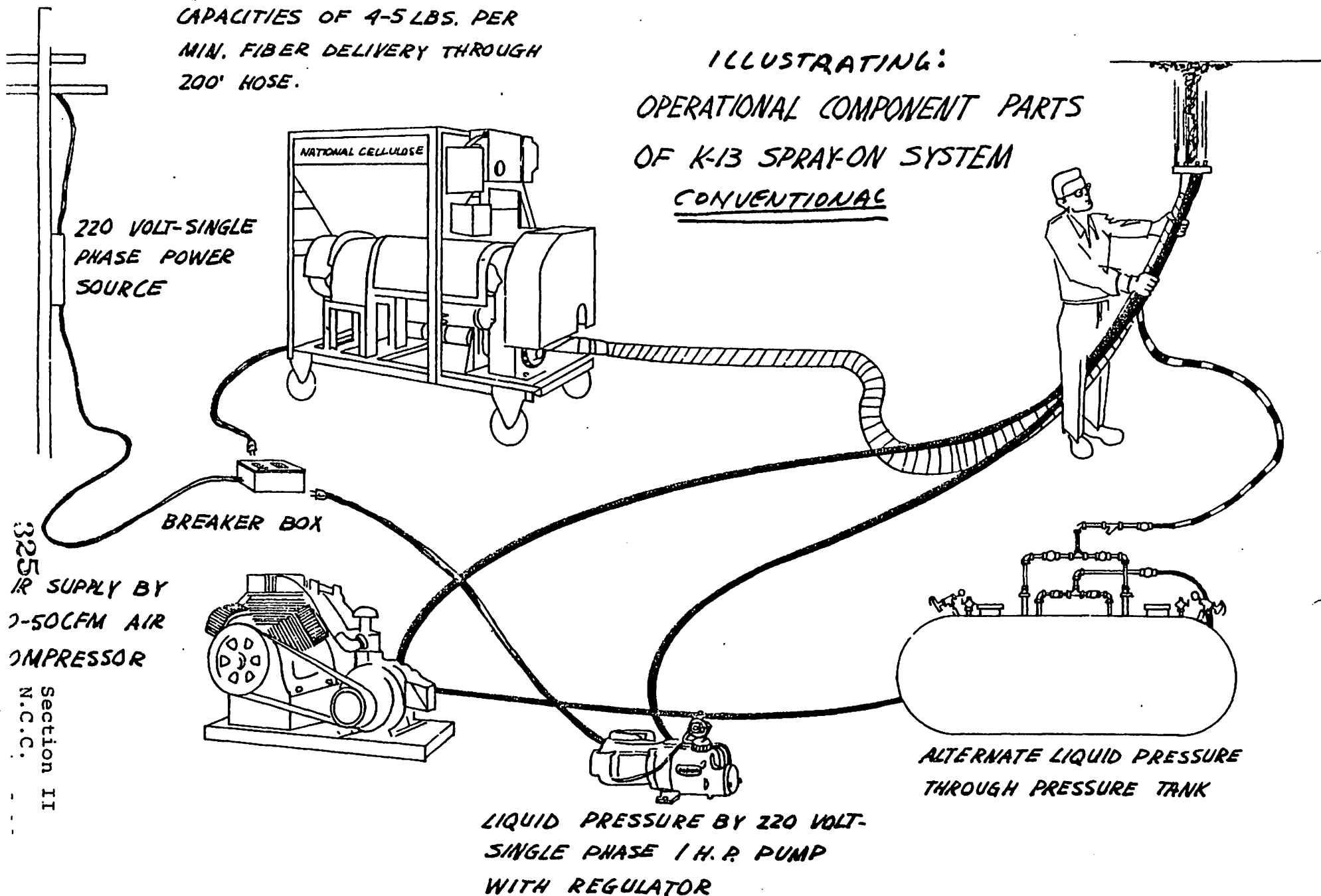


Figure II

## A. BLOWING MACHINE

The K-13 dry mix machine is designed to apply mix over a wide variety of conditions and applications. The machine can convey material over a range of 300' horizontally and 80' vertically without substantially decreasing the volume output. The variables controlling the output of the machine are:

- |                        |                |
|------------------------|----------------|
| 1. Feed Rate           | 5. Humidity    |
| 2. Blower Volume       | 6. Cleanliness |
| 3. Feeder Slide Gate   | 7. Maintenance |
| 4. Density of Material |                |

Output is rated in pounds per hour; most often this will be converted into bags per hour or square foot per hour per applied thickness.

