



SUPERIOR PRODUCTS INTERNATIONAL II, INC.

SUPER THERM used

To Glue the boards to the supports To fire protect gypsum board sheeting.

In recent testing for fire control over wall and ceiling board in normal building construction, the results of using SUPERTHERM directly over gyp board was much better than using the normal cement board that has always been required for fire control.

As seen in the testing results, the SUPER THERM coated gyp board performed better than the cement board. This is a totally new development in the building industry and could revise all the codes for multi-level construction requirements. Comment from Mr. Gleckman on the test result: **“actually the steel framing remained straight (no deflection) while in the test using cement board there was a 1-1/2” - 2” deflection of the steel framing. The Supertherm enables the mounting of the subfloor to the steel framing without the necessity for screws thereby eliminating thermal short-circuiting which is caused by the use of screws.”**

Mr. William B. Gleckman, Architect, NYC did the work on the project and arranged the testing to prove this concept as notated from the following pages. Mr. Gleckman has also used the SUPER THERM to glue the gypsum board to the metal supports rather than screw the boards to the metal supports which gave much better adhesion without forcing holes into the supports and the boards.

J.E. Pritchett
President
Superior Products International II, Inc.
USA

WILLIAM B. GLECKMAN ARCHITECT
310 EAST 69TH STREET NEW YORK NEW YORK 10021
TEL917/328-4665 FAX740/931-0883 wgleckman@nyc.rr.com

May 13, 2005

Mr. J.E. Pritchett, President
Superior Products International
10835 West 78th Street
Shawnee, Kansas 66214

Dear J.E.,

I just noticed something significant in the E119 test enclosed; on the last page it is noted 0.00" deflection after 90 minutes By comparison the attached sheet for the Viroc/Allied test shows 5/8" deflection after 90 minutes and substantial deflection thereafter. In all previous tests I have noted substantial deflection in the steel framing.

The E119 test is a rate of temperature rise test – that is, it cannot exceed 250dF above ambient because that is when the sensor terminates the test. In sum while the temperature rose the heat did not to the same degree otherwise the steel would have twisted and sagged. It must have been due to the Supe- therm which impeded the heat (but not the temperature). In all other tests of this nature the material in the cavity was a 4" 4pcf mineral wool blanket-, which just gets hot and sits on the gypsum board and the conducted heat cracks the gyp board.



VTEC #100-2363

PRAGMATEK

Small Scale ASTM E119/UL263

SUPER THERM over gypsum board

RESULTS:

At 6 minutes, smoke began emitting from the sample.

At 86 minutes, thermocouple 5 exceeded 325°F + ambient.

At 92 minutes, thermocouple 6 exceed 325°F + ambient and the average for all thermocouples exceed 250°F + ambient.

At 92 minutes, the furnace was voluntarily shut off and the test was ended.


Time Deflection Data

<u>TIME (MINS)</u>	<u>DEFLECTION (IN)</u>	<u>TIME (MINS)</u>	<u>DEFLECTION (IN)</u>
0	0.00	60	0.00
15	0.00	75	0.00
30	0.00	90	0.00
45	0.00		

The time-temperature data are contained on the following pages.



 Neil Schultz
 Executive Director



 Amirudin Rahim
 Technical Director

RESULTS:

Ambient temperature = 68°F.

At 65 minutes, large pieces of the lower sheet rock fell exposing the 2nd layer.

At 68 minutes, smoke began emitting from the top of the sample.

At 75 minutes, both layers of sheetrock fell exposing the insulation inside.

At 127 minutes, thermocouple #5 exceeded 393°F thus indicating failure.

At 131 minutes, thermocouple 8 exceeded 393°F thus indicating another failure point.

At 132 minutes, thermocouple 6 exceeded 393°F thus indicating another failure point.

At 133 minutes, the furnace was shut off and the test was ended.

Time-Deflection Data

<u>TIME (MINS)</u>	<u>DEFLECTION (IN)</u>	<u>TIME (MINS)</u>	<u>DEFLECTION (IN)</u>
0	0	75	5/8
15	3/8	90	5/8
30	1/4	100	7/8
45	1/4	105	1
60	1/4	110	2

The time-temperature data are contained on the following pages.

Neil Schultz
Executive Director

Amirudin Rahim
Technical Director