

SELECTOR GUIDE

Roofing products





THE RIGHT SOURCE.

The right solutions.

For more than 50 years, Dow Building Materials[†] has been the recognized leader in extruded polystyrene insulation. Since developing STYROFOAM^{*} extruded polystyrene insulation, we've continued to build on our foam expertise and technical strength to provide our customers with the right product for any building envelope application.

Today, Dow Building Materials offers an extensive line of science-based building envelope solutions, including:

- STYROFOAM extruded polystyrene insulation, including ROOFMATE^{*} and DECKMATE^{*}
- Dow polyisocyanurate insulation, including THERMAX^{*} and HY-THERM^{*}AP
- STYROFOAM WEATHERMATE^{*} housewraps
- STYROFOAM concrete insulation systems

Better Buildings. Better Business.

Dow Building Materials helps you improve the comfort and energy efficiency of your structures. And better buildings mean better business.

- Satisfied buyers
- Fewer callbacks
- Excellent return on investment
- Improved reputation



*Trademark of The Dow Chemical Company

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

BASED ON SCIENCE.

Backed by Dow.

Behind our building envelope solutions are more than 50 years of experience and the reputation of The Dow Chemical Company.

- Dow developed extruded polystyrene insulation – we know more about foam than anyone else
- Dow uses a unique free-rise polyisocyanurate technology
- Quality and availability are ensured – we manage the entire process from raw materials to finished product
- Dow is committed to ongoing research and development
- Dow offers the most extensive marketing support in the industry

Better Science. Better Service.

The Dow Chemical Company is a leading global supplier of chemical, plastic and agricultural products and services.

With a presence in 170 countries, The Dow Chemical Company is committed to improving the things that are essential to human progress.

BUILDING RELATIONSHIPS

Dow Building Materials leverages the strengths of The Dow Chemical Company to build and improve relationships with customers and suppliers. A Fortune 50 company, The Dow Chemical Company is respected around the world as a brand leader.

Throughout Dow, we're using information technology to further enhance customer relationships and provide needs-based solutions. Among Dow's capabilities and initiatives:

- www.dow.com
- www.dowstyrofoam.com
- www.dowinyourhome.com
- Customer Information Group (CIG)
- Telesales

Building Community.

DOW AND HABITAT FOR HUMANITY

Recognizing that decent, affordable housing is essential to quality of life, Dow has built a strong partnership with Habitat for Humanity International.

We actively support Habitat with house sponsorships, product donations and volunteer build teams. Since the early 1980s, Dow has donated more than \$5 million in financial support and product donations to Habitat. Dow is the official supplier of rigid foam insulation and will donate an additional \$5 million of insulation for the next 25,000 Habitat homes built in North America through 2005. In addition, The Dow Chemical Company Foundation has pledged \$2 million to the organization for house sponsorships around the world.







BUILDING BETTER.

Roofing solutions.

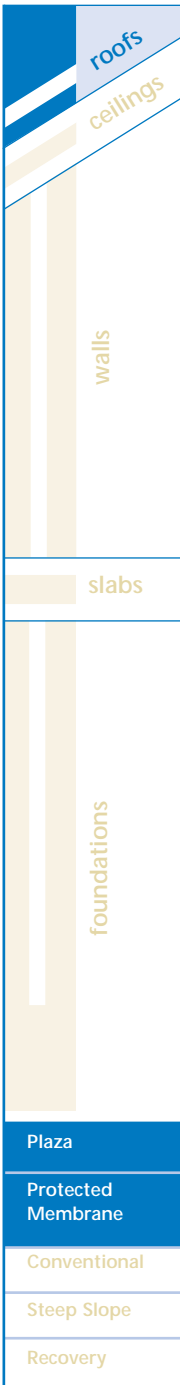
Better roofs begin with better materials ... and knowledge. Dow Building Materials offers a broad range of roofing insulation solutions – the best products backed by in-depth technical expertise and support.

