



# THE RIGHT PRODUCTS. Based on Building Science.



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 Nearly 60 years ago, Dow pioneered rigid foam insulation with the introduction of STYROFOAM<sup>™</sup> extruded polystyrene insulation
 a breakthrough product that changed the building industry, delivering energy-saving R-value\* in an easy-to-install solution.
 Since then, Dow has expanded its portfolio of science-based building envelope solutions to offer the industry's broadest mix of residing materials, including:

- STYROFOAM<sup>™</sup> extruded polystyrene insulation
- Dow polyisocyanurate insulation
- DOW High Performance Underlayment products
- STYROFOAM<sup>™</sup> WEATHERMATE<sup>™</sup> housewraps
- WEATHERMATE<sup>™</sup> Straight and Flexible Flashings
- WEATHERMATE<sup>™</sup> Sill Pan
- WEATHERMATE<sup>™</sup> Construction Tape
- FROTH-PAK<sup>™</sup> Portable Spray Foam Kit and FROTH-PAK<sup>™</sup> Sealant Foam Kit
- GREAT STUFF<sup>™</sup> Pro Gaps & Cracks Insulating Foam Sealant
- GREAT STUFF<sup>™</sup> Pro Window & Door Insulating Foam Sealant

 $^{\ast}\mathrm{R}$  means resistance to heat flow. The higher the R-value, the greater the insulating power.

# FOR A BETTER RESIDE ... Put Dow on Your Side.

When you reside with Dow, you can offer your customers more than a residing job. You can offer them a home that performs better. Dow's residing solutions offer protection against energy loss, air infiltration and moisture penetration – issues that concern homeowners the most.

#### **PROTECTION ON EVERY LEVEL**

Whether you want to add air and moisture resistance alone or add valuable insulating power, Dow has the right residing solution.



### Premium – R-5.0 to R-6.5 at 1"

1/2", 3/4" or 1" STYROFOAM<sup>™</sup> extruded polystyrene or polyisocyanurate insulation from Dow combined with STYROFOAM<sup>™</sup> WEATHERMATE<sup>™</sup> or STYROFOAM<sup>™</sup> WEATHERMATE<sup>™</sup> Plus housewrap



## Best - R-5.0 to R-6.5 at 1"

1/2", 3/4" or 1" STYROFOAM<sup>™</sup> extruded polystyrene or polyisocyanurate insulation from Dow



### Better – R-1.0 to R-1.5

DOW High Performance Underlayment products, 1/4" and 3/8"



## Good

STYROFOAM<sup>™</sup> WEATHERMATE<sup>™</sup> or STYROFOAM<sup>™</sup> WEATHERMATE<sup>™</sup> Plus housewrap



## **Enhanced Protection**

For the highest level of protection against moisture and air infiltration, seal the gaps by using WEATHERMATE<sup>™</sup> Construction Tape, GREAT STUFF<sup>™</sup> Pro Window & Door Insulating Foam Sealant, GREAT STUFF<sup>™</sup> Pro Gaps & Cracks Insulating Foam Sealant, and FROTH-PAK<sup>™</sup> spray foam insulation and sealant. Clean up with GREAT STUFF<sup>™</sup> Pro Gun Cleaner.

# Weather Barrier Solutions

Make sure your homes are covered against air and moisture that can contribute to energy loss, compromise comfort and cause damage with WEATHERMATE<sup>™</sup> Weather Barrier Solutions. Rigid foam insulation, housewrap, flashings, sill pan and tape from Dow work together to create a complete exterior water management solution for comprehensive protection from the elements.

# **Residing Solutions.**

Dow offers a full line of science-based residing solutions that provide different levels of protection against energy loss, moisture and air infiltration. Choose the right product or system for your application.

# **EXISTING WALLS**

**Product and Description** 

# **Premium Solution**



For a premium solution, combine the high R-value of one of the rigid foam insulation products listed here with the weather-resistive properties of STYROFOAM<sup>™</sup> WEATHERMATE<sup>™</sup> or WEATHERMATE<sup>™</sup> Plus housewrap. For even greater moisture protection around windows and doors, use WEATHERMATE<sup>™</sup> Flashings and WEATHERMATE<sup>™</sup> Sill Pan.

