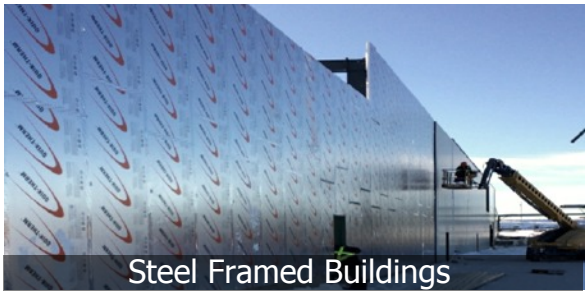
Quik-Therm Multi Purpose Insulation

MPI


Steel Framed Buildings


Tilt-Up Concrete


Residential

Quik-Therm Multi Purpose Insulation (MPI) is a high performance continuous rigid insulation product consisting of superior closed cell, lightweight and resilient Type I expanded polystyrene (EPS) layered on two sides with advanced reflective polymer facers.

Quik-Therm MPI is a multi-functional, durable and flexible insulation which can be used in a wide variety of building insulation applications. MPI is an all in one air, vapour, radiant and radon barrier and is available in rolls and sheets.

Quik-Therm MPI has been tested by Canadian certified laboratories and the test results are supported by leading building scientists.

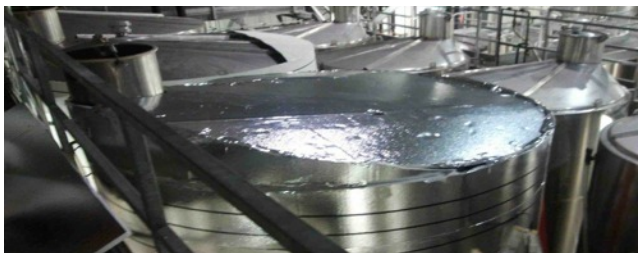
- Flexible & Durable - Ideal for a variety of applications including tanks, pipes, walls, roofs, floors and ceilings.
- Durable polymer facers and a resilient EPS core make it ideal for both interior and exterior applications.

Features & Highlights

- In one product, Quik-Therm MPI meets air, vapour and radiant barrier requirements.
- Excellent dimensional stability – flexible and durable.
- Depending on thickness, Quik-Therm MPI can be bent to 90 degree angles. Does not easily crack, chip or break.
- NO thermal drift, and its R-value will remain stable over its entire service life.
- Quik-Therm MPI does not promote mildew and mold.
- Contains no dyes, formaldehyde, or ozone depleting blowing agents.
- Recyclable – Quik-Therm MPI may contain up to 15% recycled content.
- Manufactured in a variety of thicknesses and densities. 4’ X 8’ sheets and 4’ X 72’ X ½” thick rolls (288 ft^2).

Thermal Performance Testing – Nominal vs. Effective R-Value

MPI



Morrison Hershfield states: "The best method of testing is 'Full-Scale' thermal testing such as ASTM C1363 - carried out at a certified laboratory."

Architectural Testing Inc. (ATI) / Intertek - a Canadian accredited laboratory tested Quik-Therm MPI to ASTM C1363 - Standard Test Method for Determination of the Steady State Thermal Performance of Building Assemblies.

ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers): The effective R-value of R-19 fiberglass in a steel frame wall (16" O.C.) is only R-7.1 or 62% less than the labeled R-value.

Oakridge National Laboratory, US Department of Energy states: "R-19" fiberglass batts have an R-value of 13.7 when installed as commonly found in actual walls." (Referring to wood framed walls).

ASTM C1363 Effective R-Value Testing & Energy Modelling

ASTM C1363 - ATI / Intertek. Engineering and Energy Modeling - Morrison Hershfield

Wall Assembly Description	Eff. R-Value
Frame and Steel Cladding (both sides), Empty Cavity, ½" Quik-Therm MPI	5.2
Steel Frame and Steel Cladding (both sides), Empty Cavity, 1" Quik-Therm MPI	6.85
Steel Frame and Steel Cladding (both sides), R-19 Fiberglass, ½" Quik-Therm MPI	14.77
Drywall, Wood Studs, Empty Cavity, OSB, 1" Quik-Therm MPI	8.3
Drywall, Wood Studs, Empty Cavity, OSB, ¾" Strapping (air space), 1"Quik-Therm MPI	10.6
Drywall, Wood Studs, Empty Cavity, OSB, 2" Quik-Therm MPI	13.4
Drywall, Air Space, ¾" Quik-Therm, 2 X 4 Wood Studs, R-11 fibreglass, OSB	19.5
Drywall, Wood Studs, R-19 fibreglass, OSB, ¾" Strapping (air space),1"Quik-Therm MPI	26.3
Drywall, Steel Studs, Empty Cavity, 1" Quik-Therm MPI, 3 ½" concrete wall	9.8
Drywall, Steel Studs, R-19 Fibreglass, 1" Quik-Therm MPI, 3 ½" concrete wall	21.6
3 ½" concrete wall, ½" Quik-Therm MPI (Outside)	3.8
3 ½" concrete wall, 1" Quik-Therm MPI (Outside)	5.9

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.