



United States

C O M M E R C I A L /
R E S I D E N T I A L

WHEN YOUR INSULATION NEEDS TO RESIST
MORE THAN AIR AND MOISTURE...

THERMAX Sheathing: superior flame protection for time-rated wall assemblies.

For many builders, fire resistance is as important a consideration in selecting the right insulation as airflow and moisture control. THERMAX* Sheathing polyisocyanurate insulation meets these needs as a non-structural, rigid board insulation consisting of a glass-fiber-reinforced polyisocyanurate foam core laminated between pinhole-free aluminum foil facers. This reinforcement, along with chemical modifications, helps give THERMAX Sheathing exceptional fire performance and dimensional stability ... and assures

builders that structures built with THERMAX Sheathing are safe and efficient.

THERMAX Sheathing is specially designed for meeting the one- and two-hour protection criteria of the multi-family and commercial-structure markets. Because of its improved fire performance, THERMAX Sheathing is especially appropriate on masonry exterior walls and underlayment applications where a fire break is needed in such structures as:

- Apartments
- Townhouses
- Condominiums
- Office buildings/complexes

Passing the Fire-Resistive Wall Assembly Tests

THERMAX Sheathing has been tested in three time-rated wall assemblies**. Complying with fire-resistance codes, THERMAX Sheathing meets builder needs for apartment, condominium and other construction requiring time-rated applications.

In these tested assemblies, 5/8" Type X Gypsum Board is applied as the interior finish.

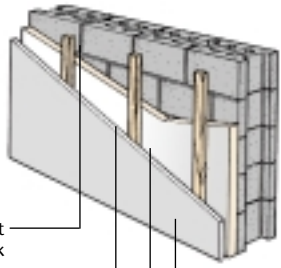
*Trademark of The Dow Chemical Company

†A business unit of The Dow Chemical Company and its subsidiaries

**The rated systems have been tested at The Ohio State University. For detailed test reports and engineering evaluations of system variations using alternative materials and/or other THERMAX Sheathing thicknesses, contact Dow at 1-800-441-4369.

**TWO-HOUR RATING
Masonry Wall System**

Interior
Fire Side



- 8" Lightweight Concrete Block
- Nominal 1" x 2" Pressure Treated Wood Furring Strips, 24" o.c.
- 2 1/4" THERMAX Sheathing
- 5/8" Type X Gypsum Board

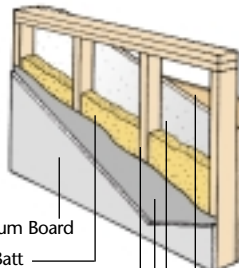
Acceptable Design Variations

- Any concrete block units meeting the requirements of Class D-2 UL Standard 618
- Any metallic furring system
- THERMAX Sheathing in thickness from 3/8" to 4 1/4"
- 1/2" Type X Gypsum Board or 1/2" Regular Gypsum Board

OSU Report 6536

**ONE-HOUR RATING
Exterior Wall**

Interior
Fire Side



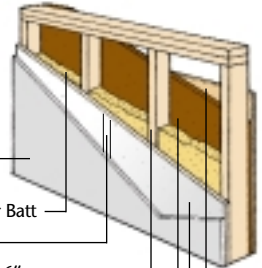
- 5/8" Type X Gypsum Board
- R-13 Glass Fiber Batt
- 2" x 4" Studs, 16" o.c.
- 6 mil Polyethylene
- 1" THERMAX Sheathing
- 5/8" Reverse Board & Batten Plywood Siding

Acceptable Design Variations

- Brick or stone veneer or Portland Cement Stucco. Minimum 1 1/32" wood lap or panel hardboard plywood siding. Aluminum or steel siding.
 - THERMAX Sheathing in thickness from 7/16" to 4 1/4"
- Note: Test conducted with design loads in excess of 2,000 lbs. per stud using #2 Southern Yellow Pine.
UL Design No. 355, OSU Report 6534

**ONE-HOUR RATING
Underlayment System**

Interior
Fire Side



- 5/8" Type X Gypsum Board
- R-13 Glass Fiber Batt
- Tape
- 2" x 4" Studs, 16" o.c.
- 1/2" Intermediate Grade Fiberboard Sheathing
- 1" THERMAX Sheathing
- 5/8" Reverse Board & Batten Plywood Siding

Acceptable Design Variations

- Brick or stone veneer or Portland Cement Stucco. Minimum 1 1/32" wood lap or panel hardboard plywood siding. Aluminum or steel siding.
 - THERMAX Sheathing in thickness from 7/16" to 4 1/4"
 - 1/2" Type X Gypsum Board
- Note: Test conducted with design loads in excess of 2,000 lbs. per stud using #2 Southern Yellow Pine.
OSU Report 6535

FLAME RESISTANCE

THERMAX Sheathing will not sustain fire without a separate flame source such as combustible building components. In fact, using THERMAX Sheathing could help your customers qualify for lower insurance rates.

THERMAX Sheathing also features superior energy-saving insulating advantages. It exhibits the properties indicated in Table 1 when tested as represented.

**SPEED UP THE
BUILDING PROCESS**

THERMAX insulation/finish boards install quickly and easily to walls and ceilings – inside or outside purlins, trusses or bar joists – reducing labor costs. Board joints can be sealed easily with tape or with one of Dow Building Materials' joint closure systems, ensuring maximum insulating value.

TABLE 1

Design R- and U-values calculated at 75°F mean temperature for fire-resistive wall systems			
Masonry (15% wood-furred-framing factor; using 2 1/4" THERMAX Sheathing)			
Framing	Cavity	System R-value	System U-value
R-19.66	R-21.49	21.19	.047

FIRE TESTING

Conducted Fire Tests of Engineering Studies:

- ASTM E 84 – Surface Burning Characteristics (flame spread)
- UL 723 – Classified Surface Burning Characteristics (flame spread)
- UL 1040 – Full Scale Enclosed Cover
- UL 1715 – Room Fire Test
- FM 4880 Building Corner Fire Test (wall-ceiling)
- ICBO 26-3 Enclosed Room Fire Test (wall-ceiling)
- ASTM E 119 – Full Scale Building Fire Tests (time-rated wall systems)

NOTICE: No freedom from any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. Dow assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

WARNING: THERMAX insulation/finish boards do not constitute a working walkable surface or qualify as a fall protection product.

COMBUSTIBLE: THERMAX products should be used only in strict accordance with product application instructions. THERMAX products, when used in a building containing combustible materials, may contribute to the spread of fire. For more information, consult MSDS and/or call Dow (1-800-441-4369). In an emergency, call 1-989-636-4400.

THE DOW CHEMICAL COMPANY • Building Materials • 200 Larkin • Midland, MI 48674
FOR TECHNICAL INFORMATION: 1-800-441-4369 • FOR SALES INFORMATION: 1-800-232-2436
www.dowbuildingmaterials.com



Living.
Improved daily.