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**Report of Standard Methods of  
Fire Tests of Building Construction and Materials  
2-Hour Test of a**

Building Panel System, non-load bearing, symmetrical  
and  
Protective Membrane Performance of 42 minutes  
System Name: Wallframe TM Building System  
Standard Test to: ASTM E 119-83

**Client:**

AlSCO Arco Building Products  
a unit of Archo Chemical Company  
Division of Atlantic Richfield Company  
50 South Main Street  
Akron, Ohio 44308

**Report Prepared by:**

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**Report No: WHI-694-0187**

Dates Tested: April 4th, May 2 and 15, 1985

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**Tests**

The vertical furnace of the Fire Test Laboratory of Gold Bond Building Products was used to test compliance with ASTM E 119-83 Fire Tests of Building Construction and Materials sections on "tests of Nonbearing Walls and Partitions" and "Performance of Protective Membranes in

Wall Assemblies.“

1) Fire Endurance Test, WE 770, tested May 15, 1985

A wall specimen was constructed as described in Test Assembly section of this Report. It received a fire exposure of 2 hours. No load was applied to the wall.

Chart 1-1 shows the time/temperature readings of the 11 furnace thermocouples.

Chart 1-2 shows the time/temperature of the 12 thermocouples on the unexposed surfaces. The initial temperature was 68°F.

At 30 minutes the high temperature was 168°F on T/C 10,  
at 60 minutes the high temperature was 164°F on T/C 6,  
at 90 minutes the high temperature was 204°F on T/C 12,  
at 120 minutes the high temperature was 385°F on T/C 5, and  
at 120 minutes the average temperature was 277°F.

Table 1-1 records unexposed face movement.

Table 1-2 records exposed face observations.

Table 1-3 records unexposed face observations.

## **Results**

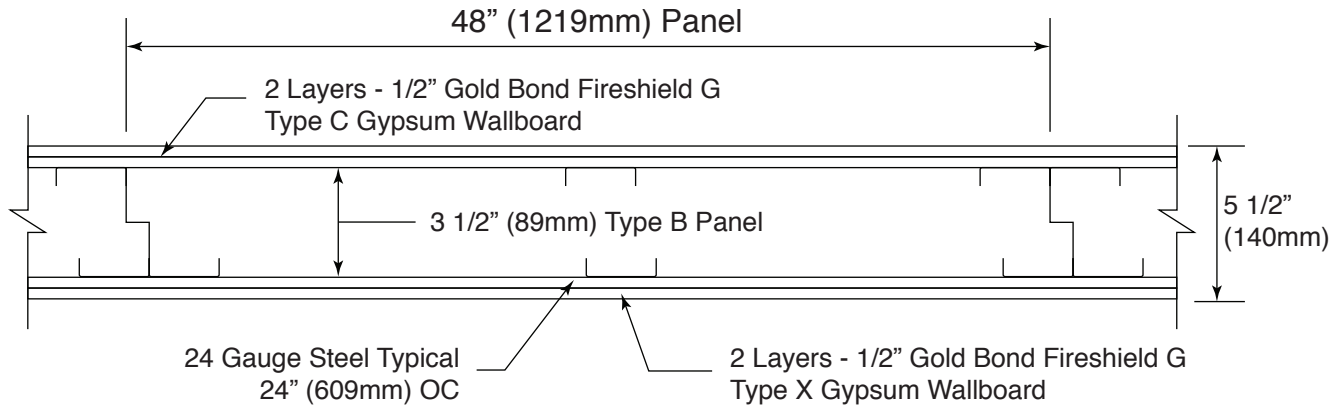
The wall withstood a 2 hour fire exposure without passage of gases hot enough to ignite cotton waste.

During the 2-hour fire exposure, the temperature of the unexposed surface did not rise more than 250°F above its initial temperature.



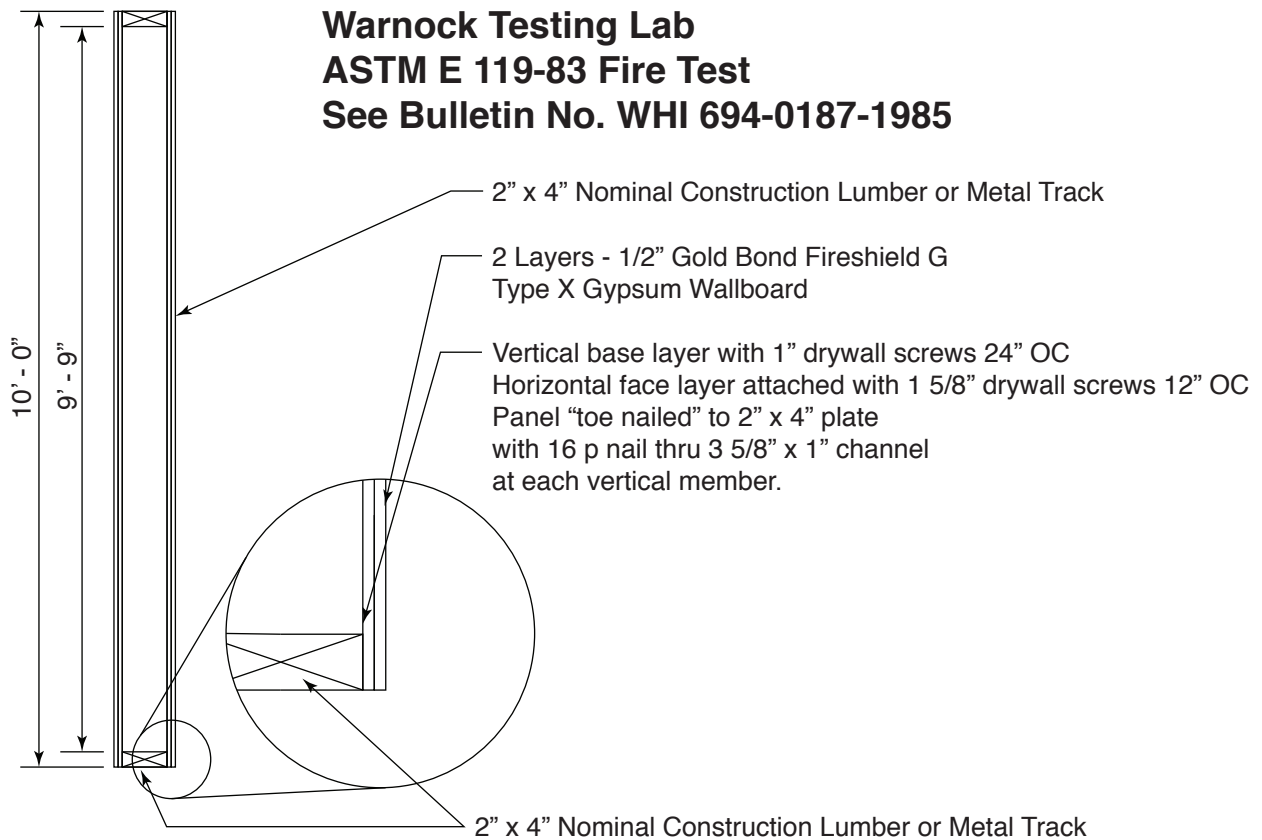
**THERMASTEEL™**  
ADVANCED PANEL SYSTEMS

**2 HOUR FIRE RATED ASSEMBLY  
NON LOAD BEARING**



PANEL SECTION

**Warnock Testing Lab  
ASTM E 119-83 Fire Test  
See Bulletin No. WHI 694-0187-1985**



PANEL ELEVATION