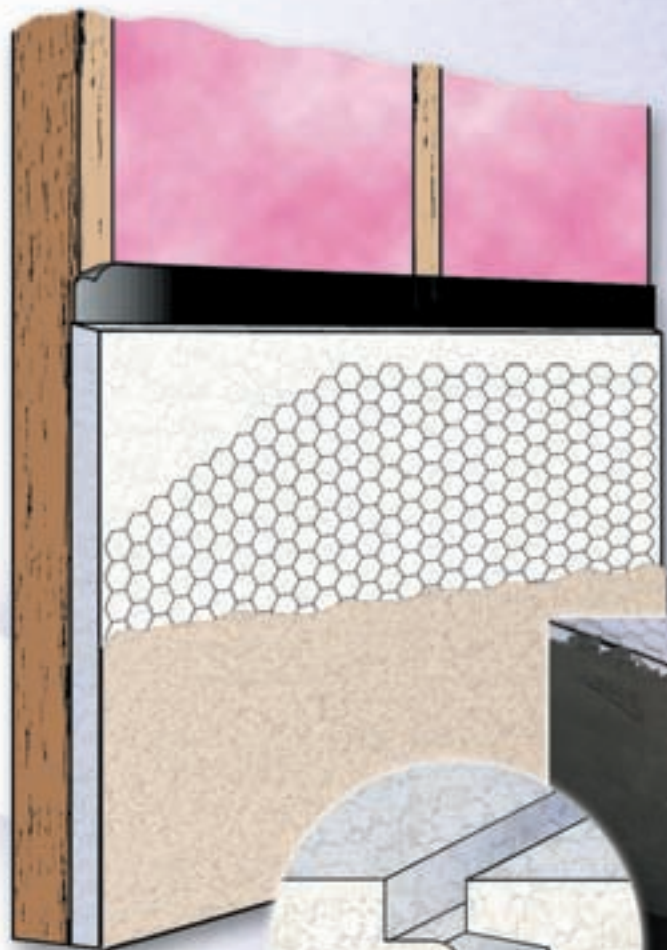


hfc-free "green" expanded polystyrene insulation

FALCON FOAM T&G

EPS INSULATION TONGUE & GROOVE
DESIGNED FOR ONE-COAT STUCCO SYSTEMS





FALCON FOAM T&G —THE UNDERLYING QUALITY

Beneath the beauty of One-Coat Stucco Systems lies the true test of insulating performance — FALCON FOAM T&G. The insulating properties of EPS have been proven in a wide variety of building applications — from sheathing in homes to engineered roofing systems.

ADD GREAT

Falcon Foam T&G

Expanded Polystyrene (EPS), is a lightweight and rigid substrate that can be easily fabricated on the jobsite to match corners, curves and architectural profiles.



Falcon Foam T&G is manufactured with a tongue-and-groove edge to resist the flow of air and water vapor through the wall.

GREEN ASPECTS OF EXPANDED POLYSTYRENE



Falcon Foam Expanded Polystyrene (EPS) insulation products are environmentally friendly and are made without ozone depleting chemicals like CFCs or HCFCs. Falcon Foam Expanded Polystyrene insulation is 100% recyclable. Falcon Foam uses recycled material in the manufacture of its EPS insulation.



THE HIGH R-VALUE LATH FOR ONE-COAT STUCCO SYSTEMS

FALCON FOAM T&G EPS insulation is designed specifically for use as a lath in One-Coat Stucco Systems. Homeowners, architects and builders all benefit from this new and innovative approach to beautiful, thermally efficient exteriors. You too can add architectural interest to your building project, while also adding thermal efficiency. FALCON FOAM T&G saves energy, installation time and

building costs — finishing crews can complete their work in a fraction of the time.

APPROVED FOR USE WITH TODAY'S LEADING ONE-COAT STUCCO EXTERIOR INSULATION SYSTEMS

As the leading name in EPS, FALCON FOAM T&G is compatible with all approved One-Coat Stucco Systems. Choose your preferred One-Coat Stucco System, then add the quality and confidence of FALCON FOAM T&G.

