

Multi-Purpose Insulation (MPI)

MPI Panel



T&G Connections (Available in 2" product thickness or thicker)

The following is a summary installation guide for Quik-Therm Multi-Purpose Insulation (MPI). For wall assemblies details and instructions, please refer to "Guide to Attaching Exterior Wall Coverings through Foam Sheathing to Wood or Steel Wall Framing" by the Foam Sheathing Coalition (FSC) found at:

http://www.nationalgypsum.com/ng/file/FSCdoc.pdf

Quik-Therm[™] MPI has been tested by Canadian Certified Laboratories and is supported by Leading Building Science Engineering. CCMC Listings Type 1 13393-L and Type 2 13457-L. Type 3 Intertek Listed.

Caution: This product is combustible. Protect from high heat sources. A protective barrier or thermal barrier may be required as specified in the appropriate building code.

Tools and Materials Required

Hammer, Screw Gun and/or Nail Gun, Utility Knife & Blades, Hand Saw, Table and Circular Saw, Spray Foam and adhesive (PL-300) or compatible adhesive with Polystyrene foam, Coated Deck Screws (appropriate length), Hammer Drill (concrete only), 4' Level, Caulking Gun, Measuring Tape.

Installation Notes

- MPI sheets are available in varying thicknesses, densities and compressive strengths to suit a variety of applications. 1/2" thick MPI rolls are ideal for insulating tanks, large pipes, below grade water mains, and other curved structures.
- Ensure wall is smooth and free of debris.
- Ensure MPI panels fit tightly together. To achieve a code compliant air and moisture barrier, foam and/or tape all joints/seams.
- Use spray foams and/or adhesives compatible with polystyrene foam insulation (i.e. Hilti CF 812 and PL-300). For cold weather applications, purchase cold weather spray foams or adhesives.
- Adhere to local building codes, manufacturer instructions and best practices as outlined by a building design professional.
- Wood or metal furring can be installed directly over MPI. Refer to FSC Guide.
- For wood frame buildings over four to six stories please consult a design professional. Special installation details and fastener requirements apply.

General Notes

- 1. Apply flashing, caulking, and peel & stick products to ensure that there is no moisture penetration.
- 2. Consult with your building professional and refer to peel and stick application recommendations.

Basic MPI Installation Instructions

Panel Fastening

Using appropriate fasteners, fasten through foam insulation to wall stud framing (see FSC Guide). Ensure Quik-Therm label is facing outwards.



For temporary fastening, plastic or metal washers and appropriate length screws are ideal for fastening MPI to

wood or steel framing. Fasteners should be installed every 6" to 9" apart. Refer to FSC Guide.

Installing Cladding Materials

Lightweight siding materials such as vinyl or metal can be installed vertically or horizontally directly over MPI. Maximum 3" thickness.

Heavy cladding materials such as stucco or cement board siding require additional furring and/or sheathing. Please consult a design professional.

Fastening to Concrete and Masonry

IDP anchors ie: Hilti IDP or Simpson Mushroom Head Crimp Anchors with plastic or steel washers are ideal for fastening MPI to concrete and masonry walls and foundations.



Window & Door Openings

Two options exist to deal with window and door openings. Consult with your building professional to determine which method is most appropriate.

Option 1:

To minimize thermal bridging, install MPI over framing members.



Option 2:

Construct the appropriate size build-out. The size of the build-out is relative to the thickness of the MPI panel. Install QT MPI flush to build-out. Spray foam between build-out and MPI.



Metal Frame

Metal washers and appropriate fasteners hold QT in place prior to installing metal siding.



Air Barrier - General Notes

Quik-Therm MPI meets code compliancy as an air and/or vapour barrier and a radon barrier. As part of the air barrier, MPI can be attached to building wrap, peel and stick and poly. Ensure all joints and corners in insulation are spray foamed and/or taped.

- Although a wood frame building is shown, these general instructions are also applicable to metal framed structures.
- In all cases, adhere to local building codes, manufacturer instructions and best practices as outlined by a building design professional.
- See MPI Window and Door Air Barrier Detailing.

QUIK-THERM"

1 888 735 3012

Quik-Therm MPI Air Barrier/Finishing Details*

1 888 735 3012

General Notes:

Although a wood frame building is shown, these general instructions are also applicable to metal framed structures.

The techniques shown below are applicable for window and door frame openings.

Quik-Therm meets air, vapour and radon barrier requirements when installed properly as part of the overall building system. All connections must be spray foamed and/or taped.

Apply flashing, caulking and peel & stick products to be installed ensuring there is no air or moisture penetration. Consult with local building professional and refer to peel & stick manufacturer recommendations.

Adhere to local building codes, manufacturer instructions and best practices as outlined by a building design professional.

Window/Door Opening Finishing Details

- Install Quik-Therm insulation (A) against window/door framing build-out (outie).
- Plane sill (C) to slope downwards and outwards.
- (Windows)Install metal angle D at sill as per manufacturer recommendation.
- Install peel & stick water resistive air barrier membrane i around openings and over flashing as per manufacturer's instructions and local building codes. Ensure membrane adheres to all surfaces.
- Install wood spacers (shims) (F) on sill to provide drainage plane to outside.
- Install window (6) as per manufacturer's instructions and local building codes.
- Install flashing (1) above window as per manufacturer's recommendations. Apply sealant along top edge above flashing and down terminations.





Quik-Therm Butts Against Framing



Water resistive Air Barrier Membrane Installed



Metal Flashing Above Window



Quik-Therm MPI Air Barrier/Finishing Details*

1 888 735 3012

Wall Finishing Details

Top of Wall (Synthetic Sheathing Membrane extending between top plates)

- Install Quik-Therm insulation (A) against sheathing (B) up flush with top plate (C).
- Ensure all joints between insulation sheets are foamed and taped.
- Drape SSM (E) over Quik-Therm.
- Apply Quik-Therm approved tape (F) over joint between SSM and insulation to complete the seal.



Bottom of Wall (Synthetic Sheathing Membrane extending between Bottom plate & concrete)

- Install Quik-Therm insulation (A) against sheathing (B) flush with top of concrete wall (G).
- Ensure all joints between insulation sheets are foamed and taped.
- Drape SSM 🖲 over Quik-Therm.
- Apply Quik-Therm approved tape (F) over joint between SSM and insulation to complete the seal.



* For additional information and instructions, please refer to general notes.



Tested By Certified Laboratories. Supported By Building Science Engineering

