

Insulated Panel Test Data

Fire

Full Scale Corner - Factory Mutual conducted the Building Corner Fire Test (FM 4880) for wall-ceiling construction. Galvamet panel have been approved for Class 1 fire classification with no height Restriction subject to the conditions of approval as described in FM Report

Surface Burning Characteristics-

The panel core was tested in accordance with the ASTM E84 Tunnel Test. The core meets. The code requirements of:

Flame Spread	25
Smoke Developed	450

Toxicity Test- Galvamet panels have been Submitted for compliance with the requirements for fire gas toxicity established by the State of N.Y., Article 15, Part 1120 of the New York State Uniform Fire Prevention Code.

Structural

Vacuum Chamber - The Galvatherm Panel assembly was tested for positive and Negative deflection and fastener pull-out in A vacuum chamber per the ASTM E72 test Method. Please consult the load/span tables For allowable panel spans and fastener patterns.

Thermal Transmission

Heat Flow Meter - The insulation properties of the Galvatherm panel were tested in accordance with the ASTM C 518 steady state Heat Flux thermal transmission method.

2"	R16.26
2.5"	R20.33
3"	R24.39
4"	R32.52
5"	R40.65
6"	R48.78

Vapor Barrier

Air Infiltration - The Galvatherm tongue and groove joint has been tested in accordance with ASTM E283 test method. The test was conducted on a completed panel assembly including horizontal and vertical joints
.06 cfm per square foot of panel are at 20 PSF

Water Penetration - The Galvatherm panel tongue groove joint has been tested in accordance with ASTM E331 test method. The test was conducted on a completed assembly including horizontal and vertical joints.

no water penetration at 6.24 psf
no weather penetration at 20 psf

Roof Panel Test

Underwriters Laboratories - The Hi Rib roof was tested per U.L. standard UL580 in 1" and 2" thicknesses. Both thicknesses attained a Class 90 rating and the additional thickness of 1.5" is also classified. U.L.L. Reference R18067-1.

Factory Mutual - The Hi Rib roof panel was tested in accordance with FM standard 4471 when installed with self drilling screws and saddle washers at 5'0" centers. The assembly meets FM Fire Classification 1A, Hailstorm Classification 10135.

Foam Core

Autoclave test - A sample section of a Galvamet insulated panel was placed in an autoclave device and pressurized to 2 PSI at 212 degrees F for 2.5 hours. There was no evidence of delamination.

Water Vapor Transmission - The panel foam core was tested in accordance with the ASTM E96 test method for water vapor transmission. The maximum permeability rating was 1.3

Humidity test - A sample section of a Galvamet panel was subject to 100% relative degree F for 1000 hours. There was no evidence of metal primer corrosion