R R-VALUE REDUCE INSULATION COSTS

TONGUE & GROOVE EDGES THERMAL PERFORMANCE

Conventional stucco, applied to the exterior of 2" x 6" framed walls and installed with R-19 batt insulation, can leave up to 20% of the wall area uninsulated. FALCON FOAM T&G, however, covers the framing member with an improved thermal envelope that dramatically increases the total R-value of the wall. What's more, FALCON FOAM T&G protects the frame against exposure to intense heat and cold, reducing structural contraction and expansion.

LIGHTWEIGHT, EASY TO HANDLE

FALCON FOAM T&G is lightweight and is easy to install. Cutting is easily accomplished with a standard utility knife. On the job, FALCON FOAM T&G withstands impacts and soiling for minimal breakage and product loss.

LIFELONG PERFORMANCE

FALCON FOAM T&G resists moisture and results in an effective R-value that is undiminished throughout the life of the structure. Condensation and freeze/thaw temperature cycling have virtually no effect on FALCON FOAM T&G's thermal or mechanical performance. Return on investment continues season after season, year after year.

COMPARE

TYPICAL 6" WALL ASSEMBLY WITHOUT T&G

4" WALL ASSEMBLY WITH T&G

| R-value | | Assembly Type: Wall Framing Material: Wood Framing Size: 2" x 6" (nominal) Framing Spacing: 16" o.c. Framing Percentage: 15% | Assembly Type: Wall Framing Material: Wood Framing Size: 2" x 4" (nominal) Framing Spacing: 16" o.c. Framing Percentage: 15% | R-value | | |
|---------------------------|---------------------------|--|--|---|--------------------------|-------|
| Cavity (R _c)* | Cavity (R _f)* | | | Cavity (R _c) | Cavity (R _f) | |
| 0.170 | 0.170 | | | 1. Outside surface air film | 0.170 | 0.170 |
| 0.175 | 0.175 | | | 2. 7/8" stucco | 0.080 | 0.080 |
| 0.060 | 0.060 | | | 3. Membrane, felt paper | 0.060 | 0.060 |
| - | 5.445 | | | 4. 2" x 6" framing | 4.680 | 4.680 |
| 17.800 | - | | | 5. R-19 fiberglass batt insulation (compressed) | - | 3.465 |
| 0.450 | 0.450 | | | 6. 1/2" gypsum | 11.000 | - |
| 0.680 | 0.680 | | | 7. Inside surface air film | 0.450 | 0.450 |
| 19.335 | 6.980 | Total Unadjusted R-values | Total Unadjusted R-values | 17.120 | 9.585 | |

$$\frac{1}{19.335} \times \frac{0.85}{1-(15\%/100)} + \frac{1}{6.980} \times \frac{0.15}{1-(15\%/100)} = \frac{0.065}{\text{Total U-value}}$$

$$\frac{1}{0.065} = \frac{15.28}{\text{Total R-value}}$$

$$\frac{1}{17.120} \times \frac{0.85}{1-(15\%/100)} + \frac{1}{9.585} \times \frac{0.15}{1-(15\%/100)} = \frac{0.065}{\text{Total U-value}}$$

$$\frac{1}{0.065} = \frac{15.34}{\text{Total R-value}}$$

T&G LOWERS CONSTRUCTION COST - AND GIVES YOU A HIGHER R-VALUE!

