



Dow

**FAST, LOW-COST WAYS
TO SAVE ENERGY**

SEAL AND INSULATE EXISTING HOMES

IMPROVING A HOME'S ENERGY EFFICIENCY MAY SOUND COMPLICATED, BUT TAKE OUR ADVICE: START EASY, WORK FAST AND SAVE NOW!

It's so easy. Just start with the simplest, least expensive energy improvements first – air seal and insulate. And go from there. Not that replacing appliances, windows and HVAC systems aren't great ideas. It's just that gaps and cracks, and inadequate insulation are major sources of energy loss that can be immediately remedied with air sealants and insulation from Dow.

**EASY
AS
1-2-3**

Enhance energy efficiency in three, simple steps.

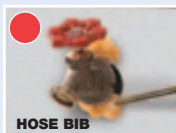
1. Block air leaks with **GREAT STUFF PRO™ Insulating Foam Sealants.***
2. Seal and insulate narrow or deep cavities, spaces obstructed with wires or pipes, and large areas with **FROTH-PAK™ Foam Insulation** and **FROTH-PAK™ Foam Sealant.***
3. Insulate with **rigid foam insulation** from Dow.

*™Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow
*Consult the label/instructions and Material Safety Data Sheets carefully before use.

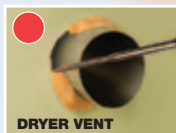
1

AIR SEAL WITH GREAT STUFF PRO™ PRODUCTS

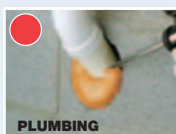
- GREAT STUFF PRO™ Gaps & Cracks Insulating Foam Sealant
- GREAT STUFF PRO™ Window & Door Insulating Foam Sealant



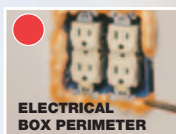
HOSE BIB



DRYER VENT



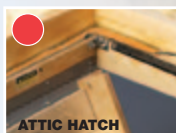
PLUMBING



ELECTRICAL BOX PERIMETER



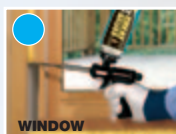
SILL PLATE



ATTIC HATCH



DOOR



WINDOW

2

AIR SEAL WITH FROTH-PAK™ PRODUCTS

- FROTH-PAK™ Foam Sealant
- FROTH-PAK™ Foam Insulation



PVC PIPE



ATTIC DUCT



RIM JOIST



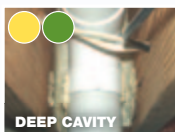
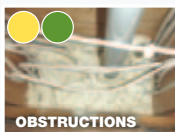
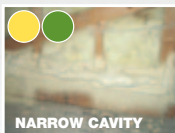
BASEMENT DUCT



SEE HOW EASY⁽¹⁾

Project:	Seal rim joist
Product:	GREAT STUFF PRO™ Gaps & Cracks Insulating Foam Sealant
Energy Savings:	\$125 annually
Payback:	<3 months
Return on Investment:	600%

(1) In a study conducted by Dow and D.R. Nelson & Associates, air loss was measured in 15 homes using blower door tests. Potential energy savings were estimated using REM Home Energy Analysis Software. Results vary based on construction, style, year built, and other distinct home characteristics. Participating homeowners were current employees of Dow.



Insulation boosts a home's long-term thermal performance and ability to provide a comfortable living space.

Consider uninsulated or under-insulated areas that are accessible, and tackle those first:

- Unfinished attic
- Crawl space
- Interior basement walls
- Garage wall/ceiling (if opposite conditioned area)

Add exterior insulation when re-siding to provide continuous thermal protection over the entire wall (studs and cavities).



Select durable, moisture-resistant rigid foam insulation products from Dow for exceptional energy efficiency.



UNLIKE APPLIANCES AND HVAC EQUIPMENT THAT WEAR OUT, SEALANTS CREATE A PERMANENT BOND WHEN APPLIED PROPERLY, AND INSULATION FROM DOW IS DESIGNED TO LAST THE LIFE OF THE HOME.

3

INSULATE WITH STYROFOAM™ BRAND, THERMAX™, TUFF-R™ AND FROTH-PAK™ PRODUCTS

INTERIOR BASEMENT WALLS

- STYROFOAM™ Brand SCOREBOARD™, Square Edge, and Tongue and Groove
- STYROFOAM™ Brand WALLMATE™
- THERMAX™ Sheathing
- THERMAX™ White Finish
- TUFF-R™ and Super TUFF-R™

SLAB/SUBFLOOR

- STYROFOAM™ Brand SCOREBOARD™
- STYROFOAM™ Brand Square Edge
- STYROFOAM™ Brand Tongue and Groove

ATTIC AND CRAWL SPACE

- STYROFOAM™ Brand SCOREBOARD™
- STYROFOAM™ Brand Square Edge
- STYROFOAM™ Brand Tongue and Groove
- TUFF-R™ and Super TUFF-R™
- STYROFOAM™ Brand Residential Sheathing (attics)
- THERMAX™ Sheathing (crawl spaces)

EXTERIOR WALLS

- STYROFOAM™ Brand Residential Sheathing
- STYROFOAM™ Brand SCOREBOARD™
- STYROFOAM™ Brand Square Edge
- STYROFOAM™ Brand Tongue and Groove
- STYROFOAM™ Brand UTILITYFIT™
- TUFF-R™ and Super TUFF-R™