### A-1 Feed Rate

The feed rate of the K-13 dry mix is controlled by the position of the belt on the three groove step cone pulley, connecting the feed drive motor and the gear reducer. (Ohio Gear Box) - This in turn governs the RPM of the Feed Auger (#43-Fig.2)

Section IV Page 12.

Low Speed - Belt is placed in left groove nearest motor.

Medium Speed - Belt is placed in middle groove.

High Speed - Belt is placed in right groove, farthest from motor.

Low Speed is used in fine finish work; average pound fiber per machine hour - 250-270.

Medium Speed is used in most K-13 applications. The feed rate at medium speed allows good control of the spray while keeping

production footage up. Medium speed is normally used on overhead work. The spray man's capabilities will, of course, have to be taken into consideration. Average delivery in pounds of fiber per machine hour - 350-360.

Hi Speed is used for walls mostly - although experienced capable men can apply at this rate overhead. Seldom, if ever, is hi speed used, even by experienced personnel, where application thickness is over 1 1/4" - control and technique are very important on overhead work at this thickness and these controls are difficult to maintain at this rate of spraying.

Average delivery of fiber in pounds per machine hour is 440-460.

#### A-2 BLOWER VOLUME

The air volume of the blower has been pre-set at factory and should not be changed. Raising the RPM's voids all warranties. The intake screen and exhaust lines must be kept clean so as not to restrict air flow.

#### A-3 FEEDER SLIDE GATE (#47 - Figure 1, page 11, Section IV).

The purpose of this slide gate is to control the length of time the K-13 mix stays in the shredder housing, and for the distribution of the material as it leaves the shredder to enter the feeder housing. The slide gate has eight positions, numbered 1 (smallest opening) to 8 (largest opening). After machine is engaged and running, adjust the slide gate by opening to its widest position, then with the machine running, slowly close slide gate until window is full; this happens usually around 3 on medium speed. K-13 mix should fill the transparent plastic window of the shredder housing and show as a smooth film of K-13 with few black

lines through the pattern.

NOTE: The shredder slide has no control over the rate of feed. Do not attempt to use the slide to adjust the feed rate. If this gate is closed too much for the material to flow through, packing of the shredder housing will result.

#### A-4 DENSITY OF MATERIAL

The amount of material in the hopper will affect the amount of material that is delivered through the machine. Always keep a steady supply in the hopper. The proper amount would be from the agitators to the top of the hopper. Do not overfill hopper. The piling on of more material will tend to compress the material in bottom around the feed auger. Do not dump bags all at once. Rake the material out of the bags or break in half and lay the partially broken lumps gently into the hopper to prevent lumps and blobs of material at spray end of hose.

#### A-5 HUMIDITY

High humidity conditions will affect the easy flow of material through machine. Keep material as dry as possible. Do not use wet or packed material.

#### A-6 CLEANLINESS

Feed rate of the machine will be affected by restrictions to air flow due to dirty filters-debris in shredder or feeder, loose belts, or clutch slipping, kinks in the hose-bent filters on the auger, etc. To keep the efficiency of your machine up - care must be taken in cleanliness.



C. LIQUID PRESSURE - BY PUMPS OR PRESSURIZED TANKS

C-1 - Pumps

C-2 - Pressurized tanks

C-1 - PUMPS

- A. Electric Motor (1 hp. 110/220 - 1 phase)
- B. Pump
- C. Fluid Regulators - (MY-101)
- D. Suction Hose and Return Hose - (MY-104 and 105)
- E. Check Valve - (MY-106)
- F. Filter - (MY-111 and MY-113)

A - The electric motor is 115-230 V- 1 hp. Power is supplied through 6 of #12 - 3 wire cord. A cord too small will cause loss of power and the motor will overheat and cut off. Keep the motor clean and well ventilated.