*This is R-value for the "Cavity" (c) and "framing" (f) part of the cavity. i.e.

| Falcon Foam Typical Physical Properties | | | | |
|---|----------------|---------------|---------------------------------|---------|
| Properties | Units | ASTM Test | ASTM Designations | |
| | | | Type I | Type II |
| Density (Nominal) | pcf | C303 or D1622 | 1.00 | 1.50 |
| Thermal Resistance Values | 1-inch @ 75° F | | 3.90 | 4.40 |
| Strength Properties | | | | |
| Compressive 10% Deformation | psi | D1621 | 10-14 | 13-18 |
| Flexural | psi | C203 | 25-30 | 40-50 |
| Tensile | psi | C1623 | 25-32 | 40-48 |
| Shear | psi | D732 | 15-18 | 25-30 |
| Moisture Resistance | | | | |
| Water Vapor Transmission | perm. in | E96 | 1.2-3.0 | 0.9-2.5 |
| Absorption (vol.) | % | | 3.0 | 2.0 |
| Coefficient of Thermal Expansion | in./in.)(F) | D696 | 0.000035 for all densities | |
| Maximum Service Temperature | | | | |
| Long-Term | °F | — | 167° F | 167° F |
| Intermittent | | — | 180° F | 180° F |
| Flame Spread up to 6" thickness | | E84 | Less than 25 for all densities | |
| Smoke Development up to 6" thickness | | E84 | Less than 450 for all densities | |

WHAT YOU SHOULD KNOW ABOUT R-VALUES

R means resistance to heat flow. The higher the R-value, the greater the insulating power. Compare insulation R-values before you buy. There are other factors to consider. The amount of insulation you need depends mainly on the climate you live in. Also, your fuel savings from insulation will depend upon the climate, the type and size of your house, the amount of insulation already in your house, and your fuel use patterns and family size. To get the marked R-value, it is essential that this insulation be installed properly.

Architectural Notes

- 1** INSTALLATION EXPOSURE — Following each day of application, all exposed insulation should be covered and temporarily sealed from free moisture in accordance with good building practices. Insulation exposed to free moisture should be replaced or thoroughly dried prior to application of finish or covering materials.
- 2** AIR AND WATER INFILTRATION AND WATER PERMEANCE — Flashing and sealants should be provided to resist air and free water infiltration. Any moisture-susceptible component of the system should be installed to assure watertight construction. Accessories for exterior finishes should be made of rust-resistant materials.
- 3** COMPLIANCE — When applied with code requirements, FALCON FOAM T&G insulation meets or exceeds ASTM Standard C 578. This product is ICC approved for use in one coat stucco systems. FALCON FOAM T&G insulation contains a fire retardant additive and is listed by UL Laboratories. UL listed figures for flame spread smoke development and fuel contribution are under controlled tests and are not intended to reflect hazards presented by this or any other materials under actual fire conditions.
- 4** COMBUSTIBILITY — FALCON FOAM T&G insulation will burn upon exposure to an adequate source of heat or flame. FALCON FOAM T&G insulation should be kept away from flame or heat sources, including, but not limited to, open flames, welder's torches, or other sources of heat. Once ignited, FALCON FOAM T&G can develop intense heat and smoke. It is the responsibility of the purchaser to warn all those who may be in contact with FALCON FOAM T&G insulation about the need to adhere to these requirements when the product is stored or exposed on the job site.
- 5** SOLVENT ATTACK — EPS is subject to attack by petroleum based solvents. Care should be taken to prevent contact between insulation and these solvents or their vapors.
- 6** ULTRAVIOLET DEGRADATION — Prolonged exposure to sunlight will cause slight discoloration and surface dusting of EPS insulation. The insulating properties will not be significantly affected under normal usage. Insulation stored outside should be protected with a light-colored opaque tarpaulin.
- 7** STRUCTURAL BRACING — FALCON FOAM T&G insulation is not a structural material. Adequate diagonal/lateral bracing for structural framing is required in accordance with job and service load conditions and all applicable building codes.
- 8** INSTALLATION — The One-Coat Stucco Exterior insulation System manufacturer's installation instructions must be followed exactly.
- 9** ADDITIONAL INFORMATION — These specifications cover normal job requirements for FALCON FOAM T&G insulation. For additional information contact Falcon Foam.



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