Best Solution	<ol> <li>Rigid foam insulation products from Dow offer stable, long-term thermal performance.</li> </ol>	Building Code Compliance
Extruded Po	lystyrene Insulation	
	<b>STYROFOAM<sup>™</sup> Residential Sheathing</b> An extruded polystyrene foam insulation board with plastic film on both sides. Recommended for wall sheathing in residential applications. Plastic film reduces job site damage.	Meets IBC/IRC requirements for foam plastic insulation. See ICC-ES NER-699, BOCA-ES RR 21-02, ICBO-ES ER-2257. UL Classified, see Classification Certificate D369.
	<b>STYROFOAM<sup>™</sup> Residing Board</b> An extruded polystyrene foam insulation board with a square edge. Recommended for use over old siding to provide a solid, level surface for new siding materials.	Meets IBC/IRC requirements for foam plastic insulation. See ICC-ES NER-699, BOCA-ES RR 21-02, ICBO-ES ER-2257. UL Classified, see Classification Certificate D369. Calif. Std. Reg. # CA T064, HUD-UMB.
	<b>STYROFOAM<sup>™</sup> Tongue and Groove</b> An extruded polystyrene foam insulation board with tongue and groove edges on all four sides of 2' x 8' boards and long edges of 4' x 8' and 4' x 9' boards.	Complies with ASTM C578 Type IV. Meets IBC/IRC requirements for foam plastic insulation. See ICC-ES NER-699, BOCA-ES RR 21-02, ICBO-ES ER-2257. UL Classified, see Classification Certificate D369.

In the residing business, your reputation is in every home you reside. So you want only the best products, backed by service and support you can rely on. Dow is on your side with:

- The industry's broadest mix of residing materials, including rigid foam insulations, housewraps, tape, flashings, adhesives and sealants
- In-depth technical support and service
- Reliable, responsive sales support
- The brand building professionals have trusted for nearly 60 years



- Rigid surface for hanging new siding
- High durability
- Optimal protection against moisture and air infiltration
- Weather-resistive barrier

# **Technical Information**

Nominal Board Thickness* in	1/2	3/4	1		
R-Value at 75°F Mean	3.0	4.0	5.0		
Board Size: 4' x 8'; 4' x 9'					

Nominal Board Thickness* in	1/2
R-Value at 75°F Mean	2.8

Board Size: 2' x 8'

Nominal Board Thickness* in	3/4
R-Value at 75°F Mean	3.8

Board Size: 2' x 8'; 4' x 8'; 4' x 9'

\*Note: Not all products and sizes are available in all parts of the country. Other product sizes are available on a made-to-order basis. Please contact your Dow sales representative with questions.

Note: R means resistance to heat flow. The higher the R-value, the greater the insulating power. R-value determined by ASTM C518 unless otherwise specified.

# EXISTING WALLS – continued

Product and	Description	
Best Solutio	n – continued	Building Code Compliance
Polyisocyanı	urate Insulation	
	STURDY-R™ A patented high-performance polyisocyanurate foam core with proprietary glass fiber facers. Recommended for wall sheathing in residential applications. Very tough, durable performance reduces damage on the job site.	Complies with ASTM C1289 Type II, Class 3. Meets IBC/IRC requirements for foam plastic insulation. See ICC-ES NER-540.
	Super TUFF-R <sup>™</sup> 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 blue; the other facer is radiant barrier-quality reflective foil.	Complies with ASTM C1289 Type I, Class 1. Meets IBC/IRC requirements for foam plastic insulation. See ICC-ES NER-616. Calif. Std. Reg. # CA T383.
N/	TUFF-R <sup>™</sup> A patented high-performance polyisocyanurate foam core with radiant barrier-quality aluminum foil facers on both sides (one side reinforced).	Complies with ASTM C1289 Type I, Class 1. Meets IBC/IRC requirements for foam plastic insulation. See ICC-ES NER-616. Calif. Std. Reg. # CA T383.
Better Solut	iON – Dow fanfold residing products pack value-added benefits in a thin profile.	
	<b>DOW High Performance Underlayment</b> An extruded polystyrene foam insulation board that is fanfolded into 50-foot lengths. Recommended as under- layment over old siding to provide a solid, level surface for new siding materials.	Meets IBC/IRC requirements for foam plastic insulation. See ICC-ES NER-699, BOCA-ES RR 21-02, ICBO-ES ER-2257. UL Fire Classified. Calif. Std. Reg. # CA T064.
1	<b>DOW High Performance Underlayment-LF</b> An extruded polystyrene foam insulation board that is fan- folded into 50-foot lengths. Special slit hinge allows board to lay flat on the wall, which provides a solid, level surface for new siding materials.	Meets IBC/IRC requirements for foam plastic insulation. See ICC-ES NER-699, BOCA-ES RR 21-02, ICBO-ES ER-2257. UL Fire Classified. Calif. Std. Reg. # CA T064.

