



**Professional Service Industries, Inc.**  
PTL/Shilstone Engineering Test Lab Division

REPORT OF LIGHT REFLECTANCE

TESTED FOR: International Cellulose Company      PROJECT: Light Reflectance  
12315 Robin Blvd.  
Houston, Texas 77045  
Attn: Mr. Steve Kempe

DATE: April 4, 1991      OUR REPORT NO.: 216-16034-01

REMARKS: Professional Service Industries, Inc. (PSI) received two (2) samples of insulation material from Mr. Steve Kempe of International Cellulose Company. As requested by Mr. Kempe the samples were tested for light reflectance per ASTM D-2244.

The results obtained are as follows.

Test Results

<u>Sample ID</u>	<u>Average Reflectance</u>
K-13 "FC" White	73.7%
Arctic White	81.5%

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.



**Professional Service Industries, Inc.**  
PTL/Shilstone Engineering Test Lab Division

REPORT OF TESTING OF INSULATION

TESTED FOR: International Cellulose Company  
12315 Robin Boulevard  
Houston, Texas 77045  
Attn: Mr. Harold Boyer

PROJECT: Testing of Insulation  
Houston, Texas

DATE: March 16, 1990

OUR REPORT NO.: 216-06041-01

REMARKS: On March 15, 1990, Professional Service Industries, Inc. (PSI) received one (1) sample of  $\frac{1}{2}$ " sheet rock with sprayed insulation applied to one side. As requested by Mr. Boyer, the sample was tested in accordance with ASTM E 736. The results obtained are as follows:

Load Test  
(ASTM E 736)

<u>Sample ID</u>	<u>Area, in<sup>2</sup></u>	<u>Pull Load, psi</u>	<u>Mode of Failure</u>
1 K-13 "FC" Dura-K	9.6	4.5	Between Sheet Rock and the Sheet Rock Paper

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

REPORT OF COHESION/ADHESION TEST

TESTED FOR: International Cellulose  
12315 Robin Blvd.  
Houston, Tx 77045

PROJECT: Adhesion/Cohesion Testing of  
K-13 fo by ASTM E- 736

DATE: September 12, 1997

REVISION #1  
OUR REPORT NO.: 198-56029-5

REMARKS: On September 4, 1997, Professional Service Industries, Inc. (PSI) received a piece of painted metal, 12' by 12', coated with sprayed on cellulose K13 fo. PSI performed cohesion/adhesion testing on the submitted specimen. Testing was done in general accordance with ASTM E736. The test results are as follows:

<u>Sample No</u>	<u>Average Thickness(in)</u>	<u>Area of Test Sq In</u>	<u>Load in Lbs</u>	<u>Load in Lbs Sq Ft</u>	<u>Mode of Failure</u>
1	0.825	0.0621	130	2093	Cohesive

\* Specifications were not provided by Client.

If you have any questions or require additional information, please contact us at your convenience.

TECHNICIAN: C Shepard  
TIME: 4 hours

Respectfully submitted,  
Professional Service Industries, Inc.



Iradj Ayazi, P.E.  
District Manager



**Professional Service Industries, Inc.**  
PTL/Shilstone Engineering Test Lab Division

REPORT OF COMPRESSION TEST ON INSULATION

TESTED FOR: International Cellulose Corporation      PROJECT: Adhesive Test  
Post Office Box 450006  
Houston, Texas 77245-0006

DATE: August 6, 1990      OUR REPORT NO.: (REVISED) 216-06041-05

REMARKS: Professional Service Industries, Inc. (PSI) received Two (2) samples of Sprayed-on Insulation from Mr. Steve Kempe of International Cellulose Corporation. As requested by Mr. Kempe the material was tested for adhesion per ASTM E-736. The results obtained are as follows:

ADHESIVE TEST, ASTM E-736

<u>Sample ID</u>	<u>Area Inches, Squared</u>	<u>Pull Load PSI</u>	<u>Mode of Failure</u>
K-13 FC	9.6	5.1	Insulation
K-13 FC Dura-K	9.6	11.04	Sheet Rock

Note: At the request of Mr. Kempe, the insulation was tested on sheet rock material.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Mike Phares, Director  
Metallurgical Operations &  
Special Services

RECEIVED  
SEP 27 1990



W.J. Peters Inspection Services, Inc.

## REPORT

6521A Basile Rowe  
East Syracuse, New York 13057TCP 3753  
Reported: 1/9/97  
Page 1 of 2

DESCRIPTION - SPRAYED INSULATION INSPECTION  
 PROJECT - Carousel Mall  
 DATE - 12/18/96  
 REPORTED TO - International Cellulose Co.  
 12315 Robin Blvd.  
 Houston, TX 77045

On 12/18/96 our inspector, T. Hill, was present at the above mentioned project site for the purpose of performing Cohesion - Adhesion tests of K13. Inspection performed in accordance with ASTM E736.

<u>Test Location</u>	<u>Force Exerted (lbf)</u>	<u>Area of Dish (ft<sup>2</sup>)</u>	<u>Cohesion/ Adhesion Force-PSF</u>	<u>Type of Failure</u>
<b>K13 insulation: Area east of Lord &amp; Taylor parking area</b>				
1) Exit ramp for Lord & Taylor parking area, Ceiling	35	.0621	564	Cohesive
2) 30 feet east of Test #4 Bottom of beam	25	.0621	400	Cohesive
3) Parking area Seahorse 7 and 6 driving lane, Ceiling.	25	.0621	400	Cohesive

Respectfully submitted,  
 TESTWELL CRAIG PETERS  
 TESTING LABORATORIES, INC.  
 Walter J. Peters, President

I/International Cellulose Co.  
 I/TCP  
 PP

REPORT OF TEST



SGS U.S. Testing Company Inc.

1341 North 108th East Avenue  
Tulsa, OK 74116  
Tel: 918-437-8333  
Fax: 918-437-8487

Report No.: IP97-0065R  
Revised: 5/6/97  
Page 1 of 1  
Original Issue: 5/1/97

CLIENT: International Cellulose  
P.O. Box 450006  
Houston, TX 77245

Attn: Harold Boyer

SUBJECT: Air Erosion Test on Spray-On Insulation

SAMPLE ID.: The client submitted 2 panels totaling 8 ft.<sup>2</sup> with K-13 Spray-On material applied insulation. These panels were received on 4/10/97.

PROCEDURE: The panels were evaluated in accordance with ASTM C 1149-90, section 6.10, which refers to ASTM E 859-93.

TEST DATE: 4/18/97 - 4/20/97

RESULTS:	Time, hours	Weight, g
	0	9.4790
	1	9.8528
	6	10.1049
	24	10.1861
	30	10.1861

CONCLUSION: The test was stopped after 30 hours because a constant weight had been reached.

CERTIFICATION: The tests reported here were conducted under the continuous direct supervision of SGS U.S. Testing Company Inc., Tulsa, OK.

Jeff Simmons  
Dept. Manager/ Product Evaluation

Signed for the Company

Dale E. Holloway  
Tulsa Branch Director

Member of the SGS Group

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