WALL CAVITIES

- FROTH-PAK™ Foam Insulation

SAVE NOW

NOW

Upgrade	Average Payback	Estimated Annual Savings	Annual Return on Investment, %
Air Seal with GREAT STUFF PRO™ Products⁽¹⁾			
Rim Joist/Sill Plate with GREAT STUFF PRO™ Gaps & Cracks	2.8 months	\$125	600
Top of Exposed Stud Cavities in Attic with GREAT STUFF PRO™ Gaps & Cracks	5 months	\$53	240
Four Basement Windows with GREAT STUFF PRO™ Window & Door	8 months	\$4	145
Insulate Interior with Rigid Foam Insulation from Dow⁽²⁾			
Interior Basement Walls with R-10 STYROFOAM™ Brand WALLMATE™ or THERMAX™ Insulation	5 years	\$320	20

SAVE LATER

LATER

Insulate Exterior Walls When Re-siding with R-5 STYROFOAM™ Brand Insulation ⁽²⁾	9.7 years	\$63	10
Replace Windows with Low-E Model ⁽³⁾	2.3 years	\$300	42.9
Replace Furnace ⁽³⁾ , minimum 95 AFUE	3.8 years	\$300	26.2
Replace Refrigerator ⁽³⁾	5 years	\$6	20
Replace Dishwasher ⁽³⁾	1.5 years	\$13	65

- (1) In a study conducted by Dow and D.R. Nelson & Associates, air loss was measured in 15 homes using blower door tests. Potential energy savings were estimated using REM Home Energy Analysis Software. Results vary based on construction, style, year built, and other distinct home characteristics. Participating homeowners were current employees of Dow.
- (2) Estimated annual savings for materials using REM Home Energy Analysis Software for 3,400 ft² home with 1,700 ft² basement in Michigan using national average energy costs.
- (3) Source: www.greenandsave.com

THE **A** LIST

Air seal for the fastest energy savings.
Check out these common applications.*

ATTIC

- Top of exposed stud cavities
- Attic hatch frame (outer perimeter)
- Plumbing stacks and shafts
- Gas line penetrations
- HVAC penetrations

BASEMENT

- PVC pipe penetrations
- HVAC duct penetrations
- Central vacuum system piping
- Floor-wall junction
- Sill plate
- Rim joist
- Headers
- Gas line penetrations

LIVING SPACE

- Under baseboards
- Gas line penetrations
- Perimeter of electrical boxes (not inside box)
- Plumbing penetrations
- Perimeter of covered wire and electrical conduit penetrations on exterior walls
- Air/heating vents
- Central vacuum system piping

HOUSE EXTERIOR

- Electric, gas, cable and A/C penetrations
- Vent hoods
- Exterior garage walls
- Outside water faucet**
- Dryer vent
- Cooling line from A/C condenser and heat pump penetration into house
- Exterior of bay window/cantilever

*Visit www.insulateyourhome.com for more foam and insulation solutions.

**When used outdoors, cured foam will discolor when exposed to natural light; paint or coat for best results.

AIR LEAKS
ACCOUNT FOR
25-40% OF THE
ENERGY USED FOR
HEATING AND COOLING
A TYPICAL HOME.

SOURCE:
WWW.ENERGYSTAR.GOV

WWW.INSULATEYOURHOME.COM

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NOTICE: Changes to the International Residential Code require the installation of a water-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™ DURAMATE™ Plus, STYROFOAM™ Residential Sheathing, STYROFOAM™ Tongue and Groove, STYROFOAM SIS™, STYROFOAM™ Square Edge, STYROFOAM™ Residing Board, DOW™ High Performance Underlayment, THERMAX™ Sheathing, TUFF-R™ and Super TUFF-R™ 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: WEATHERMATE™ and WEATHERMATE™ Plus Housewraps have already qualified as water-resistive alternatives to the prescribed felt (see Evaluation Reports NER-593 and NER-640 for approved alternative).

STYROFOAM™ Brand Extruded Polystyrene Foam Insulation

CAUTION: This product is combustible. Protect from high heat sources. A protective barrier or thermal barrier may be required as specified in the appropriate building code. 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.

Dow Polyisocyanurate Insulation

CAUTION: This product is combustible and shall only be used as specified by the local building code with respect to flame spread classification and to the use of a suitable 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.

WARNING: Rigid foam insulation does not constitute a working walkable surface or qualify as a fall protection product.

Dow Polyurethane Foam Insulation and Sealants

CAUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°. 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. When air sealing buildings, ensure that combustion appliances such as furnaces, water heaters, wood stoves, etc., maintain adequate ventilation to the outside.

FROTH-PAK™ spray polyurethane foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Read the instructions and Material Safety Data Sheets carefully before use. Wear protective clothing (including long sleeves), gloves, goggles or safety glasses, and proper respiratory protection. Supplied air or an approved air-purifying respirator equipped with an organic vapor sorbent and a P100 particulate filter may be required to maintain exposure levels below ACGIH, OSHA, WEEL or other applicable limits. Provide adequate ventilation. Contents under pressure.

GREAT STUFF PRO™ Insulating Foam Sealants contain isocyanate and a flammable blowing agent. Read the labels and Material Safety Data Sheets carefully before use. Eliminate all sources of ignition before use. Wear long sleeves, gloves, and goggles or safety glasses. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure.

GREAT STUFF PRO™ Gun Cleaner is flammable and contains acetone and propane. Read the label and Material Safety Data Sheet carefully before use. Eliminate all sources of ignition before use. Wear gloves, and goggles or safety glasses. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure.

Building and/or construction practices unrelated to building materials 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.

FOR TECHNICAL INFORMATION: 1-866-583-BLUE (2583)

FOR SALES INFORMATION: 1-800-232-2436

THE DOW CHEMICAL COMPANY

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