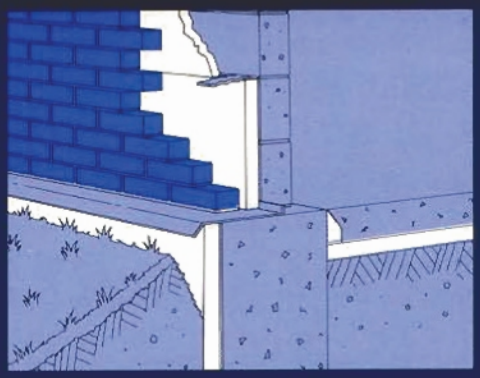
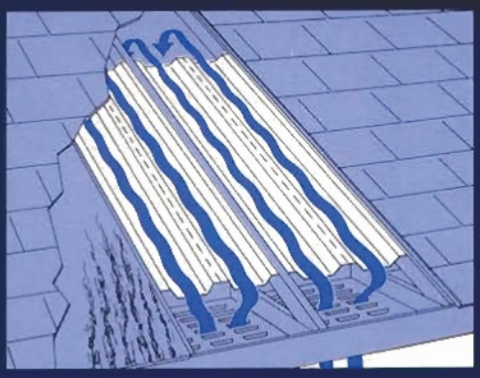
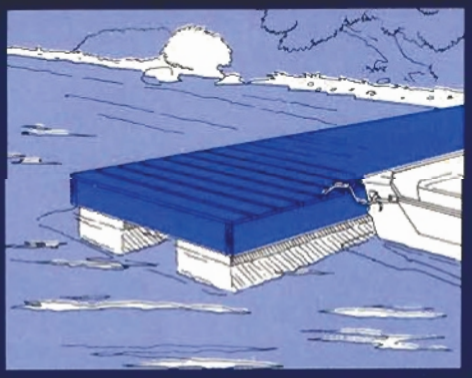
cellofoam®
NORTH AMERICA INC

EPS Insulation Building Products







For Builders and Do-It-Yourselfers

CFC

Factory Mutual System Approved

Recyclable

UL LISTED

HCFC

- BOCA, ICBO, SBCCI Code Recognized
- No Formaldehyde

EPS INSULATION

• Efficient • Versatile • More R-Value Per Dollar

No other rigid board insulation gives your customer as much R-value per dollar as CELLOFOAM® EPS. It's the best insulation value on the market.

But the good news doesn't stop there.

CELLOFOAM EPS insulation performs. Its R-value is stable and predictable; it won't drift down as the years pass. Plus, CELLOFOAM has the compressive strength and the inherent moisture resistance to withstand forces that can destroy other insulation products.

CELLOFOAM EPS is easily trimmed with hand tools to fit your specific application, yet it has the strength to absorb normal jobsite abuse.

Design Values of CELLOFOAM EPS

Density: 1.0 pcf (nominal)
R-Value*: 3.85 @ 75°F
Compressive strength: 10-14 psi
Flexural strength: 25-30 psi
Water vapor transmission rate: 2.0-5.0 perm-inches
Water absorption: Less than 4.0% by volume
Oxygen index: 24%

*R-value is the resistance to heat flow. The higher the R-value, the greater the insulating power.

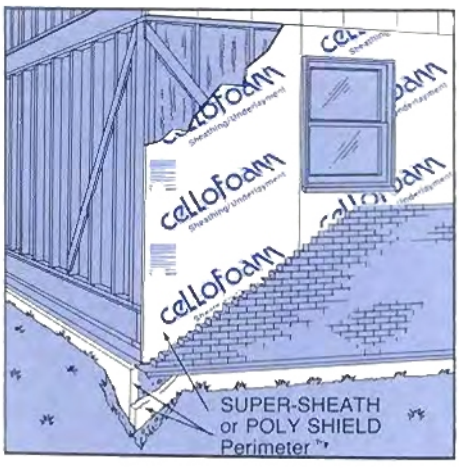
WARNING: This product is combustible and if exposed to a fire of sufficient heat and intensity may burn rapidly. It should not be left exposed or inadequately protected. Consult specific instructions for use accompanying this product.

All EPS insulation products manufactured by Cellofoam North America Inc meet applicable standards including:

- ASTM C578-92 (formerly HH-1-524C)
- HUD/FHA Use of Material, Bulletin #71
- ICBO
- BOCA
- SBCCI
- Underwriters Laboratories Inc.
- Military Spec. MILP-19644C
- Military Spec. MILP-40619A

Recommend CELLOFOAM EPS insulation with confidence.

