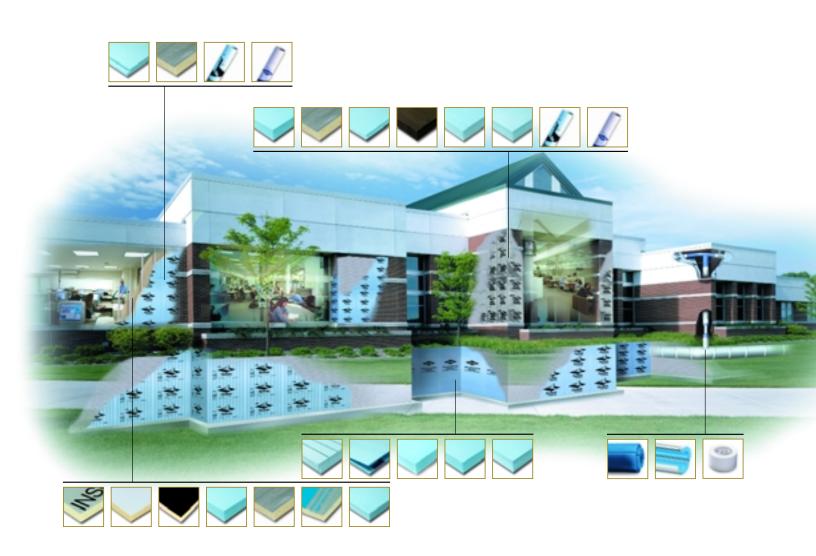


United States

COMMERCIAL



Commercial products



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 needsbased 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.





THE RIGHT PRODUCTS.

Based on building science.

Dow Building Materials offers the right product for every building envelope application. Use this chart to determine which products are best for your needs based on product characteristics beneficial for specific applications.

	foundations/slabs				
PRODUCTS	Foundations	Slabs			
Extruded Polystyrene Products					
DOW* Protection Board III	High R-Value Highest Moisture Resistance Highest Strength				
STYROFOAM Highload 40, 60 &100		High R-Value Highest Moisture Resistance Highest Strength			
STYROFOAM PERIMATE*	High R-Value Highest Moisture Resistance Highest Strength				
STYROFOAM Scoreboard	High R-Value Highest Moisture Resistance Higher Strength				
STYROFOAM Square Edge	High R-Value Highest Moisture Resistance Higher Strength	High R-Value Highest Moisture Resistance Higher Strength			

^{*}Trademark of The Dow Chemical Company

		walls	
PRODUCTS	Interior	Exterior Cavity Wall – Block Backed	Exterior Cavity Wall – Steel Stud
Extruded Polystyrene Products			
STYROFOAM CAVITYMATE*		High R-Value Highest Moisture Resistance	
STYROFOAM CAVITYMATE Plus		High R-Value Highest Moisture Resistance Highest Strength	
STYROFOAM CAVITYMATE SC			High R-Value Highest Moisture Resistance
STYROFOAM CAVITYMATE Ultra		Higher R-Value Highest Moisture Resistance	
STYROFOAM Square Edge	High R-Value		
STYROFOAM Z-MATE*	High R-Value		
Polyisocyanurate Products			
Super TUFF-R Commercial	Highest R-Value Highest Strength		
THERMAX Heavy Duty Plus	Highest R-Value Highest Strength Higher/Best Fire Resistance		
THERMAX Heavy Duty	Highest R-Value Higher Strength Higher/Best Fire Resistance		
THERMAX Light Duty	Highest R-Value High Strength Higher/Best Fire Resistance		
THERMAX Sheathing	Highest R-Value High Strength Higher/Best Fire Resistance	Highest R-Value High Moisture Resistance	Highest R-Value High Moisture Resistance
TUFF-R Commercial	Highest R-Value		
VALUE-R*	Highest R-Value		
Housewrap Products			
STYROFOAM WEATHERMATE		Higher Vapor Permeance	Higher Vapor Permeance
STYROFOAM WEATHERMATE Plus		Highest Vapor Permeance	Highest Vapor Permeance
PRODUCTS	Exterior Precast	Exterior Sandwich Panel	pipe
Extruded Polystyrene Products			
STYROFOAM Square Edge	High R-Value Highest Moisture Resistance	High R-Value Highest Moisture Resistance	
STYROFOAM Tongue and Groove		High R-Value Highest Moisture Resistance	
Mechanical Insulation Products			
Saran* Vapor Retarder Film and Tape			Lowest Vapor Permeance – No Nutrients for Mold/Fungus Growth
TRYMER* 2000 Pipe Insulation			Lowest k-Factor Best Fire Resistance