Technical Info	rmation		
Nominal Board Thickness* in	1/2 3/4	1	
R-Value <sup>1</sup> at 75°F Mean	2.5 3.7	5.0	
Board Size: 4' x 8'; 4 'R-3 STURDY-R 1/2" is available		Georgia.	
Nominal Board Thickness* in	1/2 5/8	3/4	
R-Value at 75°F Mean	3.3 4.1	5.0	
Board Size: 4' x 8'; 4	' x 9'		
			1
Nominal Board Thickness* in	1/2 5/8	3/4	
R-Value at 75°F Mean	3.3 4.1	5.0	
Board Size: 4' x 8'; 4	' x 9'		

Nominal Board Thickness* in	1/4	3/8
R-Value at 75°F Mean	1.0	1.5

Board Size: 4' x 50'

DOW High Performance Underlayment is heat-bonded between various facers and then pin-perforated for vapor permeance.

**Plastic/Plastic (P/P).** Bonds the insulation between strong plastic film facers. Available in 1/4" and 3/8" thickness.

**Plastic/Reflective Plastic (P/R).** Bonds the insulation between a strong plastic film facer and a metallic, reflective plastic film facer. Available in 1/4" and 3/8" thickness.

**Kraft/Foil (K/F).** Bonds the insulation between a kraft paper facer and a foil facer. Available in 1/4" thickness.

**Kraft/Kraft (K/K).** Bonds the insulation between kraft paper facers. Available in 1/4" thickness.

**Plastic 1 (P1).** Bonds one surface of the insulation to a plastic facer. Available in 1/4" thickness.

Nominal Board Thickness* in	1/4	3/8
R-Value at 75°F Mean	1.0	1.5

Board Size: 4' x 50'

DOW High Performance Underlayment-LF is heat-bonded between facers and then pin-perforated for vapor permeance.

**Plastic/Plastic (P/P).** Bonds the insulation between strong plastic film facers. Available in 1/4" and 3/8" thickness.

**Plastic/Reflective Plastic (P/R).** Bonds the insulation between a strong plastic film facer and a metallic, reflective plastic film facer. Available in 1/4" and 3/8" thickness.

\*Note: Not all products and sizes are available in all parts of the country. Other product sizes are available on a made-to-order basis. Please contact your Dow sales representative with questions.

Note: R means resistance to heat flow. The higher the R-value, the greater the insulating power. R-value determined by ASTM C518 unless otherwise specified.

# EXISTING WALLS – continued

# Product and Description

Product and Description							
Good Solutio	<b>on</b> – Polyolefin-based housewraps wrap up quality and value.	Building Code Compliance					
05	STYROFOAM <sup>™</sup> WEATHERMATE <sup>™</sup> Woven, perforated, polyolefin-based housewrap that is both tough and tear-resistant. Offers an effective option for builders who prefer to use housewrap as a secondary weather-resistive barrier. It is translucent to allow clear view of studs and sheathing surface. Can remain uncovered for up to 60 days.	Meets IBC/IRC requirements for a weather-resistive barrier. See ICC-ES NER-593 and ICBO-ES ER-5765.					
Pam Menus	STYROFOAM <sup>™</sup> WEATHERMATE <sup>™</sup> Plus A non-woven, non-perforated, polyolefin-based housewrap. Offers an effective option for builders who prefer to use housewrap as a secondary weather-resistive barrier. It is translucent to allow clear view of application surface. Superior tear resistance and outstanding durability compared to other leading non-woven, non-perforated wraps. Can remain uncovered for up to 120 days.	Meets IBC/IRC requirements for a weather-resistive barrier. See ICC-ES NER-640 and ICBO-ES ER-5937.					
Enhanced Pr	otection – Try these product solutions for extra protection against moisture and air infiltration.						
Tape and Fla	shing Products						
Carrier Marine	WEATHERMATE <sup>™</sup> Construction Tape Strong, pliable, highly adhesive tape seals joints and seams of STYROFOAM <sup>™</sup> WEATHERMATE <sup>™</sup> and STYROFOAM <sup>™</sup> WEATHERMATE <sup>™</sup> Plus housewraps and STYROFOAM <sup>™</sup> insulated sheathings. Oriented polypropylene backing formulated with UV-treated film helps resist degradation from exposure to sunlight.	Complies with ASTM D3330 and ASTM D882.					
	WEATHERMATE <sup>™</sup> Flexible Flashing A crosslinked polymeric film facer with butyl rubber adhesive creates a water-resistant seal around curved windows and doors, and custom shapes. Compatible with WEATHERMATE <sup>™</sup> Sill Pan.	Meets requirements of ASTM E2112, ICBO AC148-01 and AAMA 711-05.					
	WEATHERMATE <sup>™</sup> Sill Pan A flexible PVC sill pan manufactured for consistent thickness. Integrated corners and backdam offer superior protection against water seepage. Compatible with WEATHERMATE <sup>™</sup> Flexible Flashing and WEATHERMATE <sup>™</sup> Straight Flashing.	Meets requirements of ASTM E2112.					
	WEATHERMATE <sup>™</sup> Straight Flashing A crosslinked polymeric film facer with butyl rubber adhesive creates a water-resistant seal at window and door openings. Compatible with WEATHERMATE <sup>™</sup> Sill Pan.	Meets requirements of ASTM E2112, ICBO AC148-01 and AAMA 711-05.					