Insulate the entire frame wall

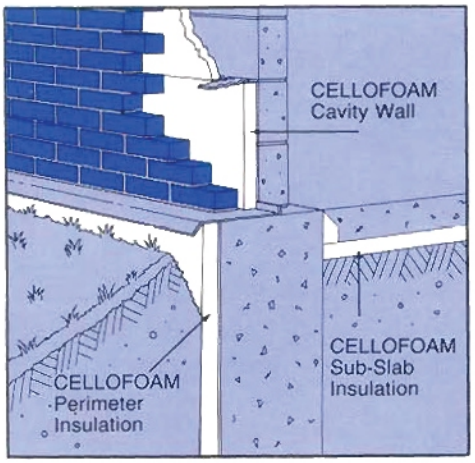


Cellofoam offers you two superior choices for your sheathing/underlayment needs; POLY SHIELD faced with white polyethylene or SUPER-SHEATH faced with reflective aluminum foil. The CELLOFOAM expanded polystyrene insulation base of these products delivers excellent resistance to heat transfer and is a major factor in the wall system to meet today's standards for saving energy. The kraft liner board, bonded between the poly or foil and the EPS, reinforces both materials increasing the overall strength of the product for durability during the installation process.

POLY SHIELD or SUPER-SHEATH will accept a wide variety of siding exterior finishes and are applicable to both new construction as well as remodeling. POLY SHIELD or SUPER-SHEATH will not deteriorate with age, and are resistant to mildew, rot, fungus and bacteria.

R-Values

Sheathing Thickness	Dead AirSpace 0	1/2"	3/4"	1-1/2"
1/2"	2.0	4.4	4.7	4.4
3/4"	2.9	5.4	5.7	5.4
1"	3.9	6.3	6.6	6.3



Warm up masonry walls and floors

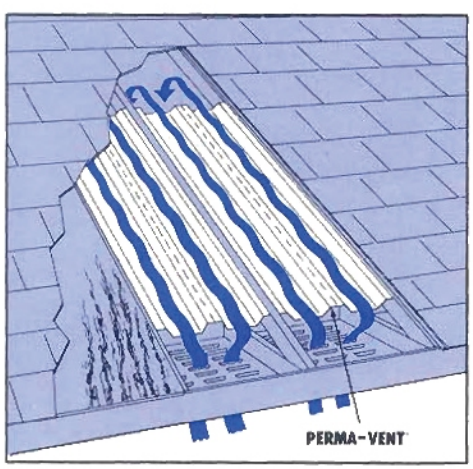
CELLOFOAM EPS insulation has the compressive strength and the moisture resistance for unequalled long-term performance in demanding below-grade applications such as sub-slab and perimeter foundations. CELLOFOAM EPS significantly reduces heat loss through concrete floors and walls. CELLOFOAM EPS is resistant to common soil acids and decay and is easily installed with spot adhesives, fasteners or wall ties.

CELLOFOAM EPS resists moisture and increases thermal performance in cavity wall applications while reducing basement heating requirements.

Drop in a new ceiling

POLY-TILE® EPS drop-in ceiling panels are the most economical on the market. These attractive, reversible panels also add insulation value and are FM-approved. Because they are designed to be heat sensitive, promptly moving out of their setting, they will not significantly interfere with the operation of automatic sprinklers located above. When other building components and occupancy do not require sprinkler protection, POLY-TILE® may be used without creating such a need.

POLY-TILE® ceiling panels are 2' x 4' and come in ½", 3/4", and 1" thickness. They can be used with any grid system and are easily cut and trimmed with a knife. They can be cleaned with soap and water.



Air out the attic

PERMA-VENT EPS ventilation channels let fresh air move from soffit to attic through the thickest application of loose-fill or blanket insulation. Helps cool in summer, removes damaging moisture in winter.

PERMA-VENT keeps loose fill insulation from closing off soffit vents and helps eliminate the problem of snow or ice dams.

Ready-to-use in lengths of 4' for rafters 16" or 24" o.c., light-weight PERMA-VENT channels attach quickly and easily with staples.

Insulate those walls

POLY PANEL EPS insulation is pre-cut to fit between ¾" thick furring strips. Ideal for basement walls because it insulates and minimizes that "damp basement" feeling. Requires no separate vapor barrier. Also helps deaden sound.