^{*}Trademark of The Dow Chemical Company

BUILDING BETTER.

Building envelope solutions.

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

BUILDING ENVELOPE INSULATION PRODUCTS

Product and Description



DOW Protection Board III

An extruded polystyrene foam insulation board with plastic film on one side. Fanfolded 50-foot lengths make it easy to install and work with on the jobsite. Recommended for waterproofing protection on the exterior of perimeter concrete and masonry walls.

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.



STYROFOAM CAVITYMATE

An extruded polystyrene foam insulation board with square edges on all four sides. Special 16" width makes it easy to fit between brick ties in cavity wall applications.

Complies with ASTM C 578
Type X. Meets IBC/IRC requirements
for foam plastic insulation. See
ICBO-ES ER 2257, BOCA-ES RR 2102, SBCCI PST & ESI ER 9576D,
Und. Lab. Inc.® Classified, see
Classification Certificate D369.



STYROFOAM CAVITYMATE Plus

An extruded polystyrene foam insulation board with square edges on all four sides. Special 16" width makes it easy to fit between brick ties in cavity wall applications.

Complies with ASTM C 578
Type IV. 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.



STYROFOAM CAVITYMATE SC

An extruded polystyrene foam insulation board with shiplap edges on long edges. Controls condensation, corrects steel stud thermal short, improves performance of insulating batting. 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.

Nominal Boar Thickness**	rd in (mm)	1/ ₄ (6.4)
R-Value at 75°F Mear	1	1.0

Board Size: 4' x 50'

Nominal Board Thickness** in (mm)	1 (25.4)	1 ¹ / ₂ (38.1)	2 (50.8)
R-Value at 75°F Mean	5.0	7.5	10.0

Board Size: 16" x 8'

Nominal Board Thickness** in (mm)	1 ¹ / ₂ (38.1)	2 (50.8)
R-Value at 75°F Mean	7.5	10.0

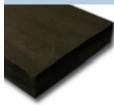
Board Size: 16" x 8'

Nominal Board Thickness** in (mm)	1 (25.4)	1 ¹ / ₂ (38.1)	2 (50.8)
R-Value at 75°F Mean	5.0	7.5	10.0

Board Size: 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.

Product and Description



STYROFOAM CAVITYMATE Ultra

An extruded polystyrene foam insulation board with square edges on all four sides. Special 16" width makes it easy to fit between brick ties in cavity wall applications.

Building Code Compliance

Complies with ASTM C 578
Type IV. Patented carbon black
technology provides high R-value
per inch of thickness. Meets
IBC/IRC requirements for foam
plastic insulation. See SBCCI PST
& ESI ER 9576D, Und. Lab. Inc.®
Classified, see Classification
Certificate D369.



STYROFOAM Highload 40, 60 and 100

An extruded polystyrene foam insulation board with high compressive strength developed specifically for in-ground applications and freezer floors.

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.



STYROFOAM PERIMATE

An extruded polystyrene foam insulation board with patented dovetail grooves cut into one face of the board and shiplap edges on the long edges. When installed on the exterior of basement walls, it provides insulation, protects the waterproofing membrane and assists water drainage away from the foundation. Qualifies as Class A, Type 2 drainage product in Canada.

Complies with ASTM C 578
Type IV. 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.



STYROFOAM Scoreboard

An extruded polystyrene foam insulation board with square edges on all four sides. Scored longitudinally on 16" (406 mm) and 24" (610 mm) centers, making it easy to snap into convenient widths.