roofs

PLAZA AND PROTECTED MEMBRANE

Product and Description	Building Code Compliance
 <p>STYROFOAM Highload 40, 60 & 100 An extruded polystyrene foam insulation board with high compressive strength developed specifically for in-ground applications and freezer floors.</p>	<p>Complies with ASTM C 578 Types V, VI and VII. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.® Classified, see Classification Certificate D369.</p>
 <p>STYROFOAM PLAZAMATE* An extruded polystyrene foam insulation board with 1/2" x 1/4" drainage channels on the bottom long edge of each board. Designed for installation above waterproofing or roofing membranes in plaza deck applications. 10-year limited thermal warranty when installed in the PMR application.</p>	<p>Complies with ASTM C 578 Type VII. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.® Classified, see Classification Certificate D369.</p>
 <p>STYROFOAM ROOFMATE* An extruded polystyrene foam insulation board with 1/2" x 1/4" drainage channels on the bottom long edge of each board. Designed for installation above waterproofing or roofing membranes in protected membrane roof (PMR) applications. 10-year limited thermal warranty when installed in the PMR application.</p>	<p>Complies with ASTM C 578 Type VI. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.® Classified, see Classification Certificate D369.</p>
 <p>STYROFOAM Ribbed ROOFMATE An extruded polystyrene foam insulation board with 1/2" x 1/4" drainage channels on the bottom long edge of each board. Top surface of the board has ribs that form corrugations in the long dimension of the board. Designed for installation above waterproofing or roofing membranes in protected membrane roof (PMR) applications that incorporate pavers as ballast. Pavers can be installed directly over the ribbed foam surface without the need for pedestals. 10-year limited thermal warranty when installed in the PMR application.</p>	<p>Complies with ASTM C 578 Type VI. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.® Classified, see Classification Certificate D369.</p>

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Technical Information

Nominal Board Thickness**	in	2	3
	(mm)	(50.8)	(76.2)

R-Value at 75°F Mean	10.0	15.0
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Board Size: 2' x 8'

Nominal Board Thickness**	in	1 1/2	2	3
	(mm)	(38.1)	(50.8)	(76.2)

R-Value at 75°F Mean	7.5	10	15
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Board Size: 2' x 8'

Nominal Board Thickness**	in	1	1 1/2	2	2 1/2	3	3 1/2	4
	(mm)	(25.4)	(38.1)	(50.8)	(63.5)	(76.2)	(88.9)	(101.6)

R-Value at 75°F Mean	5	7.5	10	12.5	15	17.5	20
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Board Size: 2' x 8'

Nominal Board Thickness**	in	2
	(mm)	(50.8)

R-Value at 75°F Mean	10
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Board Size: 2' x 8'

NOTE: R-value means resistance to heat flow. The higher the R-value, the greater the insulating power. R-value determined by ASTM C 518, unless otherwise specified.

**Not all product sizes are available in all regions. Please contact your local Dow sales representative for specific product availability in your area.


CONVENTIONAL

Product and Description	Building Code Compliance
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HY-THERM* AP⁺ Roof Insulation
 A polyisocyanurate foam insulation board with specially formulated organic/inorganic facers. It is suited for use under gravel-surfaced, fully mopped built-up (with suitable coverboard), modified bitumen roofing (with suitable coverboard), single-ply and metal roof applications.

Complies with ASTM C 1289 Type II, Class 1. Meets IBC/IRC requirements for foam plastic insulation.




HY-THERM Composite⁺ Roof Insulation
 A composite board consisting of a polyisocyanurate foam core, which provides high thermal efficiency, integrally bonded to 1/2" high-density fiberboard roof insulation on one side and an organic/inorganic facer sheet on the other. Recommended for use in loose-laid and ballasted single-ply systems, mechanically fastened single-ply systems, fully adhered single-ply systems (EPDM only) and built-up and modified bitumen systems.