Boards of POLY PANEL EPS trim with a knife and can be held in place by friction fit or with latex adhesive mastic. Drywall goes on top and nails to furring strips or applied with mastic. Sizes 13 5/8" x 48" (1x3 furring, 16" o.c.) and 14 1/2" x 48" (for 1x2 furring, 16" o.c.).

Attractively packaged in poly bags with complete installation instructions for the do-it-yourselfer or builder.

Suggested (Condensed Language) Guide Specification

Expanded Language Guide Specification available upon request

ED NOTE: *Coordinate use of this EPS building insulation section with other Division 7 building insulation sections.*

SECTION 07215 EPS BOARD BUILDING INSULATION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: EPS board insulation for use as a building insulation.

B. Related Sections:
1. Division 3 Concrete sections for cast-in-place concrete.
2. Division 4 Masonry sections for concrete masonry units.
3. Division 6 Wood and Plastics for wood studs.
4. Division 9 Finishes for metal studs and gypsum wallboard.
5. Division 9 Finishes for ceiling suspension systems.

1.02 REFERENCES

A. American Society for Testing & Materials (ASTM):
1. C578-92 Preformed, Cellular Polystyrene Thermal Insulation, Spec. for

B. The Society of the Plastics Industry, Inc. (SPI):
1. ACCU-R EPS Program for product quality control and labeling program.

C. Factory Mutual Research Corporation (FMRC).
1. FMRC Approval Guide, current edition, for Suspended Ceilings, Plastic

1.03 SYSTEM DESCRIPTION

A. Description: EPS board insulation product specifically manufactured and recommended by manufacturer for building insulation R-value and other physical properties indicated herein when tested in accordance with ASTM C 578.

1.04 SUBMITTALS

A. Product Data: Submit manufacturer's product data for specific EPS board building insulation proprietary products affirming products do not contain chlorofluorocarbon (CFC) or hydrochlorofluorocarbon (HCFC).

B. Samples: Submit three samples, 12"x12"x1" minimum, of each specified EPS insulation product, identified with SPI ACCU-R quality assurance program label.

1.05 QUALITY ASSURANCE

A. SPI ACCU-R Program: Comply with the quality assurance program of The Society of the Plastics Industry, Inc. (SPI) ACCU-R EPS program for appropriate testing, inspection, and review of product production practices for compliance with ASTM C 578 requirements.

ED NOTE: *Delete below if no EPS ceiling panels.*

B. Factory Mutual Research Corporation (FMRC) Approval: Comply with FMRC Approval Guide for fire test requirements of FMRC Approval Standard No. 4651 for EPS ceiling panels.

1.06 DELIVERY, STORAGE AND HANDLING

A. Storage: Store and protect EPS building insulation units prior to installation from direct sunlight exposure and from weather to ensure insulation is dry when installed.

1.07 WARRANTY

A. Manufacturer's Product Warranty: Submit manufacturer's standard warranty form for EPS board insulation R-value when tested for conformance with ASTM C 578. This warranty is in addition to, and not a limitation of other rights Owner may have under Contract Documents.

ED NOTE: *Specify below warranty period. Consult with insulation manufacturer.*

1. Warranty Period: _____ years from Date of Substantial Completion.
2. Beneficiary: Issue warranty in the legal name of project Owner.
3. Warranty Acceptance: Owner is sole authority who will determine acceptance of warranty document.

PART 2 PRODUCTS

ED NOTE: *Retain below article for proprietary specification.*

2.01 MANUFACTURERS

A. Manufacturer: Cellofoam North America Inc
1. Address: P.O. Box 406, Conyers, GA 30207
2. Telephone: 404 483 4491

ED NOTE: *Select below thickness for product(s) required from manufacturer's options. Product(s) below available in one density only.*

3. Products:
a. Flat Stock (Unfaced)/Foil or Poly Faced Board
1) Thickness:
2) Density: 1.0 pcf (nominal).

ED NOTE: *Delete below if no foil or poly faced board*

3) Foil: Aluminum kraft paper laminate

4) Poly: Poly-skin kraft paper laminate

b. Ceiling Tile: Poly-Tile® EPS ceiling panels
1) Size 2' x 4'
2) Thickness:
3) Density: 1.0 pcf (nominal).

c. Attic Ventilation Channels: Perma-Vent EPS ventilation channels
1) Length: 4'
2) Size and Shape: Manufacturer's standard
3) Density: 1.0 pcf (nominal).