Complies with ASTM C 578
Type IV. 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.



STYROFOAM Square Edge

An extruded polystyrene foam insulation board with square edges on four sides. Offers superior water resistance, long-term thermal performance and high compressive strength.

Complies with ASTM C 578
Type IV. 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.

Nominal Board Thickness** in (mm)	1 ³ / ₄ (44.5)	2 ¹ / ₈ (54)
R-Value at 75°F Mean	10	12

Board Size: 16" x 8'

Nominal Board Thickness** in (mm)	2 (50.8)	3 (76.2)
R-Value at 75°F Mean	10.0	15.0

Board Size: 2' x 8'

Nominal Board Thickness** in (mm)	1 ¹ / ₂ (38.1)	2 ¹ / ₈ (54.0)
R-Value at 75°F Mean	7.0	10.0

Board Size: 2' x 8'

Nominal Board Thickness** in (mm)	^{3/4} (19.1)	1 (25.4)	1 ¹ / ₂ (38.1)	2 (50.8)	2 ¹ / ₂ (63.5)	3 (76.2)
R-Value at 75°F Mean	3.8	5.0	7.5	10.0	12.5	15.0

Board Size: 4' x 8'

Nominal Board Thickness** in (mm)	^{3/4} (19.1)	1 (25.4)	1 ¹ / ₂ (38.1)	2 (50.8)	2 ¹ / ₂ (63.5)	3 (76.2)	4 (101.6)
R-Value at 75°F Mean	3.8	5.0	7.5	10.0	12.5	15.0	20.0

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.

Product and Description



STYROFOAM Tongue and Groove

An extruded polystyrene foam insulation board with tongue and groove edges on all four sides of 2' x 8' boards, 1" thick or less and long edges on all other boards.

Building Code Compliance

Complies with ASTM C 578
Type IV. 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.



STYROFOAM WEATHERMATE

Woven, perforated, polyolefin-based housewrap that is both tough and tear-resistant. Offers an effective option for builders who prefer to use non-insulating sheathing along with housewrap. It is translucent to allow clear view of studs and sheathing surface. Can remain uncovered for up to 60 days.

See ICBO-ES ER 5765, NES NER 593.



STYROFOAM WEATHERMATE Plus

A non-woven, non-perforated, polyolefin-based housewrap. Offers an effective option for builders who prefer to use non-insulating sheathing along with a housewrap. It is translucent to allow clear view of application surface. More tear-resistant than other non-woven, non-perforated wraps. Can remain uncovered for up to 120 days.

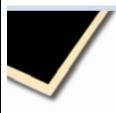
See ICBO-ES ER 5937, BOCA-ES RR 21-68, SBCCI PST & ESI ER 2128.



STYROFOAM Z-MATE

An extruded polystyrene foam insulation board with square edges on all four sides. Its unique width fits between 24" o.c. Z furring which saves installation time by eliminating cutting or snapping of insulation boards.

Complies with ASTM C 578
Type X. 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.



Super TUFF-R Commercial

A patented high-performance polyisocyanurate foam core with patented three-ply poly/aluminum foil facers laminated to the core, resulting in unsurpassed durability. One facer is painted black; the other facer is radiant barrier-quality reflective foil.

Complies with ASTM C 1289 Type I, Class 2. Meets IBC/IRC requirements for foam plastic insulation.

Nominal Board Thickness** in (mm)	^{3/4} (19.1)	1 (25.4)	1 ¹ / ₂ (38.1)	2 (50.8)
R-Value at 75°F Mean	3.8	5.0	7.5	10.0

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

Sold in Rolls** | 10' x 100' | 9' x 100' | 9' x 150' | 9' x 195' | 4'6" x 100' | 3' x 100'

Sold in Rolls** 10' x 100' 10' x 150' 9' x 100' 9' x 150' 9' x 195' 3' x 100'

Nominal Board Thickness** in (mm)	1 ¹ / ₂ (38.1)	2 (50.8)
R-Value at 75°F Mean	7.5	10.0

Board Size: 237/8" x 8'

Nominal Board Thickness** in (mm)	^{5/8} (15.9)	1 (25.4)	1 ³ / ₈ (34.9)	1 ¹ / ₂ (38.1)	1 ³ / ₄ (44.5)	2 (50.8)
R-Value at 75°F Mean	4.1	6.5	9.1	9.8	11.4	13.0

Board Size: 16" x 8'; 4' x 8'; 4' x 9'

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.

