

Product Technical Specifications

"Performance"

OUTER SURFACE: Various substrates, OSB, plywood, Densglass, Typar, Metal or fiberglass
INNER SURFACE: None. Typically Normal drywall – Field installed
INSULATION CORE: 2-1/2" rigid Polyurethane, 2.2 lbs/ft³ Density, Class 1, Closed Cell Foam.
ADHESION: A strong, durable bond exists between the foam core, steel framing and fiberglass skins created in the manufacturing process.

DIMENSIONS AND WEIGHT:

Wall Product Thickness: 3-5/8" and 5-5/8"
Thickness Tolerance: 1/8"
Standard Width: varies according to design requirements – up to 30ft
Standard Height: 8' – 9' capability of up to 30'
Height Tolerance: 1/8"
Weight: Varies, approximately 1.5 - 4 lbs/ft²

STRUCTURAL PROPERTIES OF FOAM:

Compressive Strength: 35 psi.
Tensile Strength: 58 psi.
Shear Strength: 28 psi.
PMDI
Blowing Agents: Water, HFC-245fa
Density: 2.2# / c.f. in-place density

THERMAL PERFORMANCE:

Conductivity of Foam: 0.155 Btu-in/ft²hr°F
Minimum R Value: 6.45 per inch of thickness.

MOISTURE:

Vapor Permeability: 2-3 perm/in
Absorption: 2.4%
Solvent Resistance: Excellent
Mold/Mildew Resistance: Excellent

FIRE SAFETY:

Foam Fire Rating: Class 1
Smoke Developed: <450 ASTM E-84
Flame Spread: <25 ASTM E-84
Minimum self-ignition temp: 962°F
Minimum flash ignition temp: 794°F

STRUCTURAL INTEGRITY IN FIRE CONDITIONS:

Polyurethane foam is a thermoset plastic and retains its structural integrity until completely consumed by fire. Melting does not occur.

TOXICITY OF COMBUSTION:

The overall toxic potency of the decomposition products released by polyurethane foam is the same as wood or wool under comparable fire conditions.

Product Technical Specifications

"Ultimate"

OUTER SURFACE: Biaxial Fiberglass Cloth
INNER SURFACE: Biaxial Fiberglass Cloth
INSULATION CORE: 3-5/8" or 5-5/8" Polyurethane, 2.2 lbs/ft³ Density, Class 1 Closed Cell Foam.
ADHESION: A strong, durable bond exists between the foam core, steel framing and fiberglass skins created in the manufacturing process under heat and pressure.

DIMENSIONS AND WEIGHT:

Wall, and Ceiling/Roof Product
Thicknesses: 3-5/8" and 5-5/8"
Thickness Tolerance: 1/8"
Standard Width: 3' 11-7/8" (Called 4' for discussion purposes.)
Standard Height: 8' – 9' capability of up to 30'
Height Tolerance: 1/8"
Weight: Varies between wall, ceiling and roof product 2-4 lbs/ft²

STRUCTURAL PROPERTIES OF FOAM:

Compressive Strength: parallel 20psi
Compressive Strength: perpendicular 15psi
Polymeric MDI
Blowing Agents: Water, HFC 134a
Density: 2.25#/c.f.

THERMAL PERFORMANCE:

Conductivity of Foam: 0.155 Btu-in/ft²hr°F
Minimum R Value: 6.45 per inch of thickness.

MOISTURE:

Vapor Permeability: 2.27 perm/in
3-5/8" panel .65 PERMS
5-5/8" panel .41 PERMS
Absorption: 1.6%
Solvent Resistance: Excellent
Mold/Mildew Resistance: Excellent

FIRE SAFETY:

Foam Fire Rating: Class 1
Smoke Developed: <450 ASTM E-84
Flame Spread: <20 ASTM E-84
U.L. # R5692
Minimum self-ignition temp: 932°F
Minimum flash ignition temp: 698°F
ASTM D-1929

STRUCTURAL INTEGRITY IN FIRE CONDITIONS:

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TOXICITY OF COMBUSTION:

The overall toxic potency of the decomposition products released by polyurethane foam is the same as wood or wool under comparable fire conditions.