

# TremLock® ThermalT™

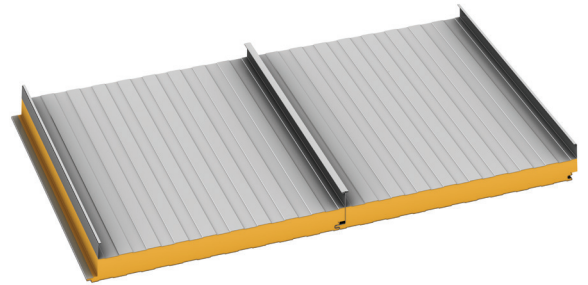
## Exterior Standing Seam Insulated Metal Panel

### FEATURES

- T-seam
- Factory Caulked Batten

### BENEFITS

- Slide panels together rather than lift or roll
- Double layer of weather-tight protection



### DESCRIPTION

TremLock ThermalT is the IMP Industry's premier standing seam roof panel.

### BASIC USES

TremLock ThermalT's patented T-seam allows for sliding the panels together rather than lifting and / or rolling the panels into place. The interior tongue-and-groove joint, coupled with a factory-caulked batten, helps provide a double layer of weather-tight protection.

### SYSTEM DESIGN

TremLock ThermalT panels are designed with a 42" coverage width, a 2" tall, tee-shaped vertical rib with mechanically seamed batten. Available lengths of 12'-0" to 53'-0". Panel thickness options of 2.5, 3, 4, 5, 6-inch. Exterior Gauge availability of 22, 24 and 26. Interior gauge of 26. Exterior Substrate is Galvalume®, G90. Interior substrate Galvalume®, G90, Stainless Steel. Interior Joint is Green-Lock, offset tongue-and-groove. Core is continuously poured-in-place polyisocyanurate insulating foam. R-Value is R-8 per inch of thickness (nominal).

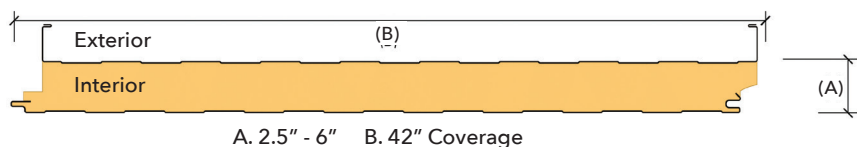
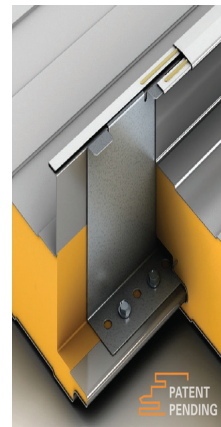
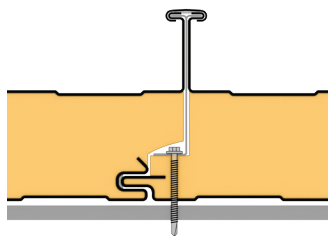
### FINISH/COLOR

Exterior Finish: Siliconized Polyester, standard gloss PVDF  
Interior Finish: Polyester, Siliconized Polyester, Plastisol (PVC)  
Exterior Texture: Smooth  
Interior Texture: Embossed, Smooth

### APPLICATION

TremLock ThermalT is a standing seam, insulated roof panel used on slopes 1/2:12. Standard panel lengths 12'0" - 53' 0".

### PANEL OPTIONS



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## TESTING

| TYPE                      | TEST PROTOCOL | DESCRIPTION   | RESULTS  |
|---------------------------|---------------|---|--|
| ENVIRONMENTAL PERFORMANCE | ASTM C518     | Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus  | K-Factor 0.139 BTU-in/hr-ft <sup>2</sup> -F° at 75° mean<br><br>K-Factor 0.129 BTU-in/hr-ft <sup>2</sup> -F° at 35° mean |
|                           | ASTM E1680    | Rate of Air Leakage Through Exterior Metal Roof Panel Systems   | 0.001-cfm/sf at 12-psf   |
|                           | ASTM E1646    | Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference  | Zero penetration at 12-psf   |
| FOAM CORE CHARACTERISTICS | ASTM C273     | Shear Properties of Sandwich Core Materials   | Shear Strength = 16-psi  |
|                           | ASTM D1621    | Compressive Properties of Rigid Cellular Plastics   | Compressive Strength – 18-psi  |
|                           | ASTM D1622    | Apparent Density of Rigid Cellular Plastics   | Apparent Density – 2.25-pcf  |
|                           | ASTM D1623    | Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics  | Tensile Strength – 21-psi  |
|                           | ASTM D6226    | Open Cell Content of Rigid Cellular Plastics  | Open Cell Content ≥ 90% closed cells   |
| FIRE RESISTANCE           | ASTM E84      | Surface Burning Characteristics of Building Materials   | Flame Spread < 25, Smoke Developed < 450   |
|                           | FM 4880       | Factory Mutual Approval Standard for Class 1 Fire Rating of Insulated Wall or Wall and Roof/Ceiling Panels, Interior Finish Materials or Coatings and Exterior Wall Systems | Class 1 Fire Rated – see technical bulletin ATB-0005   |
| IMPACT RESISTANCE         | FM 4771       | Factory Mutual Approval Standard for Class 1 Panel Roofs  |  |
|                           | TAS 201       | Florida Building Code Impact Test Procedure   | Miami Dade County NOA No. 17-0619.08   |
| ENGINEERING PROPERTIES    | ASTM E1592    | Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference   | See Load Tables  |
|                           | ASTM E72      | Strength Tests of Panels for Building Construction  | See Load Tables  |
|                           | FM 4471       | Factory Mutual Approval Standard for Class 1 Panel Roofs  | Class 1 Approved – see technical bulletin ETB-0015   |



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## TESTING (Continued)

| TYPE          | TEST PROTOCOL             | DESCRIPTION  | RESULTS  |
|---------------|---------------------------|--|--|
| APPROVALS     | Miami-Dade County         | Miami-Dade County Product Control Section – Notice of Acceptance | Miami Dade County NOA No. 17-0619.08   |
|               | State of Florida          | Florida Product Approval Factory Mutual Approval                 | FL21349  |
|               | Underwriters Laboratories | Roof Deck Construction – Class 90                                | TGKX.698   |
| BOND STRENGTH | Fatigue Endurance         | 2,000,000 Alternating Cycles of L/180 Deflection                 | No evidence of facer or liner delamination, fracture of foam core or permanent set |
|               | Freeze/Heat Cycle         | Twenty-One (21) Eight-hour Temperature Cycles (-20° F to 180° F) | No evidence of delamination, blistering or permanent set                           |
|               | Humidity Endurance        | 1,200 Hours of 93% Humidity at a Temperature of 158° F           | No evidence of delamination, blistering or interface corrosion                     |
|               | Autoclave                 | Exposure to 218° F and a pressure of 2-psig for 2½ hours         | No evidence of facer or liner delamination   |

## MAINTENANCE

Your local Tremco Roofing sales representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventative maintenance are all part of a sound roof program.

## PRECAUTIONS

Users must read container labels and Safety Data Sheets for health and safety precautions prior to use.

## TECHNICAL SUPPORT

Your local Tremco Roofing sales representative, working with the Technical Service Staff, can help analyze conditions and needs to develop recommendations for special applications.



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