Complies with ASTM C 1289 Type IV. Meets IBC/IRC requirements for foam plastic insulation.




STYROFOAM DECKMATE*
 An extruded polystyrene foam insulation board with square edges. Designed for use in conventional low slope roof applications. Can be installed directly on structural steel deck in all building code jurisdictions. See Dow for a complete listing. Typical compressive strength of 18 psi.

Complies with ASTM C 578 Type X. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, ICBO-ES ER 5155, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.[®] Classified, see Classification Certificate D369.



STYROFOAM DECKMATE Plus
 An extruded polystyrene insulation board with square edges. Designed for use in conventional low slope roof applications. Can be installed directly on structural steel deck in all building code jurisdictions. See Dow for a complete listing. Minimum compressive strength of 25 psi.

Complies with ASTM C 578 Type IV. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, ICBO-ES ER 5155, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.[®] Classified, see Classification Certificate D369.



STYROFOAM Tapered DECKMATE Plus
 An extruded polystyrene foam insulation board with tapered edges. Designed for use on conventional flat roofs. Covering STYROFOAM Tapered DECKMATE Plus with a single-ply membrane assures unimpeded drainage. Each precision-tapered panel provides long-term thermal efficiency and minimum compressive strength of 25 psi.

Complies with ASTM C 578 Type IV. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, ICBO-ES ER 5155, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.[®] Classified, see Classification Certificate D369.

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 †Only available west of the Rocky Mountains

Technical Information

Nominal Board Thickness** in (mm)	1 (25.4)	1 1/2 (38.1)	1.8 (45.7)	2 (50.8)	2 1/2 (63.5)	3 (76.2)	4 (101.6)
R-Value ¹ at 75°F Mean	6.0	9.0	10.9	12.1	15.3	18.5	25.0

Board Size: 4' x 4'; 4' x 8'

¹Expected results for foam pending confirmation using Long-Term Thermal Resistance (LTTR) – C 1289 Annex method.

Nominal Board Thickness** in (mm)	1 1/2 (38.1)	1.8 (45.7)	2.1 (53.3)	2.3 (58.4)	2 1/2 (63.5)	3 (76.2)	4 (101.6)
R-Value ¹ at 75°F Mean	7.4	9.2	11.0	12.3	13.5	16.7	23.1

Board Size: 4' x 4'

¹Expected results for foam pending confirmation using Long-Term Thermal Resistance (LTTR) – C 1289 Annex method.

Nominal Board Thickness** in (mm)	2 (50.8)	2 1/2 (63.5)	3 (76.2)	4 (101.6)
R-Value at 75°F Mean	10	12.5	15	20

Board Size: 2' x 8'; 4' x 8'

Nominal Board Thickness** in (mm)	2 (50.8)	2 1/2 (63.5)	3 (76.2)	4 (101.6)
R-Value at 75°F Mean	10	12.5	15	20

Board Size: 2' x 8'; 4' x 8'

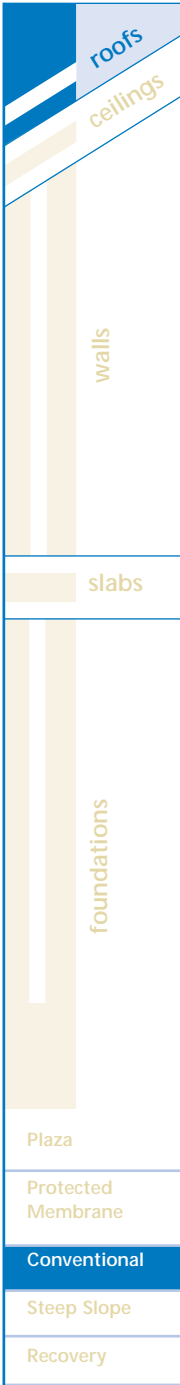
1/8" Slope Nominal Board Thickness** in (mm)	1/2-3/4 (12.7-19.1)	3/4-1 (19.1-25.4)	1-1 1/4 (25.4-31.8)	1 1/4-1 1/2 (31.8-38.1)
1/4" Slope Nominal Board Thickness** in (mm)	1/2-1 (12.7-25.4)	1-1 1/2 (25.4-38.1)	—	—
1/2" Slope Nominal Board Thickness** in (mm)	1/2-1 1/2 (12.7-38.1)	—	—	—

