



Quik-Therm T&G Connect

CONNECT



Wood Framed Buildings

Quik-Therm T&G Connect is a high performance interlocking (tongue and groove) structural insulation system.

Plywood battens (nailing strips) allow easy attachment to framing members

Interlocking T&G Connections



Steel Framed Buildings

T&G Connect panels are manufactured from superior closed-cell, lightweight and resilient Type 1 and Type 2 expanded polystyrene (EPS) covered on both sides with advanced metallic polymer facers.

In one simple and effective system, Quik-Therm T&G Connect structurally attaches high performance continuous insulation and heavy claddings to walls, ceilings, roofs and floors.



Concrete Buildings

3/4" thick X 2 1/2" wide X 8' long plywood nailing strips / battens are embedded within the Connect insulation panels. The plywood battens attach directly to framing members. In-turn, cladding materials such as cement board siding and metal are fastened directly to the battens.

Features & Highlights

- 5 in 1 insulation system, Quik-Therm T&G Connect is an air, vapor and radiant barrier and a high performance insulator with inherent structural integrity.
- Panels are 2" to 4" thick X 4' wide X 8' long with a 1/2" wide X 1/2" protruding tongue on one vertical (long side) edge and a 1/2" wide X 1/2" deep groove on the opposite vertical edge. When installed, the tongue from one panel fits into the groove of the adjacent panel. The tongue and groove connection provides panel support and alignment. It also increases productivity and reduces energy loss via air and moisture leakage.
- 3/4" thick X 2 1/2" wide X 8' long battens (nailing strips) are imbedded within the insulation panels. The battens are hermetically sealed in place by a reflective polymer laminate. Battens are spaced 16" or 24". The battens provide a simple and effective method of attaching Quik-Therm Connect and heavy claddings to walls, ceilings, roofs and floors.
- Rugged and durable. Does not easily crack, chip or break.
- The effective R-value of Quik-Therm T&G Connect will vary and is dependent on the type of structure (wood, concrete or steel), the method of installation and location (interior/ exterior) of the product.
- T&G Connect has no thermal drift and its R-value will remain stable over its entire service life.
- Environmentally friendly. Contains no dyes, formaldehyde, or ozone depleting blowing agents. T&G Connect may contain up to 15% recycled content.
- Reduces on site material and labour costs. T&G Connect installs in half the time of conventional foam board insulation products and conventional strapping methods.

quiktherm.com



Innovative Insulation Solutions



Tested By Canadian Accredited Laboratories. Supported By Building Science Engineering.

Thermal Performance Testing – Nominal vs. Effective R-Value



National Research Council Canada

"In recent years, the focus of building code and regulatory officials, professionals and researchers has shifted towards the performance of the entire wall system. Therefore, it is not sufficient to characterize the wall by its R-value alone, as was the case in the past."

Morrison Hershfield

"The use of effective R-values when evaluating the thermal resistance of an assembly is preferable to using the nominal R-value of the insulation alone."

"The best method of testing is 'Full Scale' thermal testing such as ASTM C-1363 carried out by a certified laboratory."



Architectural Testing Inc. (ATI)

Architectural Testing Inc. (ATI) / Intertek a Canadian accredited laboratory tested Quik-Therm to ASTM C1363-05 Standard Test Method for Determination of the Steady State Thermal Performance of Building Assemblies.

Vapour Control

Quik-Therm Connect walls should be designed to meet the minimum ratio of outboard to inboard thermal resistance listed in Table 9.25.5.2 of the code.

ASTM C1363 Effective R-Value Testing & Energy Modelling

ASTM C1363 - ATI / Intertek. Energy Modelling/ASHRAE

Wall Assembly Description

1363 - Drywall, 2X4 empty wood cavity, OSB, 2" Connect, cement board	13.2
1363 - Drywall, 2X4 empty wood cavity, OSB, 3/8" drainage plane, 3" Connect, cement board	17
Modelled - Drywall, 2X4 empty wood cavity, OSB, 3" Connect, cement board	18.2
1363 - Drywall, 2x4 wood frame, R-12 fiberglass, OSB, 2" Connect, cement board	22.1
Estimated - Drywall, 2x4 wood frame, R-12 fiberglass, OSB, 3" Connect, cement board	28
Estimated - Drywall, 2x6 wood frame, R-20 fiberglass, OSB, 3" Connect, cement board	34

Eff. R-Value *

* The above recommended wall assemblies exceed the requirements of Table 9.25.5.2 of the code for most jurisdictions. For breathable wall assemblies that require a drainage plane and rain screen, please refer to Quik-Therm Solar Dry.

NOTE: Substitute mineral wool insulation for fiberglass - add an effective R-1 to the assembly.

Typical Physical Properties

Property

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

CCMC (Canadian Construction Materials Center) Listing: Type 1 13393-L and Type 2 13457-L.

Quik-Therm Connect should be covered with a fire-resistant material. Check with local building codes.