Technical	Informati	on					
Sold in Rolls*	10' x 150'	9' x 100'	9' x 150'	9' x 195'	4'6" x 150'	3' x 100'	
Sold in Rolls*	10' x 100'	10' x 150'	9' x 100'	9' x 150'	9' x 195'	3' x 100'	3' x 165'

Sold in Rolls* 1-7/8" x 165' 2-7/8" x 165'	
Sold in Rolls* 6" x 75' 9" x 75' Thickness: 60 mil	
Dimensions: 5" h x 3-3/4" d x 32" w; 3/8" backdam (each piece) Sold as two-piece assembly	
Sold in Rolls* 4" x 100' 6" x 100' 9" x 100' Thickness: 20 mil	
*Note: Not all products and sizes are a of the country. Other product sizes ar made-to-order basis. Please contact y representative with questions.	e available on a
®™Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow	ower. R-value

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# **EXISTING WALLS – continued**

# **Product and Description**

Product and	Description	
Enhanced Pr	otection – Try these product solutions for extra protection against moisture and air infiltration.	Building Code Compliance
Spray Polyu	rethane Foam Insulation and Sealant Products	
	FROTH-PAK <sup>™</sup> Portable Spray Foam Kit and FROTH-PAK <sup>™</sup> Sealant Foam Kit A two-component, quick-cure spray polyurethane foam that fills studs, sill plates and large cavities for insulation and air sealing. Available in a selection of densities, properties and performance ranges to meet different application require- ments for the two-component sealant foam. Available as a 1.75 pcf density for the full coverage spray kit.	UL Classified as a sealant. See CCMC 13074-R. Spray foam kit meets IBC/IRC requirements for foam plastic insulation at 2" thickness.
	<b>GREAT STUFF<sup>™</sup> Pro Gaps &amp; Cracks</b> A one-component, minimal-expanding, insulating, fireblocking penetration polyurethane foam sealant ideal for smaller gaps and penetrations less than 2". Identifiable orange color.	ICC-ES Legacy NER-645. ASTM E331, ASTM E547, ASTM C1620 and complies with AAMA 812-04 and ABAA standards for air leakage per ASTM E283. UL Classified as a sealant. See CCMC 13074-R.
	GREAT STUFF <sup>™</sup> Pro Window & Door A one-component, minimal-expanding, low pressure- build formulation polyurethane foam sealant that won't bow window and door frames. Identifiable yellow color.	ICC-ES Legacy NER-645. Conforms to AAMA 812-04 pressure-build @ 0.08 psi, ABAA standards for air leakage per ASTM E283, ASTM E331, ASTM E547, ASTM C1620. UL Classified as a sealant. See CCMC 13074-R.
	GREAT STUFF <sup>™</sup> Pro Gun Cleaner An innovative solution simplifies uncured foam cleanup. Attach foam dispensing gun for cleaning or use red spray nozzle.	Not applicable.
PRO 13 PRO 14 PRO 15	PRO Foam Dispensing Guns Foam dispensing guns with convenient, re-startable features developed just for professionals. Advantages include no post-dispensing foam drip for less foam waste, better control and low post-dispensing foam expansion plus greater yield.	Not applicable.

