

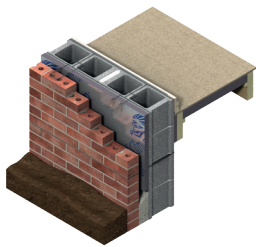


Kooltherm®

PREMIUM PERFORMANCE RIGID THERMOSET INSULATION

Kingspan Kooltherm® offers an extensive range of premium performance insulation products for wall, floor, soffit (structural ceiling) and concrete sandwich wall system applications. It has a fiber-free rigid thermoset phenolic insulation core that resists both moisture and water vapor ingress, and has excellent fire performance characteristics.

- Highest R-value per inch among any commonly used insulation
- Excellent fire and smoke performance
- Lower total construction cost
- Higher ROI on building design



K8 Cavity Board

- Partial fill cavity wall insulation
- R-value of 16 on 2 in
- NFPA 285 compliant; for non-combustible cladding; ASTM E 84 rating of 25/20 (flame-smoke)
- Resists sagging and moisture penetration



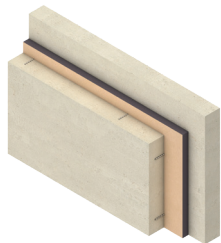
K10 FM Soffit Board

- Insulation for structural ceilings (soffits)
- R-value of 16 on 2 in
- FM approved for exposed use. Class 1 fire rating Class Number 4880
- Increased floor to ceiling clearances



K12 Framing Board

- Insulation for wood and steel framing systems
- R-value of 16 on 2 in
- NFPA 285 compliant; for non-combustible cladding; ASTM E 84 rating of 25/20 (flame-smoke)
- Low emissivity foil facings significantly increase thermal resistance of the cavity



K20 Concrete Sandwich Board

- High performance insulation for concrete sandwich wall systems
- R-value of 17 on 2 in
- ASTM E 84 rating of 5/5 (flame-smoke)
- Thinner pre-cast and tilt-up panels



Product Data

Property	Test Method	Kingspan Kooltherm K8® Cavity Board	Kingspan Kooltherm K10® Soffit Board	Kingspan Kooltherm K12® Framing Board	Kingspan Kooltherm K20® Concrete Sandwich Board
General					
R-value		16 on 2 in	16 on 2 in	16 on 2 in	17 on 2 in
Nominal Thickness (in/mm)		1.58 / 40 1.97 / 50 2.36 / 60	1.58 / 40 2.36 / 60	1.18 / 30 1.97 / 50	1.97 / 50 2.95 / 75 3.94 / 100
Standard Dimensions					
Width (in/mm)		47.25 / 1200	47.244 / 1200	47.25 / 1200	47.244 / 1200
Length (in/mm)		16 / 406.4	89.370 / 2270	96 / 2438	89.370 / 2270
Compressive Strength, Min. (psi@ 10% deflection)	ASTM C 209	15	15	15	15
Water Absorption, Max. (% by volume)	ASTM C 272	1.15	1.0	1.15	1.21
Density, Min. (lb/ft ³)	ASTM C 1621	2.0	2.0	2.0	2.0
Closed Cell Content (% of cells closed)	ASTM D 6226	94.67	94.67	94.67	94.67
Air Permeance (L/S/m ²) / (cfm/ft ²)	ASTM E 2178	0.002 / 0.000	0.001 / 0.000	0.002 / 0.000	0.001 / 0.000
Water Vapor Permeance, Max. ¹ (perm)	ASTM E 96	0.51	0.48	0.51	0.79
Fire & Smoke Performance					
Flame Spread ²	ASTM E 84 / UL723	25	25	25	5
Smoke Developed ²		20	20	20	5

¹ Permeance shown is for 25mm thick board. Permeance typically decreases as board thickness increases.

² These numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by this material under actual fire conditions. All applicable building codes must be followed.

Compliance

Intertek CCRR 1066;
 NFPA 285 Tested Wall Assemblies Using Kingspan Kooltherm
 TER No. 1601-06;
 NFPA 286 Tested Wall Assemblies Using Kingspan Kooltherm
 TER No. 1601-07;
 FM Approval – K10.

For more information on specific building product recommendations and installation guidelines, contact your Kingspan Insulation LLC representative.

For the most current product and compliance information go to www.kingspaninsulation.us.



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