Product and Description



A glass-fiber-reinforced polyisocyanurate foam core faced with nominal 16.5 mil embossed white acrylic-coated aluminum sheet laminated to plain 1 mil aluminum on one side and 1 mil plain aluminum on the other side. Can be installed exposed to the interior without a thermal barrier.

Building Code Compliance

Complies with ASTM C 1289
Type I, Class 2. Meets IBC/IRC
requirements for foam plastic
insulation. See SBCCI PST & ESI ER
9574C, BOCA-ES RR 98-25, ICBOES ER 3223. FM 4880 – see
Factory Mutual Approval Guide.



THERMAX Heavy Duty

A glass-fiber-reinforced polyisocyanurate foam core faced with nominal 4 mil embossed white acrylic-coated aluminum on one side and 1.25 mil embossed aluminum on the other side. Can be installed exposed to the interior without a thermal barrier.

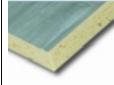
Complies with ASTM C 1289 Type I, Class 2. Meets IBC/IRC requirements for foam plastic insulation. See SBCCI PST & ESI ER 9574C, BOCA-ES RR 98-25, ICBO-ES ER 3223. FM 4880 – see Factory Mutual Approval Guide.



THERMAX Light Duty

A glass-fiber-reinforced polyisocyanurate foam core faced with nominal 1.25 mil embossed white acrylic-coated aluminum on one side and 1.25 mil embossed aluminum on the other side. Can be installed exposed to the interior without a thermal barrier.

Complies with ASTM C 1289 Type I, Class 2. Meets IBC/IRC requirements for foam plastic insulation. See SBCCI PST & ESI ER 9574C, BOCA-ES RR 98-25, ICBO-ES ER 3223. FM 4880 – see Factory Mutual Approval Guide.



THERMAX Sheathing

A glass-fiber-reinforced polyisocyanurate foam core with solid aluminum foil facers on both sides. Can be installed exposed to the interior without a thermal barrier.

Complies with ASTM C 1289
Type I, Class 2. Meets IBC/IRC
requirements for foam plastic
insulation. See SBCCI PST & ESI ER
9574C, BOCA-ES RR 98-25, ICBOES ER 3223. FM 4880 – see
Factory Mutual Approval Guide.



TUFF-R Commercial

A patented high-performance polyisocyanurate foam core insulation with reflective/radiant barrier-quality aluminum foil facers on both sides.

Complies with ASTM C 1289 Type I, Class 2. Meets IBC/IRC requirements for foam plastic insulation. See SBCCI PST & ESI ER 9605C, BOCA-ES RR 95-22, ICBO-ES ER 5009.

Nominal Board Thickness** in (mm)	1/ ₂ (12.7)	^{3/4} (19.1)	1 (25.4)	,		1 ³ / ₄ (44.5)		2 ¹ / ₄ (57.2)	,	- , .	3 (76.2)
R-Value at 75°F Mean	3.3	5.0	6.5	8.0	10.0	11.4	13.0	14.4	15.8	17.4	19.0

Board Size: 4' x 8'; 4' x 10'

Nominal Bo Thickness**		1/ ₂ (12.7)	^{3/4} (19.1)	1 (25.4)		1.55 (39.4)			,	2 ¹ / ₂ (63.5)	, ,	3 (76.2)
R-Value at 75°F Me	ean	3.3	5.0	6.5	8.0	10.0	11.4	13.0	14.4	15.8	17.4	19.0

Board Size: 4' x 8'; 4' x 10'