Aged R-Value per Inch (25.4 mm) at 75°F Mean: 5.0 (0.88)

Board Size: 2' x 8'

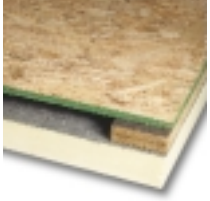
NOTE: R-value means resistance to heat flow. The higher the R-value, the greater the insulating power. R-value determined by ASTM C 518, unless otherwise specified.

**Not all product sizes are available in all regions. Please contact your local Dow sales representative for specific product availability in your area.



STEEP SLOPE

Product and Description	Building Code Compliance
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CELO-VENT* Insulated Shingle Deck

A factory-assembled ventilated (nail-base) roof insulation system, which allows for insulation outside the structural deck. This is especially useful with cathedral ceilings or where attic space does not permit insulating. CELO-VENT consists of thermally efficient, closed-cell polyisocyanurate roof insulation board and 7/16" APA- or TECO-rated OSB, with 2" shiplap, separated by 1" x 3" wide fiberboard strips set 16" o.c. to provide venting. Available with unidirectional or cross ventilation. CELO-VENT must be used along with continuous eave and ridge vents.

Complies with ASTM C 1289 Type V. Meets IBC/IRC requirements for foam plastic insulation.



HY-THERM NAIL-LINE* Roof Insulation

Polyisocyanurate foam core, securely bonded to a top layer of durable 7/16" oriented strand board (OSB) and an organic/inorganic facer sheet on the other side. Incorporating all the features of our other polyisocyanurate roof insulations, this product features insulating value, nailability, high compressive strength and high resistance to traffic abuse.

Complies with ASTM C 1289 Type V. Meets IBC/IRC requirements for foam plastic insulation.



STYROFOAM DECKMATE

An extruded polystyrene foam insulation board with square edges. Designed for use in standing-seam metal roof applications. Can be installed directly on structural steel deck in all building code jurisdictions. See Dow for a complete listing. Typical compressive strength of 18 psi.

Complies with ASTM C 578 Type X. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, ICBO-ES ER 5155, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.® Classified, see Classification Certificate D369.



STYROFOAM DECKMATE Plus

An extruded polystyrene insulation board with square edges. Designed for use in standing-seam metal roof applications. Can be installed directly on structural steel deck in all building code jurisdictions. See Dow for a complete listing. Minimum compressive strength of 25 psi.

Complies with ASTM C 578 Type IV. Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, ICBO-ES ER 5155, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.® Classified, see Classification Certificate D369.

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Technical Information

Nominal Product Thickness** in (mm)	2 1/2 (63.5)	3 1/2 (88.9)	4 1/2 (114.3)	5 (127)	5 1/2 (139.7)
Nominal ¹ Core Foam Thickness in (mm)	1.0 (25.4)	2.0 (50.8)	3.0 (76.2)	3.5 (88.9)	4.0 (101.6)
Product R-Value ² at 75°F Mean	7.1	13.2	19.6	22.8	26.1

Board Size: 4' x 8'

¹Includes facers

²Expected results for foam pending confirmation using Long-Term Thermal Resistance (LTTR) – C 1289 Annex method.

Nominal Product Thickness** in (mm)	1 1/2 (38.1)	2 (50.8)	2.4 (61)	3 (76.2)	4 (101.6)
R-Value ¹ at 75°F Mean	6.6	9.6	12.1	15.9	22.3

Board Size: 4' x 8'

¹Expected results for foam pending confirmation using Long-Term Thermal Resistance (LTTR) – C 1289 Annex method.