ED NOTE: *Retain below article for generic/ reference standard specification, in addition to Article 2.01 above.*

2.02 INSULATION MATERIALS

A. Material Standard: Comply with ASTM C 578 for EPS board building insulation.

ED NOTE: *Below type listed is only type used for building insulation. (Type VIII, II, and IX not normally usually used for building insulation.)*

1. Type I.

2.03 FASTENER MATERIALS

A. Fasteners: Spot adhesive, wall ties, and mechanical fasteners for specific application.

ED NOTE: *Use below new article in Division 7 building insulation section when this separate, stand-alone building insulation section is not desired.*

2.04 EPS BUILDING INSULATION BOARD

A. Molded EPS Board Insulation: Rigid, closed cell, lightweight, thermal insulation formed by the composition of hydrogen and carbon atoms in a closed mold to comply with ASTM C578-92 for type indicated as follows:

ED NOTE: *Select below type(s) required. Delete others.*

1. Type I: .90 pcf minimum density, R-value of 4.17 and 3.85 at 40 degrees F and 75 degrees F (4.4 degrees C and 23.9 degrees C) respectively

PART 3 EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Verify condition of substrate is acceptable to receive EPS building insulation in accordance with insulation manufacturer's recommendations.

3.02 MANUFACTURER'S RECOMMENDATIONS

A. Compliance: Comply with EPS board insulation manufacturer's recommendations for product insulation requirements.

3.03 INSULATION INSTALLATION/APPLICATION

ED NOTE: *Below text adopted with modification from AIA MASTERSPEC Program. MASTERSPEC is copyrighted by American Institute of Architects. MASTERSPEC neither endorses nor recommends manufacturers and products.*

A. General: Install EPS board insulation in a single layer to achieve required R-value, extending insulation over entire surface to be insulated, cutting and fitting around projections and obstructions.

B. Insulation Board Joints: Stagger EPS board insulation joints in one direction for each course. Butt edges and ends tight to adjacent EPS board.

C. Exposure: Do not install more EPS insulation in a day than can be covered with finish material before end of work day or before start of weather conditions which can damage EPS insulation.

ED NOTE: *Select below appropriate paragraphs.*

D. Sheathing/Underlayment Board: Install EPS insulation board vertically over exterior sides of studs; provide corner bracing as required. Fasten vertically 12" o.c. maximum using capped nails. Install fire rated gypsum wallboard, 1/2" thick minimum on interior side of stud, in accordance with applicable codes.

E. Concrete and Masonry Walls: Install EPS insulation board over furring channels on concrete substrates or concrete masonry unit substrates. Fasten vertically with mechanical fasteners spaced 12" o.c. maximum.

F. Cavity Walls: Install EPS insulation board on exterior surface of interior width of cavity wall, fitting EPS board between wall ties and other projections and penetrations.

G. Perimeter Foundation: Install EPS insulation board on exterior surface of perimeter foundation walls. Secure EPS insulation board with spot adhesive applied to back of board.

H. Slab-On-Grade: Install EPS insulation board under slab-on-grade and over properly prepared sub-grade of compacted fill and vapor retarder. Place EPS insulation board, with butted edges and ends.

I. Ceiling Panels: Install EPS ceiling panels in coordination with suspended ceiling system, with edges concealed by support of suspension system. Scribe and cut panels to fit at borders and at penetrations.

J. Attic Ventilation Channels: Install EPS ventilation channels in coordination with attic rafter spacing, attaching channels to rafters with mechanical fasteners every 12" on center.

ED NOTE: *Coordinate below with Part 2 products fastener materials article.*

K. Mechanical Fasteners or Adhesive: Secure insulation to substrate with spot adhesive, wall ties, and mechanical fasteners as required for specific application.

3.04 CLEANING AND PROTECTION

ED NOTE: *Coordinate below to paragraphs with appropriate provisions in Division 1 General Requirements Sections.*

A. Cleaning: Remove trash and debris from EPS building insulation operations from project site.

B. Protection: Protect installed building insulation from damage to ensure acceptable substrate for subsequent finish system.

END OF SECTION

CELLOFOAM® NORTH AMERICA INC

P.O. Box 406
Conyers, GA 30207

1-800-241-3634 U.S.
1-404-483-4491 GEORGIA
1-404-929-3608 FAX