B - Pump - Specifications for K-13 Spray-On with application of fibers average at 250 to 450 lbs per hour

a. Single Nozzle Operation

- 1. 3 gallons per minute @ 140 lbs. per square inch (airless) 120 PSI (conventional)

b. Dual Nozzle Operation

- 1. 5 gallons per minute @ 140 lbs. per square inch (airless) 120 PSI (conventional)

For the conventional system ( using air for atomization ) the Myers Centrifical Pump is a good heavy duty pump. Its maximum rated pressure is 120 PSI with a volume of 5 gallons per minute. This pump will provide enough liquid and pressure to operate 2 conventional nozzles with your machine blowing 450 lbs. of fiber per hour.

For the airless system where atomization and flow are dependent upon pressures, the PSI rating would limit your fiber production to approximately 310 pounds on an 8 jet nozzle. The volume would operate 2 nozzles at these rates. Please check Pump Data and Specs Section V Pages 1 in this manual.

C - LIQUID REGULATOR - a standard liquid regulator with Bypass Valve to provide a surge-free flow of liquid to nozzle. The liquid you do not use at the nozzle is returned to the barrel or holding tank by the regulator through the recirculating line back. Set regulator pressure approximately 25 lbs. over recommended nozzle pressures (Section V Pages 1-6 ). The regulated pressure should remain constant while spraying.

D - SUCTION HOSE

Located on intake side of pump - normally a 3/4" hose approximately 8" long. Keep all bends out of the suction hose. Keep filter clean at all times. Bends and dirty filters will overload the motor and cause it to overheat and cut off.

E - CHECK VALVE

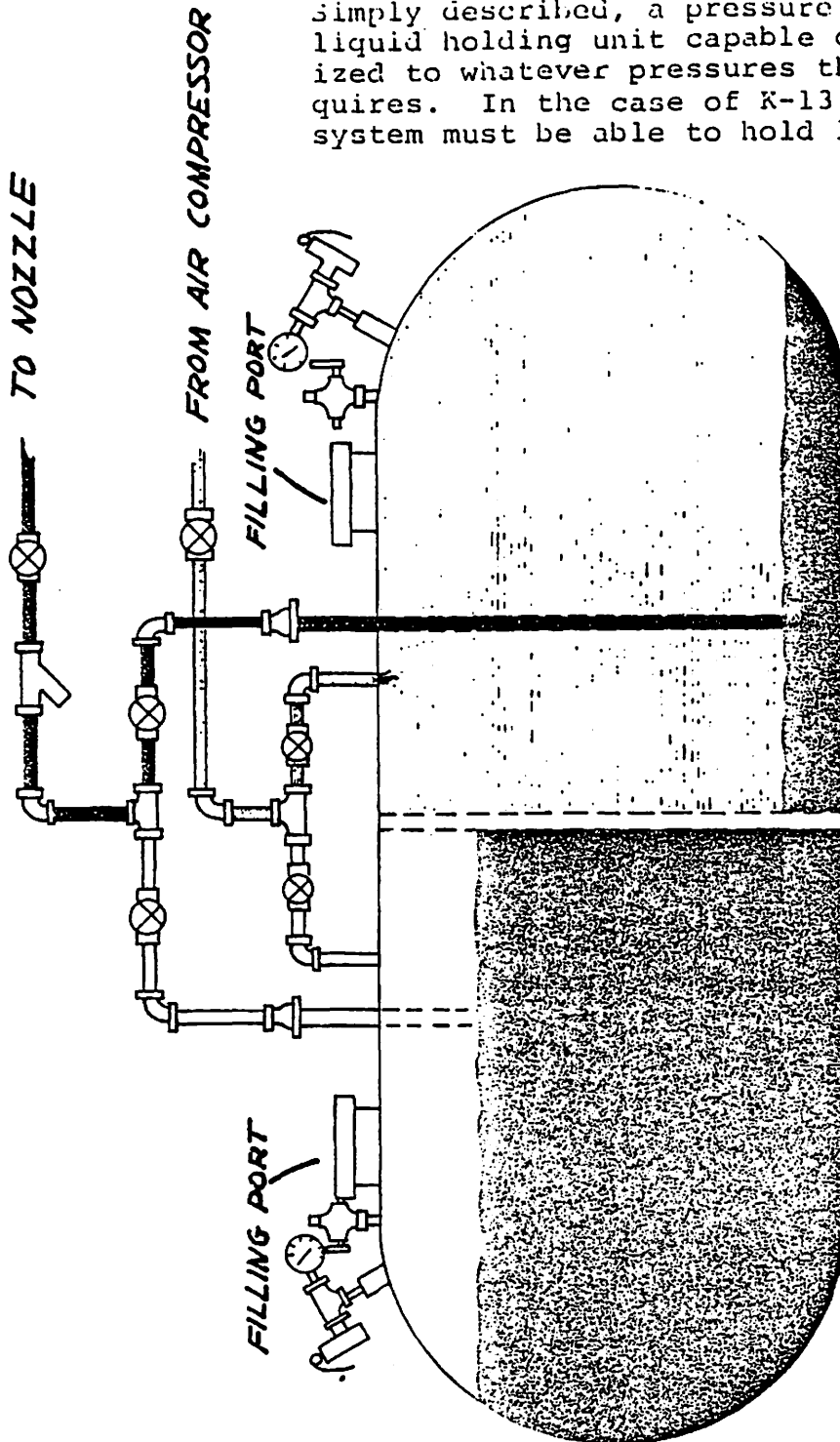
Located in suction line (or in some cases at the Pump) to prevent liquid from draining out of the pump after it is shut down, which in some cases will require you to reprime the pump before you can continue operations after a "shutdown".

