

RIGID FOAM INSULATION FOR CONCEALED APPLICATIONS

| ATTRIBUTE | Manufacturer | JM | Atlas | Dow | Dow | Hunter | Hunter | Rmax | Rmax | Rmax |
|----------------------|---------------------------------|---|---|--|---|--------------------|--------------------------|---|----------------------------|--|
| | Product Name | AP Foil-Faced | Energy Shield Energy Shield Plus | TUFF-R | THERMAXci | Xci Foil | Xci Class A | Rmatte Plus3 | Thermasheath 3 | ECOMAXci |
| DESCRIPTION | ASTM 1289 Class | Type I, Class 1 | Type I, Class 1 | Type I, Class 1 | Type 1 Class 2 | Type I, Class 1 | Type I, Class 1 | Type I, Class 1 | Type I, Class 1 | Type I, Class 2 |
| | Facer | Bilaminate foil, one side reflective, other side white non-reflective | Trilaminate foil both sides. Reflective (Energy Shield), non-reflective (Energy Shield Plus). | Foil one side, trilaminate foil other side | 4 mil embossed blue foil on one side, 1.25 mil embossed foil on the other | Foil both sides | Embossed foil both sides | Reinforced foil, one side reflective, other side white non-reflective | Bilaminate foil both sides | Glass mat reinforced 1.5 mil foil one side, bilaminate 0.3 mil foil other side |
| | Thicknesses | 0.5-4.5 | 0.5-4.0 | 0.375 - 2.0 | 0.5-4.5 | 1.0-4.0 | 1.0-4.0 | 0.5-4.5 | 0.5-4.5 | 1.0-3.0 |
| PHYSICAL PERFORMANCE | R at 1" | 6.0 | 6.0 | 6.5 | 6.5 | not provided (6.7) | not provided (6.3) | 6.0 | 5.9 (6.0) | 6.5 |
| | Compressive Strength | 16 psi | 16 psi | 25 psi | 25 psi | 16, 20, 25 | 20, 25 | 20 psi | 20 psi | 25 psi |
| | Density | 2 pcf | 2 pcf | 2 pcf | 2 pcf | 2 pcf | 2 pcf | 2 pcf | 2 pcf | 2 pcf |
| | Water Absorption | <1% | <1% | <1% | <0.1% | <0.05% | <0.05% | <1% | <1% | <1% |
| | Water Vapor Transmission | <0.05 perm | <1 perm | <0.03 perm | <0.03 perm | <0.05 perm | <0.05 perm | <0.3 perm | <0.3 perm | <0.3 perm |
| | Dimensional Stability | <2% | <2% | <2% | <2% | 2% | 2% | <2% | <2% | <2% |
| FIRE PERFORMANCE | Operational Temperature | -100 - 250 ° F | -100 - 250 ° F | -50 - 190 ° F | <250 ° F | -100 - 250 ° F | -100 - 250 ° F | -40- 250 ° F | -40- 250 ° F | -40- 250 ° F |
| | Flame Spread | ≤25 | ≤75 | ≤75 | ≤25 | ≤75 | <75 (≤ 25) | ≤75 | ≤75 | ≤25 |
| | Smoke Developed | ≤450 | ≤450 | ≤450 | ≤450 | ≤450 | ≤450 | ≤450 | ≤450 | ≤450 |
| CODES/APPROVALS | IBC | Types I-V | Type V-B | Type V | Types I-V | Type V | Type V | Type V-B | Type V-B | Types I-V |
| | IRC | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Ignition Barrier Required | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| | Exterior Gypsum Required | No | NA | NA | No | NA | NA | NA | NA | NA |
| | ICC-ESR Thermal | ICC-ESR-3398 | ICC-ESR-1375 | ICC-ESR-3089 | ICC-ESR-1659 | ICC-ESR-3174 | ICC-ESR-3174 | No | ICC-ESR-1864 | NA |
| | ICC-ESR Air Barrier | ICC-ESR-3398 | No | ICC-ESR-3089* | ICC-ESR-1659 | No | No | No | No | NA |
| | ICC-ESR Water-Resistive Barrier | ICC-ESR-3398 | ICC-ESR-1375 | ICC-ESR-3089 | ICC-ESR-1659 | No | No | No | No | NA |
| | ABAA Approved Air Barrier | Yes | No | Yes* | Yes | No | No | No | No | NA |
| | ENERGY STAR | ICC-ESR-3398S | No | No | No | No | No | No | No | No |
| | Miami Dade | No | Yes | No | No | Yes | Yes | No | No | No |

Data as shown is intended to be used as a general guideline only. The physical and chemical properties of Polyisocyanurate Foam Sheathing listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. When manufacturer's published literature varied from ICC-ESR data, ICC-ESR data governs (manufacturer's data shown in parenthesis).

*Requires SPF in cavity.