

DUROCK® Brand Cement Board



Backer board for ceramic tile and exterior finish systems

- Water-durable, mold-resistant substrate for high-moisture areas
- Can be used in interior or exterior applications
- Easy to score and snap
- Will not rot, warp, delaminate or disintegrate
- Smooth side for ceramic tile mastic applications
- Rough side for thin-set mortar and Portland cement basecoat applications

Description

DUROCK® Brand Cement Board provides a smooth, sound base for glass and ceramic mosaics; ceramic and quarry tile; lugged tile; and thin stone and thin brick. Suitable for application to wood or steel framing spaced 16" o.c. in new construction and in remodeling. Board is ideal for use in partitions, walls, floors, soffits and ceilings in wet or dry areas. It does not deteriorate in the presence of water so it is highly durable in high-moisture areas found in baths, showers, kitchens and laundry rooms. Also adaptable for fences, fireplace fronts, mobile home skirting, agricultural buildings, UL-listed wall shield/floor protectors, garage wainscoting and exterior finishes.

Limitations

- A. DUROCK Brand Cement Board is designed for positive or negative uniform loads up to 50 psf. For complete information on the use of DUROCK Brand panels in exterior systems, consult with your USG sales representative.
- B. Maximum stud spacing: 16" o.c. (24" o.c. for cavity shaft wall assembly); maximum allowable deflection, based on stud properties only, L/360. Maximum fastener spacing: 8" o.c. for wood and steel framing; 6" o.c. for ceiling applications.
- C. Maximum dead load for ceiling system is 7.5 psf.
- D. Steel framing must be 20 gauge or heavier.
- E. Do not use drywall screws or drywall nails.
- F. Do not use 5/16" DUROCK Brand Underlayment for wall or ceiling applications.
- G. Do not use DUROCK Brand Cement Board with vinyl flooring.

Installation

- A. Apply DUROCK Brand Cement Board panels with ends and edges closely butted but not forced together. Stagger end joints in successive courses.
- B. Fasten DUROCK Brand Cement Panel to framing with specified fasteners. Drive fasteners into field of DUROCK Brand Cement Panel first, working toward ends and edges. Hold DUROCK Brand Cement Panel in firm contact with framing while driving fasteners. Space fasteners maximum 8" o.c. for walls, 6" o.c. for ceilings with perimeter fasteners at least 3/8" and less than 5/8" from ends and edges. Drive nails and screws so bottoms of heads are flush with surface of DUROCK Brand Cement Panels to provide firm panel contact with framing. Do not overdrive fasteners. Approved fasteners include: 1. DUROCK Brand Screws, USG Sheathing, Type WF for wood-frame or Type SF for steel-frame construction, or 2. Minimum (1-1/2") 11 gauge, hot-dipped galvanized roofing nails with nominal 7/16" diameter head for wood framing.
- C. DUROCK Brand Cement Panels should be cut to size utilizing a knife and straight edge. A power saw should be used only if it is equipped with a dust collection device. Worker should wear NIOSH/MSHA-approved dust mask.

Refer to current United States Gypsum Company Brochures SA-932 *DUROCK Brand Cement Board Systems* and SA-700 *Exterior Systems* for complete installation information. For specific technical assistance, call a USG Technical Representative at (800) USG-4YOU (874-4968).

Product Data

Sizes and Packaging

Cement Board: 1/2" or 5/8" thickness, 32", 36" or 48" width x lengths of 4', 5', 6', 8'. Underlayment: 5/16" thickness, 36" or 48" width x 4' to 5' length. Exterior Cement Board: 1/2" or 5/8" thickness, 32", 36" or 48" width x 8' length. Custom sizes may be available upon request.

Standards

DUROCK Brand Cement Board exceeds the ANSI standards for cementitious backer units (CBU). See ANSI A118.9-1990 for test methods and Specifications for CBU and ANSI 108.11-1990 for interior installation of CBU. Exceeds industry standards as an exterior substrate for exterior finishes.

Building Code Data

See National Evaluation Service Reports Nos. 259 and 396 for allowable values and/or conditions of use concerning material presented in this document. These reports are subject to reexamination, revisions and possible changes.

Availability and Cost

DUROCK Brand Cement Board is distributed throughout the United States. Contact a United States Gypsum Company sales office or sales person for additional information.



Composition and Materials	DUROCK Brand Cement Board is formed in a continuous process of aggregated portland cement slurry with polymer-coated, glass-fiber mesh completely encompassing edges, back and front surfaces. The edges are formed smooth—patent No. 4,916,004. The ends are square cut.
Warranty	Products and systems provided by United States Gypsum Company are warranted to be free from defects in material and workmanship. Contact a United States Gypsum Company sales office for complete warranty details.
Maintenance	Contact a United States Gypsum Company sales office for complete details.

Technical Data

Property	Unit of Measure	ASTM Test	1/2" Cement Board Typical Value	5/16" Underlayment Typical Value
Flexural strength	psi	C947-81	750	1250
Indentation strength	psi 1" dia. disc. @ 0.02" indent	D2394	2300	2300
Uniform load	psf (studs spaced 12" o.c.)	—	50 max.	—
Water absorption	% by wt. 24 hrs.	C473-84	15	15
Nail pull resistance	lb. (0.4" head diameter, wet or dry)	C473-84	125	—
Weight	psf	C473-84	3	2
Freeze/thaw resistance	procedure B, number of cycles with no deterioration	C666-84	100	100
Surface burning characteristics	flame/smoke	E84-84	5/0	5/0
Thermal	"R"/k value	C177	0.26/1.92	—
Standard method for evaluating ceramic floor tile installation systems	Passes cycles 1-3	C627	Residential	Residential
Min. bending radius	ft. (requires special framing—details available upon request)	—	8	—

Submittal Approvals:

Job Name		
Contractor		Date

Trademarks
The following trademark used herein is owned by United States Gypsum or a related company: DUROCK.

Note
Products described here may not be available in all geographic markets. Consult your U.S. Gypsum Company sales office or representative for information.

Notice
We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

Safety First!
Follow good safety and industrial hygiene practices during handling and installing products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

