

## Building Insulations - Walls and Ceilings (FM Approval Class Numbers 4411, 4651, 4880, 4881, 4882)

Insulating materials may occur in building construction to reduce heat or sound transmission through a wall, roof or floor-ceiling assembly. See Roofing Products and Assemblies Category for roof insulations.

The insulation listed below may be a surface treatment exposed to the building occupancy or as core material faced with metal, gypsum wallboard, concrete or masonry.

The listed assemblies are not intended as long-term fire walls or barriers since fire endurance was not evaluated. See SPECIFICATION TESTED PRODUCTS, ASTM E119 Standard, for hourly rated systems.

### Wall-Ceiling Construction/Roof Construction (Class Number 4880)

Combustible insulations, bonding agents, facing and finish materials contained in walls, ceilings and roof assemblies may exhibit self-propagating fire spreading tendencies when combustible vapors are emitted upon heating and rated Class II requiring sprinkler protection. The quantity of combustible vapors and the maximum rate of heat released by the assembly, in combination with sufficient oxygen and a positive heat balance, will start the self-propagating process.


The following assemblies have been evaluated using FM Approvals Standard 4880 (2005). The Class 1 systems exhibited limited fire spread and fuel contribution and may not require special protection such as sprinklers, when the building walls do not exceed the listed height.

The FM Approved assemblies are not intended as loadbearing or long-term fire barriers, since fire endurance was not evaluated. (See SPECIFICATION TESTED PRODUCTS, ASTM E119 Standard, for hourly rated systems.) If building use, occupancy or furnishings are combustible and expected to sustain a prolonged fire beyond 15 minutes, automatic sprinklers should be installed to control the ignition source.

Materials and method of installation are described as they were tested and must be maintained to insure the same fire performance. In cases where the structural framing supporting metal clad insulated panels is on the interior side of the panels, the intent of the listed fastening requirements may be met if the panels are secured to interior framing 1) with clips that in effect fasten the interior panel facer directly to the framing or 2) by fastening through the framing directly into the interior panel facer. Smoke and other products of combustion were not evaluated for toxicity.

This section describes each type of construction. The individual characteristics of each manufacturer's assembly follow the manufacturer's name and address.

The wall and ceiling constructions listed in this section (FM Approvals Standard 4880 (2005) Wall-Ceiling/Roof Constructions) are Approved for interior use only unless listed in the Exterior Wall Construction Category in the FM Approvals Standard 4881 (2005)

Exterior Wall Constructions section as exterior wall constructions or in  as roof constructions.

### Metal-faced with Combustible Core

Products identified with the **GREEN** symbol have attributes that are considered to be "sustainable" by certain outside organizations. FM Approvals verifies the presence of these attributes. Specific attributes for specific products are listed in the individual listings. To facilitate a search for these products in the Approval Guide, first search by the product type you desire and then refine your search to products with the **GREEN** symbol.

### Norex-H, Norex-L

Product	Primary Class of Work	Listing Country	Height Restriction	Certification Type
Norex-H, Norex-L	4880-Wall/Ceiling Ins. Assembly	Canada	No Height Restriction	FM Approved

Product	Panel Thickness in (mm)	Panel Width in (mm)	Minimum Exterior Facer Thickness in (mm)	Minimum Interior Facer Thickness in (mm)
Norex-H	2 - 5 (50 - 127)	36 - 41.5 (914 - 1054)	0.018 (0.45)	0.018 (0.45)
Norex-L	2 - 6 (50 - 150)	36 - 42.5 (914 - 1080)	0.018 (0.45)	0.018 (0.45)

**Facer Material:** Prefinished zinc coated steel

**Insulating Foam Systems:** Polyisocyanurate (PIR)

**Flashing:** Assembly interior corners are finished with 2.0 x 2.0 in. x 26 ga. (51x 51 x 0.45 mm) flashing fastened 12 in. (300 mm) on center with self-drilling screws.

**Other:** Norex-H and Norex-L panels are designed with offset joints and installed using concealed fasteners. Panels may be installed vertically or horizontally. See Exterior Wall Construction Class 4881 for panel securement specifications.

<b>Company Name:</b>	Norbec Architectural Inc
<b>Company Address:</b>	97 De Vaudreuil St, Boucherville, Quebec J4B 1K7, CAN
<b>Company Website:</b>	<a href="http://www.norbec.com">http://www.norbec.com</a>
<b>New/Updated Product Listing:</b>	No
<b>Green Product:</b>	No
<b>Primary Class of Work:</b>	4880-Wall/Ceiling/Roof Ins.Assem.
<b>Listing Country:</b>	Canada
<b>Height Restriction:</b>	No Height Restriction
<b>Certification Type:</b>	FM Approved