F - FILTER (in-line)

Very important to continuous operation of the spraying operation. National Cellulose recommends filtration at suction end of hose, at discharge side of pump and the nozzle. (See recommended filters and placement guide Section V - Page 6. Set up and maintain a program to clean and change the filter elements regularly to prevent costly down time.

## PRESSURE TANK

Simply described, a pressure tank is a liquid holding unit capable of being pressurized to whatever pressures the system requires. In the case of K-13 Spray-On, the system must be able to hold 150-160 P.S.I.



Tank - 150 - 200 P.S.I.

Air Compress - 5 - 7 CFM @ 150 to 200 P.S.I.

THE TANK SHOULD HAVE THE FOLLOWING MINIMUM CHARACTERISTICS:

1. Volume - 125 gal or 250 or 500 gallon
2. Pressure - 150 to 200 P.S.I.
3. Cleaning - A port large enough to allow thorough cleaning and re-painting the inside.
4. Plumbing - Ability to change from empty to full without stopping the spray operation.

D. SPRAY NOZZLE (Conventional Air Atomization)

The special design nozzle is machined to give you control of air, liquid adhesive and K-13 dry mix. It is made of lightweight aluminum for durability. The component parts are:

1. Nozzle head (Face plate and back plate)
2. 2 1/2 inch sleeve
3. Air valve and gauge assembly
4. Fluid valve
5. 6 spray jets
6. Gasket and bolts

D-1 The nozzle head is a 2 section special design nozzle through which the air and liquid pass on their way to being mixed with the K-13 dry fiber. The interior channels of the nozzle head serve to keep the air and liquid separated until they finally meet in the jet assembly of the nozzle. The back plate of the nozzle head serves as the receiver of the air and liquid lines from the source of supply.

The air and liquid enters the back plate of the nozzle and is distributed to each of the 6 jets inserted into the front plate where atomization of the liquid is accomplished by the air and finally mixed with the dry fiber between the nozzle and the surface to be insulated.

D-2 2 1/2 inch plastic sleeve slides into the nozzle head at one end and 2 1/2 inch blowing hose on other, serving as the connector from blowing hose to nozzle.