Technical Inf	ormation		
Cure Time <sup>1</sup>	Tack-free <1 min.	FROTH-PAK <sup>™</sup> 120 – for mid-size jobs. Theoretical yield <sup>2</sup> : 12 Components: 1 ISO (A) cylinder, 1 polyol (B) cylinder, 9' dis assembly, 6 cone spray nozzles, 4 fan spray nozzles.	
Density, pcf	1.75, 2.25, 2.75	FROTH-PAK <sup>™</sup> 180 – for larger jobs. Theoretical yield <sup>2</sup> : 180 Components: 1 ISO (A) cylinder, 1 polyol (B) cylinder, 9' dis assembly, 6 cone spray nozzles, 4 fan spray nozzles.	
	2.00	FROTH-PAK <sup>™</sup> 600 – maximum coverage to complete large yield <sup>2</sup> : 600 board feet. Components: 1 ISO (A) cylinder, 1 p 15' dispensing gun hose assembly, 8 cone spray nozzles, 4 f	olyol (B) cylinder,
	on various factors	ire. s of the application and the environment, including pam spray passes, the specific nozzle used, etc.	
Cure Time <sup>1</sup>	Tack-free	6 mins.; trim in 30 mins.; full cure 1 hour	
Size*	24 oz can, available in both gun and straw foam		
<sup>1</sup> Actual cure time will dep	oend on temperatu	are, relative humidity and size of foam bead.	
Cure Time <sup>1</sup>	Tack-free	6-9 mins.; trim in 1 hour; full cure 12 hours	
Size*		n, available in both gun and straw foam	
<sup>1</sup> Actual cure time will dep	pend on temperatu	are, relative humidity and size of foam bead.	
Size*	12 oz car	1	
	alve, and a stai	ensing gun. Features a Teflon coated can adapter, inless steel barrel for longer life. Excellent flow control dispenser tip.	
		bated can adapter and needle, stainless steel check spenser tip. Adjustable flow control makes it easy to	
PRO 13 Gun – The n		al PRO Series foam dispensing gun. The lightweight gun	
ieatures a darded dis	spenser tip and	adjustable flow control for variable bead size.	
			*Note: Not all produce
			*Note: Not all product of the country. Other made-to-order basis representative with

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Note: R means resistance to heat flow. The higher the R-value, the greater the insulating power. R-value determined by ASTM C518 unless otherwise specified.



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NOTICE: Changes to the International Residential Code require the installation of a weather-resistive barrier (WRB) within most exterior wall assemblies in residential construction. The following Dow insulated sheathing products qualify as a WRB when installed according to the installation instructions developed for "installation of foam sheathing as a weather-resistive barrier": STYROFOAM<sup>TM</sup> DURAMATE<sup>TM</sup> Plus, STYROFOAM<sup>TM</sup> Residential Sheathing, TUFF-R<sup>TM</sup> and Super TUFF-R<sup>TM</sup> and therefore do not require the use of a building paper or a housewrap as a WRB. When a WRB is not needed, these Dow foam sheathings may be installed according to standard installation instructions for foam sheathing from Dow. Be sure products and installation instructions meet code requirements for your particular location. Note: STYROFOAM<sup>TM</sup> WEATHERMATE<sup>TM</sup> Plus housewraps have already qualified as weather-resistive alternatives to the prescribed felt (see Evaluation Reports NER-593 and NER-640 for approved alternative).

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.

STYROFOAM WEATHERMATE housewraps are a secondary defense against bulk water intrusion. The exterior finish is the primary water barrier.

NOTE: Dow polyurethane foam sealants and adhesives contain isocyanate, hydrofluorocarbon or hydrocarbon blowing agent and polyol. Read the Material Safety Data Sheet carefully before use. Wear protective clothing, gloves and goggles and provide adequate ventilation and/or wear proper respiratory protection.

Building and/or construction practices unrelated to insulation could greatly affect moisture and the potential for mold formation. No material supplier including Dow can give assurance that mold will not develop in any specific system.

THE DOW CHEMICAL COMPANY Building & Construction • 200 Larkin • Midland, MI 48674 • www.dowonyourside.com

FOR TECHNICAL INFORMATION: 1-866-583-BLUE (2583) FOR SALES INFORMATION: 1-800-232-2436







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www.energystar.go

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