Nominal Board Thickness** in (mm)	2 (50.8)	2 1/2 (63.5)	3 (76.2)	4 (101.6)
R-Value at 75°F Mean	10	12.5	15	20

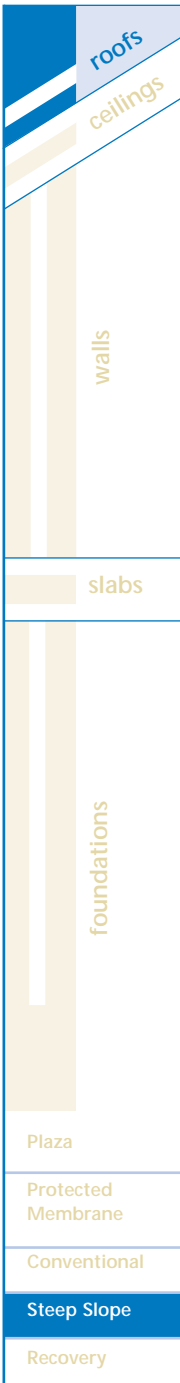
Board Size: 2' x 8'; 4' x 8'

Nominal Board Thickness** in (mm)	2 (50.8)	2 1/2 (63.5)	3 (76.2)	4 (101.6)
R-Value at 75°F Mean	10	12.5	15	20

Board Size: 2' x 8'; 4' x 8'

NOTE: R-value means resistance to heat flow. The higher the R-value, the greater the insulating power. R-value determined by ASTM C 518, unless otherwise specified.

**Not all product sizes are available in all regions. Please contact your local Dow sales representative for specific product availability in your area.



RECOVERY

Product and Description



STYROFOAM RECOVERMATE* CR

An extruded polystyrene foam insulation board with square edges. Poly-coated Kraft facers make RECOVERMATE CR compatible with plasticized membranes. Designed for installation over an existing roofing membrane in roof recovery applications with a new ballasted or light-colored mechanically attached sheet membrane.

Building Code Compliance

Meets IBC/IRC requirements for foam plastic insulation. See ICBO-ES ER 2257, BOCA-ES RR 21-02, SBCCI PST & ESI ER 9576D, Und. Lab. Inc.® Classified, see Classification Certificate U589.

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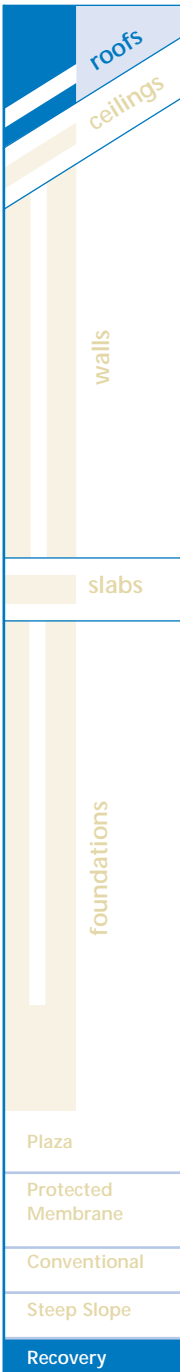
Technical Information

Nominal Board Thickness**	in (mm)	3/8 (9.5)
R-Value at 75°F Mean		1.5

Board Size: 4' x 50' fanfold boards folded every 2'

NOTE: R-value means resistance to heat flow. The higher the R-value, the greater the insulating power. R-value determined by ASTM C 518, unless otherwise specified.

**Not all product sizes are available in all regions. Please contact your local Dow sales representative for specific product availability in your area.



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COMBUSTIBLE: Protect from high heat sources. Local building codes may require a protective or thermal barrier. For more information, consult MSDS, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector. In an emergency, call 1-989-636-4400.

The Dow Chemical Company

Building Materials

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