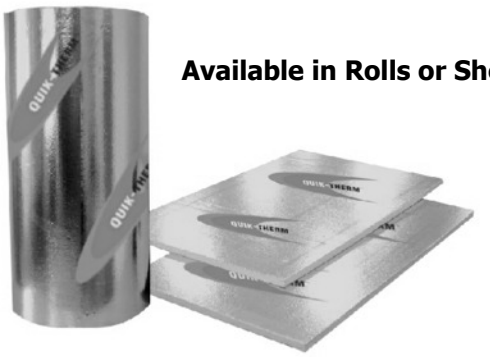
Sub-Grade Insulation (SGI)

Installation Guidelines



Available in Rolls or Sheets

The following is a summary installation guide for Quik-Therm Sub-Grade Insulation (SGI). 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.

ASTM C1512 was developed specifically to determine the freeze-thaw and moisture resistance properties of foam insulation in below grade applications. Test results clearly demonstrate that EPS does not absorb excessive amounts of moisture and there is no loss in R-value or change in compressive strength for EPS even after long-term exposure in northern climates.

Tools and Materials Required

Utility Knife & Blades, Measuring Tape, Plastic Spatula, Approved Tapes: Tuck Tape 202 by Canadian Technical Tape Limited or Flex Fix by Berry Plastics Corporation.

Typical Quik-Therm SGI Below Grade Applications

Type 1

Compressive Strength: 12.6 psi (1815 psf)

Supports a 4 to 8 inch concrete slab. Examples: basement floors, garage floors, warehouse structures and backfilled vertical foundations.

Type 2

Compressive Strength: 19.7 psi (2835 psf)

Supports a minimum thickness slab of 5.5 inches. Vehicular traffic, heavy vehicles and farm machinery.

Type 3

Compressive Strength: 26.7 psi (3845 psf)

Supports load bearing walls and footings. For these applications a specific geotechnical assessment should be undertaken.

Note: For Quik-Therm SGI technical information i.e. compressive strength, R-value, etc. please refer to the Quik-Therm Sub-Grade Insulation (SGI) Technical Data Sheet.

General Installation Notes

- When connections (joints) are taped (sealed) using approved tapes or sealants, SGI meets code compliancy as an air, vapour and radon barrier.
- SGI joints should be tight together and perimeter edges to be taped should be dry and clean.
- Tape should be applied with pressure using a plastic spatula.
- As part of an air, vapour or radon barrier system, SGI can be connected to 6 mil poly.

Best Practices - Below Grade Applications

It is important to recognize that the successful use of below grade foam insulation depends upon its correct installation using good building practice. In below grade applications the success of Quik-Therm SGI depends, to some extent, upon adequate drainage of water away from the foundation. The following design considerations should be taken into account for below grade applications:

- Direct Water Away From The Foundation. Provide a slope at grade away from the foundation of at least 6” in 10 feet.
- Direct down spouts to drain at least 3 feet away from the building.
- Avoid landscaping that requires excessive watering in the vicinity of the foundation wall.
- Provide adequate sub-grade drainage. Use well graded backfill or other appropriate measures to provide sufficient sub-grade drainage adjacent to foundation wall.
- Wrap a geotextile filter fabric around the drain tile at the base of the foundation or place granular fill material over the drain tile.
- Keep the level of perimeter drain tile below the basement floor and ensure the drain tile has adequate slope to the outflow point.
- Seal walls, tie rod holes and control joints.
- Seal and flash top edge of foundation and insulation.