Nominal Bo Thickness**		1/ ₂ (12.7)	^{3/4} (19.1)	1 (25.4)		1.55 (39.4)				2 ¹ / ₂ (63.5)		3 (76.2)
R-Value at 75°F Me	ean	3.3	5.0	6.5	8.0	10.0	11.4	13.0	14.4	15.8	17.4	19.0

Board Size: 4' x 8'; 4' x 10'

Nominal Board Thickness** in (mm)	1/ ₂ (12.7)	^{3/4} (19.1)	1 (25.4)	,	1.55 (39.4)		2 ¹ / ₂ (63.5)	,	3 (76.2)	31/ ₂ (88.9)	4 (101.6)	4 ¹ / ₄ (108)
R-Value at 75°F Mean	3.3	5.0	6.5	8.0	10.0	13.0	15.8	17.4	19.0	22.1	25.3	27.0

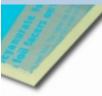
Board Size: 16" x 8'; 4' x 8'; 4' x 10'

Nominal Board Thickness** in (mm)	1 (25.4)	1 ¹ / ₄ (31.8)	1 ¹ / ₂ (38.1)	1 ⁷ / ₈ (47.6)	2 (50.8)
R-Value at 75°F Mean	6.5	8.0	9.8	12.0	13.0

Board Size: 16" x 8'; 4' x 8'; 4' x 9'

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.

Product and Description



VALUE-R††

Polyisocyanurate foam insulation board with radiant barrierquality reinforced aluminum foil facers on both sides.

Building Code Compliance

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

MECHANICAL INSULATION PRODUCTS



TRYMER 2000 Pipe Insulation

A closed-cell, water-resistant, high-performance, rigid, polyisocyanurate insulation for use as pipe and duct insulation. The superior properties of TRYMER 2000 pipe insulation make it an ideal choice for all pipe insulation below 300°F and, most notably, in chilled water applications.

Complies with ASTM C 591, Type IV. Meets IMC requirements for pipe insulation in all areas of a building, including inside air plenums. Classified by Omega Point Laboratories to meet 25/50 flame/smoke rating. See Classification Certificate 16096-1.



Saran Vapor Retarder Film and Tape

A strong, tough and easy-to-apply vapor retarder system that exceeds all industry requirements for water vapor permeance. This system consists of **Saran** Film on straight pipe and **Saran** Tape on elbows, valves and fittings to help ensure long lifespan and a tight, water-resistant seal.

All grades of **Saran** Film and Tape meet an ASTM E 84 flame/smoke performance of 25/50 or lower. This allows the use of these products as an exposed vapor retarder on pipe insulation in all areas of a commercial building including within an air plenum.

[†]Only available west of the Rocky Mountains

Nominal Board Thickness** in (mm)	2 (50.8)	2 ¹ / ₂ (63.5)	31/ ₂ (88.9)	4 (101.6)
R-Value at 75°F Mean	13.0	15.8	22.1	25.3

Board Size: 16" x 8'; 4' x 8'; 4' x 9'

Thermal Conductivity (k-Factor) at 75°F and 180 days Aging ^{1,2}	0.19
Compressive Strength psi	24

'k-Factor expressed in Btu•in/hr•ft²•°F ²TRYMER 2000 is closed-cell to better resist water and water vapor. This helps to maintain thermal efficiency and minimize mold/fungus growth

Water Vapor Permeance ³	
Saran 540 Film⁴	0.02
Saran 560 Film⁴	0.01

¹Permeance expressed in perms ⁴Saran Vapor Retarder Film and Tape provide no nutrients to contribute to the growth of mold/fungus

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.

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.

STYROFOAM Extruded Polystyrene Insulation, TRYMER Polyisocyanurate Insulation and Dow Polyisocyanurate Insulation Other Than THERMAX Products 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.

THERMAX Products

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 at 1-866-583-BLUE (2583). In an emergency, call 1-989-636-4400.

The Dow Chemical Company

Building Materials 200 Larkin • Midland, Michigan 48674

For Technical Information: 1-866-583-BLUE (2583) For Sales Information: 1-800-232-2436 www.dowstyrofoam.com

