Insulation Solutions for Metal Buildings

Metal Buildings

Quik-Therm Multi-Purpose Tongue and Groove Insulation (MPI) is a high performance continuous rigid insulation technology consisting of superior closed cell, lightweight and resilient Type I or Type 2 expanded polystyrene (EPS) layered on both sides with flexible and durable metallic polymer facers.

Installing Quik-Therm MPI on the outside is the fastest, easiest and most effective way to insulate metal buildings. It also provides superior R-value performance. Quik-Therm on metal buildings installs approximately 50% faster than batt and poly. For increased effective R-value, batt insulation can be installed between wall girts and roof purlins.

- Quik-Therm MPI meets code compliance as an air and vapour barrier and high performance insulator.
- MPI is manufactured in 4 ft. wide by 8', 10, and 12 lengths and available in variable thicknesses. Custom lengths are available on request.
- Tongue and Groove connections provide easy alignment and superior air and vapour control.

Tested for the Canadian Climate

Quik-Therm MPI has been Effective R-value tested to ASTM C1363 in Canadian winter like conditions (-18˚C outside / 22 KPH wind / +21˚C inside) by Canadian certified laboratories. The results of these tests are supported by leading building scientists.

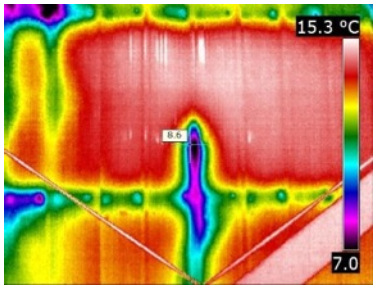
Quik-Therm Advantages

- FAST & EASY TO INSTALL - Speeds up scheduling and Saves Labour Dollars.
- LIGHTWEIGHT PANELS - are easy to cut and are dimensionally stable.
- T&G CONNECTIONS - Staggered joints, superior panel alignment and support.
- FLEXIBLE & DURABLE - Does not easily chip crack or break.
- VAPOUR & AIR BARRIER - No poly required.
- SUPERIOR PERFORMANCE - outperforms steel framing and batt insulation
- NO THERMAL DRIFT - R-value remains stable for life cycle of product.
- HEALTHY & MOLD RESISTANT - Does not promote mildew or mold.
- ENVIRONMENTALLY RESPONSIBLE & RECYCLABLE- No dyes or ozone depleting blowing agents. Contains up to 15% recycled Expanded Polystyrene.
- FLEXIBLE & DURABLE - Does not easily chip crack or break.
- MANUFACTURED IN CANADA - Quebec, Manitoba, BC.

Compare Quik-Therm to Batt and Steel Girts

Without Quik-Therm MPI

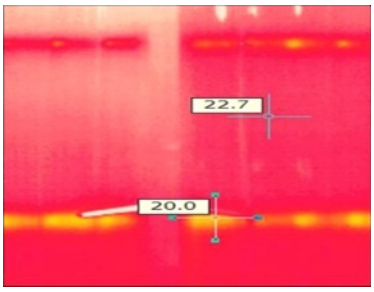
Steel Building with R-20 fiberglass batt only



IR image shows air leakage, moisture and significant thermal bridging through steel girts. Interior wall temperature range between 7 and 15˚C.

With Quik-Therm MPI

Steel Building with R-20 batt and
Quik-Therm on exterior girts between metal cladding



IR image shows minimal thermal bridging at girts. Image also indicates there is virtually no air leakage or moisture. Interior wall temperature range between 20 and 22˚C.

Effective R-Value Modeling & Testing

Tested - ASTM C-1363 - ATI/Intertek.	**Eff. R-Value**
1" Quik-Therm (no building materials)	5.86
Steel cladding, steel framing, 1" Quik-Therm, steel cladding	6.85
Energy Modeling & ASHRAE Calculations	
Walls - Steel cladding, 9" fiberglass batt, 2" Quik-Therm, steel cladding	27
Roof - Steel cladding, 9" fiberglass batt, 3" Quik-Therm, steel cladding	35
Energy Modeling Report 1" Quik-Therm effective R-value	5

NOTE: Substitute mineral wool insulation for fiberglass - add an effective R-1 to the assembly.
As per NBC Table A-9.36.2.4.(1)D walls without interior framing (i.e.: no air cavity); deduct R-1
Quik-Therm MPI costs approximately 25% less than Extruded Polystyrene.

Typical Physical Properties

Property		**Test Method**
R-Value Testing	Type 1	ASTM C1363
Nominal Density (pcf)	1.0	ASTM D1622-03
Compressive Strength (psi, 10% deformation)	13	ASTM D1621-04
Water Vapour Transmission (perms)	<1.0	ASTM E96
Flame Spread	250	CAN/ULC - S102.2
Smoke Developed	410	CAN/ULC - S102.2

CCMC (Canadian Construction Materials Center) Listing: Type 1 13393-L and Type 2 13457-L.
Quik-Therm MPI should be covered with a fire-resistant material. Check with local building codes.