D-3 The air valve and gauge assembly provide control of density of application and footage per bag. Correct pressures

are a must to proper application. The air gauge is in increments of 1 lb. This small increment is necessary, larger increments such as found on 100 or 200 lb. gauges required printing too small to be easily read.

D-4 RANGES OF CONVENTIONAL NOZZLE PRESSURE AS SHOWN ON AIR GAUGE

<u>Speed of blowing machine</u>	<u>Nozzle Air</u>	<u>Liquid or Total Pressure</u>
Slow-250-270 # Per Hr.	11-12	14-15
Med -350-360 # Per Hr.	13-14	16-18
Fast-440-460 # Per Hr.	17-19	22-24

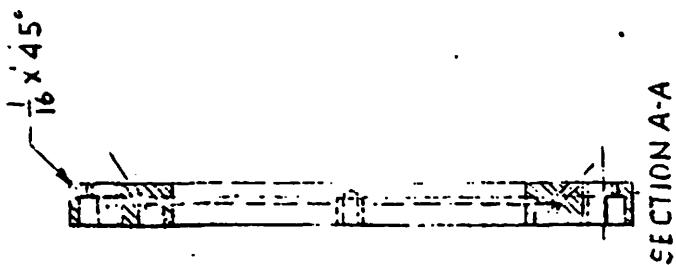
THE ABOVE ARE MINIMUM PRESSURE. DO NOT GO BELOW. These pressures are intended to provide proper rates between dry mix and binder. Please check to see the recommended conditions are met, by being aware of proper product ratios. Check with ratio guide included in this manual, Page 1 Section Product Information Data.

D-5 THE SPRAY JETS (6 per nozzle)

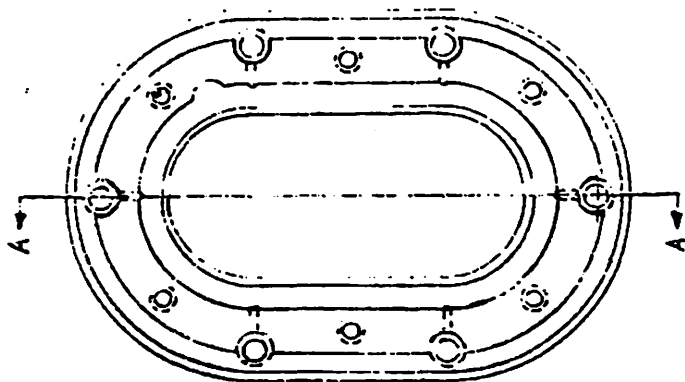
1. Conventional spray jets have 3 parts. The liquid jet nozzle, air cap, and retaining ring. The liquid jet nozzle screws into the fact plate of nozzle head. These should be tightened snug with a wrench but do not over tighten. The air cap sets onto the liquid jet nozzle. The air caps are then held into place by the retaining ring, which should be no more than hand tight. Atomization of liquid is provided by the air as air and liquid come together in the air cap. When nozzle is to be shut down for a short period of time, place nozzle in shallow pan of water to prevent tips from drying.

D-6 MAINTENANCE OF NOZZLE

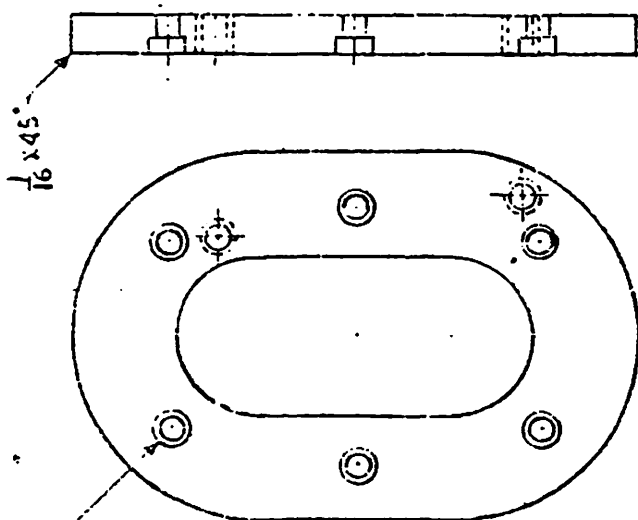
1. The sleeve should be kept clean of material build-up.



