



ReAct[®] Cement

Fiber-Cement Board

Usages

ReAct Cement as a Standalone Binder

Compressive Strengths

High Strength to Weight Ratio

Cement Replacement

100%

ASTM - Specific Board Standards

C1288

C1186

RADCO testing report #RAD-5716

ReAct[®] Cement is a white calcium carbonate cement, that is a reactive form of calcium carbonate known as vaterite. ReAct Cement is a low CO₂ binder successfully used in the formulation of fiber-cement boards.

+ Business Applications

Indoors for tile backer boards.

Outdoor for sheathing boards, siding, and trim.

+ Key Benefits

100% OPC Replacement

Dramatically Lower (¾ less) Carbon Intensity of Binder

White Color

Enable Lightweight Formulations

High Strength to Weight Ratio

Improved Dimensional Stability

Compatible with Existing Manufacturing Processes

Reduced Energy Demand in Autoclaves

The technical data provided here relates only to the specific material designated herein and does not relate to use of this material in combination with any other material or in any process. Fortera assumes no liability in connection with the use of the information contained herein. Nothing in this sheet should be construed as ensuring compliance with any federal, state or local laws or regulations. This document provides no warranties, express or implied, of merchantability, fitness for a particular purpose or otherwise. Please refer to Fortera's standard conditions of sale.

Fiber-Cement Board

Exceed Strength Requirements While 20% Lighter

Calcium carbonate cement-based fiber-cement boards provide good mechanical performance

Test	ReAct Cement FCB Machine / Cross / Avg. / % Retained	ASTM C1288, C1186 Requirement	Method
Density (g/cm ³)	0.98		ASTM C1185-12
Flexural Strength, Equilibrium (MPa)	11.8 / 7.2 / 9.3	≥4/10/16 (Grade I/II/III)	ASTM C1185-12
Flexural Str., Water Soak (MPa)	7.5 / 4.6 / 6.1 / 65%	≥4/7/13 (I/II/III) / ≥50%	ASTM C1185-12
Flexural Str., Warm Water Soak (MPa)	7.4 / 4.6 / 6.0 / 98%	≥80%	ASTM C1185-12
Flexural Str., Freeze-Thaw (MPa)	7.3 / 4.4 / 5.8 / 96%	≥80%	ASTM C1185-12
Shear Bond Strength, Portland Mortar (kPa)	591	≥344	ANSI-A118.1
Shear Bond Str., Latex Mod. Mortar (kPa)	1027	≥344	ANSI-A118.4
Nail Head Pull Through (N)	913	≥400	ASTM D1037-12

Provide Strong Service Life Performance

Calcium carbonate cement-based fiber-cement boards are durable and safe

Test	ReAct Cement FCB	ASTM C1288, C1186 Requirement	Method
Moisture Content (%)	2.3	Report	ASTM C1185-12
Water Absorption (%)	32.5	Report	ASTM C1185-12
Moisture Movement/Expansion (%)	0.01	≤0.07	ASTM C1185-12
Water Tightness	No Water Droplets	No Water Droplets	ASTM C1185-12
Heat/Rain Resistance	No Damage	No Damage	ASTM C1185-12
Mold Resistance (Rating)	0 / No Growth	≤1	ASTM G21-13
Surface Burning Index	0	≤5	ASTM E84-15
Flame Spread Index	0	0	ASTM E84-15
Smoke Development Index	2 / Class A	≤450	NFPA No. 255