



**Iowa EPS Products, Inc.**

Since 1980

### **eps360® – 100% Recycled**

Made of 100% recycled EPS expanded polystyrene, **Iowa EPS Products, Inc.'s eps360®** is the green alternative for environmentally sound construction in many traditional applications.

### **eps360® ADVANTAGES**

#### **Recycled**

- Produced from clean, dry, post-consumer expanded polystyrene (EPS), eps360® is a 100% recycled product.
- Qualifies for green building programs, such as LEED® with its regenerated manufacturing process.
- A smart alternative for environmentally conscious builders.
- Iowa EPS Products serves as a recycling center for unnecessary household packaging, jobsite waste and much more.
- Ensures third party requirements are met by thorough testing of recycled material prior to remanufacturing into eps360®.
- Aids builders and homeowners to meet sustainability goals.

#### **Energy Efficient**

- Maintains same physical properties of virgin, non-recycled EPS.
- Save heating and cooling costs with an average R-Value of 4 or above.
- Take advantage of cost effectiveness of eps360® through added value manufacturing



## Durable

- Can be used wherever most EPS foam insulation is installed.
- Customize thickness of 4' x 4' sheets to accommodate jobsite requirements.

## Versatile

- Adaptable to various applications, including roof systems, interior or exterior walls and many more.
- Choose desired thickness of the 4' x 4' sheet to meet your needs.

## eps360® APPLICATIONS

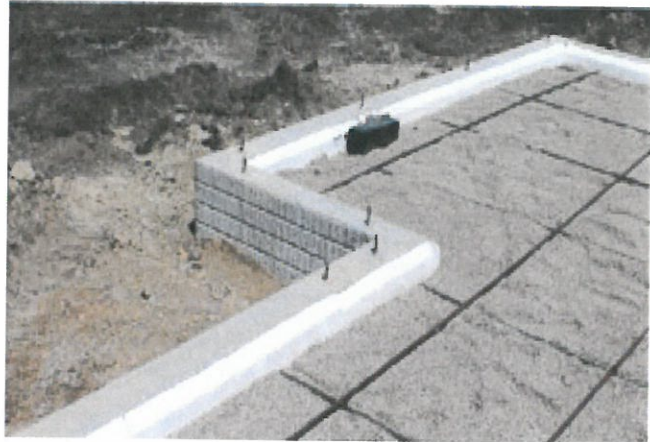
### Roofing

- Achieve a higher average R-Value and compressive strength than other rigid insulation boards for the same cost.
- Easy installation with lightweight 4' x 4' sheets.
- Integrates as base layer in tapered roof systems.
- Capable of retaining stable, permanent thermal performance
- Will always be recyclable into future insulating products.
- Smart way to build green with ongoing energy savings.



## Foundation/Perimeter

- Prevent frost penetration and frost heaves on poured concrete basement walls.
- Save energy costs by limiting heat loss to a minimum.
- Enjoy a more comfortable living space by using eps360® to protect the exterior foundation from cold weather damage.
- Increase overall energy efficiency of building.



## Sub-Slab

- Reduce heat loss by installing eps360® before pouring a concrete slab.
- Prevent possible frost heaving with added insulating value.
- Causes less environmental impact than other rigid insulation boards by not using harmful blowing agents like HCFCs (hydro chlorofluorocarbons.)
- Appreciate a steady temperature in lower levels.



## PHYSICAL PROPERTIES OF EPS

| Property                                       | Units                 | ASTM Test        | Values Meet or Exceed ASTM C578 |
|--|-----------------------|------------------|---------------------------------|
| eps360 <sup>®</sup>                            |                       |                  |                                 |
| Density, min.                                  | lbs/ft <sup>3</sup>   | C303 or<br>D1622 | Meets or exceed<br>1.15         |
| Thermal Resistance<br>"R Value"                | One inch<br>Thickness | C177 or<br>C518  | @ 40°F<br>4.25<br>@ 75°F<br>4.0 |
| <b>Strength Properties, minimum</b>            |                       |                  |                                 |
| Compressive<br>(@10 deformation)               | psi                   | D1621            | 15.0                            |
| Flexural                                       | psi                   | C203             | 30.0                            |
| <b>Moisture Resistance</b>                     |                       |                  |                                 |
| Water Absorption<br>(by total immersion, max.) | vol %                 | C272             | <3.0                            |
| Water Vapor<br>(Permeance, max.)               | Perms                 | E96              | 2.5                             |

All values are based on data available from Flint Hills Resources, Nova Chemical Company and BASF Corporation.  
 \*Federal Trade Commission ruling: Use of the 75° R-Value when calculation R-Values fro residential construction.  
 (Fact sheet available upon request).

### DESIGN CONSIDERATIONS

**Flammability:** Like many construction materials, expanded polystyrene (EPS) is combustible. It should not be exposed to flame or other ignition sources. Current building code requirements should be met for adequate protection or separation from occupied areas.

**Water Absorption Properties:** EPS water absorption is low. Moisture takes the path of least resistance and travels around beads rather than through them; the non-interconnecting cell structure prevents capillary absorption.

**Water Vapor Transmission:** EPS has low permeability, but is not considered a vapor barrier.

**Solvent Exposure:** EPS is subject to attack by petroleum-based solvent and adhesives, and coal-tar pitch products.

Care should be taken to prevent EPS direct contact with these products and their vapors. Use only adhesives approved for EPS applications.