SECTION A-A

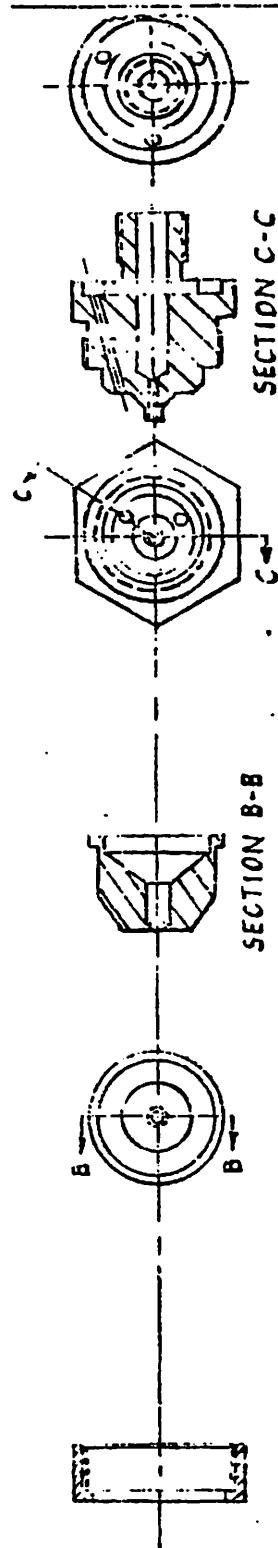


FACE PLATE



BACK PLATE

1/8" THRU  
CTBK-1/4" DP  
HOLES



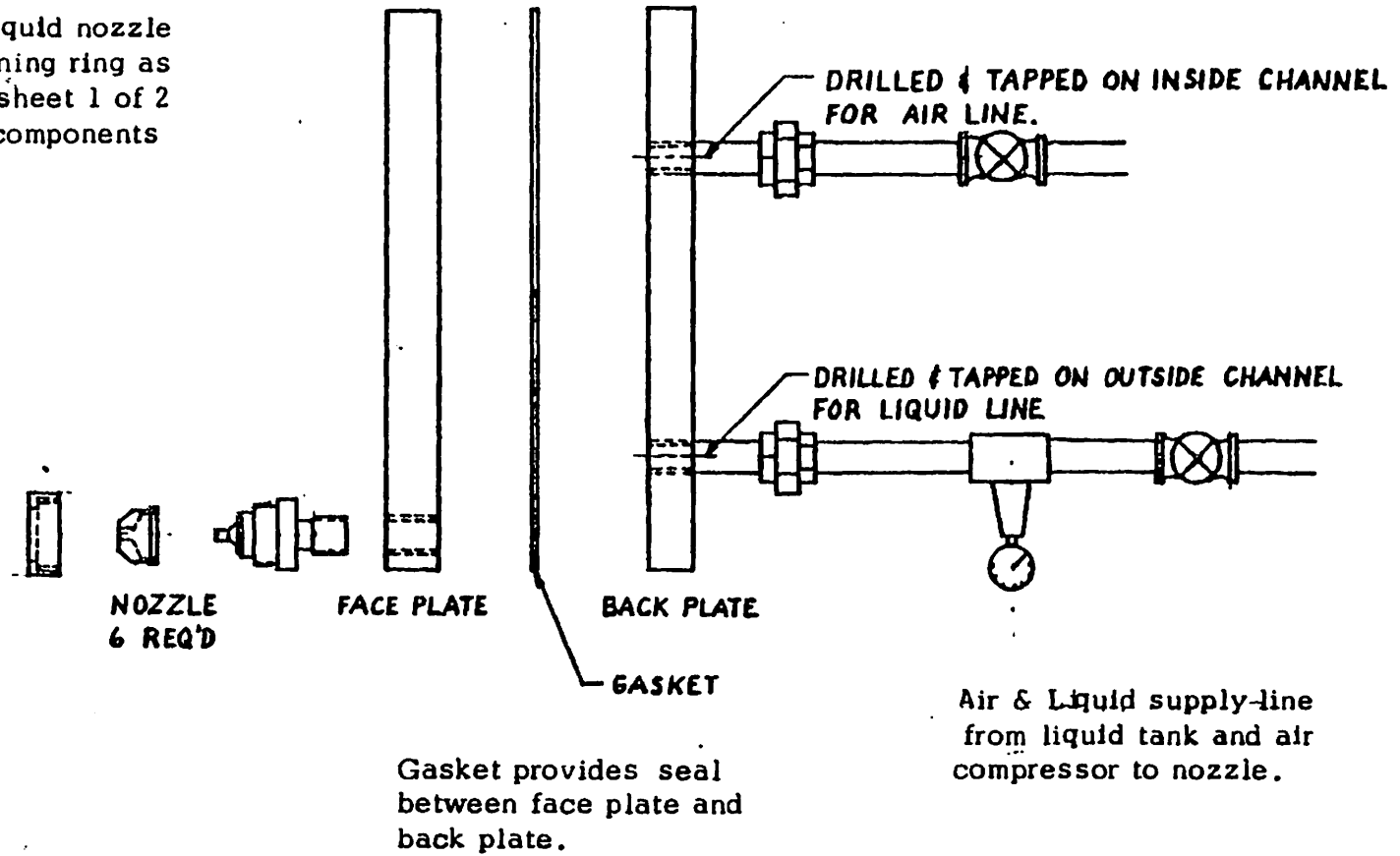
SECTION C-C

SECTION B-B

NOZZLE

NATIONAL CELLULOSE	
12315 ROBIN	HOUSTON, TEXAS
DRWN BY EWR	ACC STIC
	NOZ LE
	COMPTON
	WITH

Jet assembly-Liquid nozzle  
air cap and retaining ring as  
shown-in detail sheet 1 of 2  
acoustic nozzle components



Face plate designed to disperse  
air and liquid to each of 6 jets  
inserted into front side of face  
plate.

Back plate designed to receive  
air and liquid supply lines and  
to "cap" back side of face plate.

NATIONAL CELLULOSE		ACUSTIC NOZZLE ASSEMBLY	
12315 ROBIN		HOUSTON, TEXAS	
DRW	BY	EW	
DATE	8-30-75		
CKD	HFB		

2. When inserting the liquid jet nozzle into the face plate, use a small wrench. Excessive tightening may damage threads of jet or face plate. Do not tighten more than just enough to prevent leaks.
3. Clean the air holes in the nozzle head daily with tip cleaners. While cleaning, have the air valve open. This will blow out any foreign matter that may break loose while cleaning.
4. Change the air jet nozzles three to four times a day. Be sure film build-up is cleaned from each. Clean jets assure you of better atomization and and more thorough saturation and better dust control.

E. AIRLESS NOZZLE

1. Component Parts

- a. Tips
- b. Front Plate
- c. Gasket
- d. Back Plate
- e. 1/40 In-line Filter
- f. 0-160# Gauge

E-2 ATOMIZATION - By pressure through a small orifice - the orifice is engineered to provide a given supply of binder at a given pressure. The pressure at the nozzle head governs how much liquid is being used - ie. on jet #1501 furnished by National Cellulose Corporation 60# pressure will provide .12 gallons of liquid per minute. These tips should be replaced after approximately 40,000 / of usage due to increasing orifice size because of wear.

E-3 ADJUSTMENTS - (See Flow Chart Following Page)

Pressure must be regulated to the flow of fiber. For example - each pound of fiber requires .23 gallons of SK-13-1A.



E-3 - Cont. - Adjustment Chart showing pressure & flow.

