



INNOVATIONS FOR LIVING™

PINKCORE™ Tight Tolerance Board

Product Data Sheet

Description

PINKCORE Tight Tolerance is a closed-cell extruded polystyrene foam insulation board specifically designed to meet the needs of composite panel manufacturers. The high R-value and excellent moisture resistance properties inherent to XPS foam make it an ideal core for many of the sandwich panel applications in the OEM and building construction markets. Removal of the as-extruded skin surfaces using state-of-the-art planer technology provides the tight tolerances necessary to ensure intimate contact between the foam core and facing material. The process also provides the panel-to-panel and lot-to-lot thickness control necessary to provide for proper alignment of composite panels in the end use application.

Availability

PINKCORE Tight Tolerance boards are available in minimum compressive strengths of 15, 25, 40, and 60 psi. The boards are available in thicknesses from 1" to 4", widths of 24" or 48", and lengths up to 20'.

Custom sizes are available. Contact your local Owens Corning sales representative to discuss your specific needs.

Applications

PINKCORE Tight Tolerance board can be used in any application requiring tight thickness tolerance control. It is particularly well suited for commercial or residential sandwich panel applications where facings made from materials such as aluminum, steel, FRP, wood, or plastic are to be laminated to the surfaces of the foam core.

In most cases, an adhesive is needed to bond the facing material to the foam core. Typical adhesive systems used for this purpose are moisture cured urethanes or reactive hot melts. These systems often require the use of additional equipment such as static or vacuum bag presses in order to enhance intimate contact between the facing and foam core as the adhesive cures. Contact your local adhesive supplier for specific recommendations as to the type of adhesive and optimum curing conditions needed for your application.

In many sandwich panel applications, *PINKCORE* Tight Tolerance board may need to be trimmed to meet final product dimensions. *PINKCORE* Tight Tolerance board can be cut using hand tools such as a utility knife or drywall saw.

Typical Physical Properties

Property	ASTM Test Method	<i>PINKCORE</i> Tight Tolerance 15	<i>PINKCORE</i> Tight Tolerance 25	<i>PINKCORE</i> Tight Tolerance 40	<i>PINKCORE</i> Tight Tolerance 60
Compressive Strength @ 10% deformation, psi, min. ²	D 1621	15	25	40	60
Tensile Strength, psi, min.	D 1623	50	50	50	55
Shear Strength, psi, min.	C 273	15	15	20	35
Shear Modulus, psi, min.	C 273	370	400	500	740
Flexural Strength, psi, min. ³	C 203	40	50	60	75
Flexural Modulus, psi, min.	C 203	1400	1750	2100	3000
k-factor @ 180 days, 75°F mean, BTU ·in/hr·ft ² ·°F	C 518	0.2	0.2	0.2	0.2
Water Absorption, % vol., max.	C 272	0.3	0.3	0.3	0.3
Water Vapor Permeance, Perm, max.	E 96	1.1	1.1	1.1	1.1
Flame Spread ^{4,5}	E 84	5	5	5	5
Smoke Developed ^{4,5,6}	E 84	45-175	45-175	45-175	45-175
Thickness Tolerance, in.	—	± 0.020	± 0.020	± 0.020	± 0.020
Coefficient of Linear Thermal Expansion, in./in./°F	—	2.7 × 10 ⁻⁵	2.7 × 10 ⁻⁵	2.7 × 10 ⁻⁵	2.7 × 10 ⁻⁵
Maximum Service Temperature, °F	—	165	165	165	165

¹ Published values in this table are typical values and should not be considered as specifications. Properties shown are representative values for 2" thick product unless noted otherwise.

² Value at yield or 10%, whichever occurs first.

³ Tested as a 1" thick sample. Value at yield or 5%, whichever occurs first.

⁴ These laboratory tests are not intended to describe the hazard presented by this material under actual fire conditions.

⁵ Data from Underwriters Laboratories, Inc. Classified. See Classification Certificate U-197.

⁶ ASTM E 84 is thickness dependent; therefore a range of values is given.



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Mechanical saws or hot wires can be used where more precise cuts are needed.

Limitations

PINKCORE Tight Tolerance board should not be used in contact with chimneys, heater vents, steam pipes or other surfaces where temperatures exceed 150 °F. It is not recommended for applications where sustained temperatures exceed 165 °F.

PINKCORE Tight Tolerance board is susceptible to deterioration or damage from excessive exposure to ultra violet light. Material should be stored in such a manner so as to protect it from exposure to direct sunlight.

Polystyrene based foam insulations may be potentially incompatible with some of the solvents used in commercially available adhesives and sealants. Contact an Owens Corning representative for a list of known solvents that are incompatible with extruded polystyrene insulation.

Caution: Although it does contain a flame-retardant additive to inhibit ignition from small fire sources, this product will ignite if exposed to fire of sufficient heat and intensity. During shipping, storage, installation, and use, this product should not be exposed to open flame or other ignition sources.

Caution: Fire performance of products fabricated using PINKCORE Tight Tolerance board may vary in the field depending on facings and adhesives used in the fabrication process. Fabricators are responsible for developing composite product performance data where applicable.

Most commercial building codes require that polystyrene based insulations be separated from the inhabited space of a commercial building by an approved thermal barrier. Consult local building code requirements for specific information regarding your application.

Exposure to dust may be irritating to eyes, nose and throat. To prevent ignition, avoid smoking. Grinding, sawing or fabrication activities can produce dust particles which may under certain conditions form explosive dust atmospheres that can be ignited.



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