Lbs. Fiber Per Machine Hr.	G.P.H. Required	GPM Required	6 Jet Nozzle		8 Jet Nozzle	
			GPM Per Jet	PSI @ Nozzle	GPM Per Jet	PSI @ Nozzle
240	55.2	.920	.153	92	.115	55
250	57.5	.958	.160	99	.120	60
260	59.8	.997	.166	106	.125	65
270	62.1	1.035	.173	112	.129	69
280	64.4	1.073	.179	119	.134	73
290	66.7	1.112	.185	140	.139	78
300	69.0	1.150	.192	152	.144	83
310	71.3	1.188	.198	163	.149	87
320	73.6	1.227	.205	174	.153	92
330	75.9	1.265	.211	184	.158	97
340	78.2	1.303	.217	195	.163	104
350	80.5	1.342	.224	207	.168	114
360	82.8	1.380	.230	220	.173	122
370	85.1	1.418	.235	234	.178	130
380	87.4	1.457	.243	249	.183	138
390	89.7	1.495	.249	264	.187	145
400	92.0	1.533	.256	279	.192	153

The complete description of how to establish flow rates and compute nozzle pressure are included in this manual - See Product Information Data Section, page 5.

#### E-4 FILTRATION FOR AIRLESS NOZZLE

Due to small orifice of the airless top, the filtration of binder to the nozzle tips is extremely critical.

The minimum recommended procedure as established by N.C.C. is:

1. Suction end of hose use a strainer with large cross sectional area to prevent having to clean too often - mesh size of filter should be no smaller than 60 and no larger than 45. From N.C.C., we ship a tee strainer assembly with a large cross section and a 50 mesh screen. To facilitate cleaning this filter,

114 } show  
122 } have  
80 } was  
set

ۛۛۛ

Average 70# @ Nozzle

Page 17 of 18

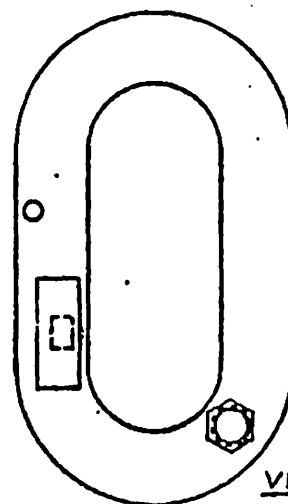


**FILTER SCREEN**

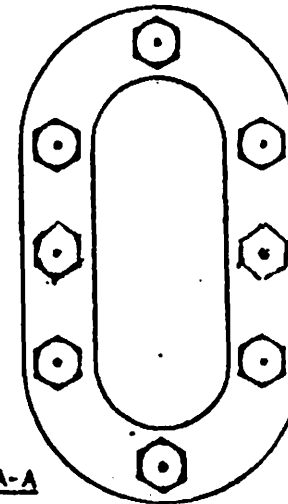
**FILTER BODY**

**SWIVEL**

ALL THD. NIPPLE



VIEW B-B



VIEW A-A

NATIONAL CELLULOSE		JAN 1974		MAY 1974	
DRAWN BY	ELW.R.	8 JET AIR-LESS NOZZLE ASSEMBLY FOR K-13 SPRAY ON SYSTEMS			
CHECKED BY	4-20-74				
APPROV. BY	H B 4-27-74				

you may utilize a section of nylon wrapped around filter element - thus when the nylon gets dirty, it can be thrown away.

2. At discharge side of Pump, N.C.C. recommends the use of a 3/8 brass "Y" with replaceable 50 mesh screen element. (See Section V, Page 6).
3. At the nozzle head, is the 1/4 Q inline strainer with the replaceable 50 mesh screen. Details of this 1/4 strainer assembly are shown on drawing titled 8 Jet Nozzle Assembly Page 17 this section.

When the pressure tank system is used, it is sometimes difficult or impossible to filter at bottom of stand pipe which is equivalent to suction side of pump, so it is advisable to install 2 inline filters at discharge side of tank.

- E-5 The guide rod in the nozzle head is provided to keep nozzle sleeve (See drawing 8 Jet Nozzle this section ), perpendicular to nozzle head - if the sleeve so improperly aligned - dusty dap application will result. Be aware of the need for proper alignment of sleeve and nozzle head and tie securely to prevent twisting.
- E-6 Spray the fiber into the substrate roughly within 3 to 50 from perpendicular - holding nozzle at arms length - an angle to surface greater than recommended will lessen material impact force and will result in a weaker bond.