Installation Guide

Cement Board

1/2" and 5/8"
Outstanding base for floors, walls, ceilings and countertops

1/4"
Floors and countertops only
(1/4" DUROCK® cement board is not for walls or ceilings)
Discover the Next Generation of DUROCK® Brand Cement Board

For more than 25 years, DUROCK cement board has set the standard for proven performance in the backerboard category. Now this great product is even better. The next generation of DUROCK cement board not only continues the brand’s tradition of quality and reliability, but now installs up to 20% faster—and that provides a big boost to your productivity. Other benefits include:

- Lightest cement board for easier handling
- Easiest to cut and fasten
- 30-year warranty

Water durable and mold resistant, with better tile bond than fiber-cement boards or bare plywood, DUROCK is an outstanding backerboard for a wide variety of materials. Choose this high performance alternative to fiber-cement boards or bare plywood surfaces for:

**Superior Tile Bond** Prevents tile pops and grout cracks, up to 40% greater tile bond than fiber-cement board.

**The Strength of Portland Cement** Will not swell, soften, rot, warp, delaminate or disintegrate if exposed to water. Noncombustible. Backed by a 30-year limited warranty.

**Superior Mold Resistance** No mold growth as tested per ASTM G21.
What You’ll Need

Floors 1/4", 1/2", 5/8" thickness
– Subfloor should be minimum 5/8" exterior-grade OSB or plywood.

Countertops 1/4", 1/2", 5/8" thickness
– Minimum 3/4" exterior-grade plywood base.
– Cover base with DUROCK™ brand tile membrane, 15 lb. felt or 4-mil polyethylene and attach with 1/4" galvanized staples.

Walls and Ceilings 1/2" and 5/8" thickness only
– Maximum stud spacing: 16" o.c. 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.

Cutting
DUROCK panels should be cut to size with a knife and straight edge. A power saw should be used only if it is equipped with a dust collection device. Always wear a NIOSH/MSHA approved mask and eye protection when cutting DUROCK panels.
– Utility knife: Using a straight edge, score panel face with utility knife and cut through glass-fiber reinforcing mesh, then snap and cut backside mesh to break cleanly. Use a rasp to smooth any rough edges.
– Power saw: Use a low-RPM portable saw with 3-1/2” carbide-tipped blade. To make cutouts for pipes and fixtures, use utility knife to cut through mesh on both sides of panel and punch out with a hammer from back side. Or, use an electric drill with a hole-saw bit.

WARNING: Dust can contain silica. Prolonged breathing can cause lung damage and cancer. See MSDS for more information.

Requirements

Waterproofing
If waterproofing is desired, use DUROCK tile membrane. See USG literature piece CB492 for DUROCK tile membrane product information.
Positioning
Fit ends and edges of panels closely but not forced together, maintaining 1/4" space between panels and perimeter walls. Stagger joints a minimum 16" so that four corners never meet. Offset panel joints a minimum 8" from subfloor joints.

Leveling Bed
Apply type 1 organic adhesive with 5/32" v-notched trowel, latex-fortified mortar with 1/4" square-notched trowel. Comb out adhesive or mortar in straight, parallel rows (as shown below) and immediately cover with panel. Adhere panels to subfloor, one panel at a time.

Fastening
Secure panels while adhesive is still wet. Space fasteners 8" o.c. around the perimeter and in the field of the board.

Wood framing and countertops: fasten with 1-1/2" 11-gauge hot-dipped galvanized roofing nails, or Durock™ brand tile backer screws for wood framing or 1-1/4" Durock tile backer screws for wood framing or equivalent.

Joining
Fill joints with latex-fortified mortar or Type 1 organic adhesive and immediately embed alkali-resistant, fiberglass mesh joint tape.

Finishing
Tile or almost any flooring material.*

* Not for use with vinyl flooring.
Countertop Installation
1/4", 1/2", 5/8"

- Cover plywood base with DUROCK tile membrane, 15 lb. felt or 4 mil polyethylene and attach with 1/4" galvanized staple.

Position
Fit ends and edges of panels closely but not forced together. Stagger panel joints from plywood base joints.

Fasten
Space fasteners 8" o.c. around the perimeter and in the field of the board.

Joining
Fill joints with latex-fortified mortar or Type 1 organic adhesive and immediately embed alkali-resistant, fiberglass mesh joint tape.

Finish
Install tile.

Note:
Because cement board fasteners may protrude through the plywood base when 1/4" cement board is used, 1/2" or 5/8" cement board is preferred in this application.

Wall and Ceiling Installation
1/2" & 5/8" only

Fastening
Fasten to studs spaced 16" o.c. Space fasteners 8" o.c. for walls, 6" o.c. for ceilings. Fit ends and edges of panels closely but not forced together.
- Wood framing: 1-1/2" hot-dipped galvanized roofing nails or 1-1/4" DUROCK tile backer screws for wood framing or equivalent.
- Steel framing: 1-1/4" DUROCK™ brand tile backer screws for steel framing or equivalent.

Joining
Fill joints with latex-fortified mortar or Type 1 organic adhesive and immediately embed alkali-resistant, fiberglass mesh joint tape.

Shim
Place a 1/4" spacer strip or shim around lip of bathtub or shower pan to hold bottom edge of panel off the fixture.

Finish
Install tile.
Where tile will not cover entire wall surface, such as above tub and shower surrounds, determine where you want the tile to end and draw a level line at this height. Be sure to allow for height of tile cap, if applicable.

On walls where tile will reach the floor, determine whether floor is level by measuring distance to desired tile height on both sides of area to be tiled. If there is a difference (e.g., the floor is lower on one side), lay one vertical row of tile from highest point down to floor. Affix tiles with dabs of mastic.

Use this first row as a guide to keep tiles and grout lines level and ensure alignment with tiles of adjacent tub or shower surround. If new flooring will be installed, leave a sufficient gap between lowest tile and subfloor.

On bathroom floors, start by placing full tiles in front of bathtub or shower and along the adjoining wall to avoid cut tiles in this highly visible area.
Installing Ceramic Tile

Apply latex-fortified mortar or Type 1 organic adhesive with a notched trowel. Hold trowel at an angle to maintain uniform thickness. Refer to setting material manufacturer for specific information related to trowel type and size.

Working a small area at a time, press tile into place with a slight twisting motion to seat properly. Prevent adhesive buildup on tile edge and in grout space. If adhesive squeezes from under tile, remove excess before it dries.

Keep tiles and joints straight and uniform. Use tile spacers if desired.
Trademarks
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Note
Products described here may not be available in all geographic markets. Consult your United States Gypsum Company sales office or representative for information.

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Safety First!
Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

WARNING!
Dust can contain silica. Prolonged and repeated breathing of silica dust can cause lung damage and cancer. If cutting with a power tool, use a wet or vacuum saw to reduce the amount of dust generated. Dust can be corrosive to eyes, skin, and respiratory tract. Contact can cause severe chemical burns. Wear eye, skin and respiratory protection. If eye contact occurs, flush immediately with water for 30 minutes. If ingested, call physician. Product safety information: 800-507-8899 or usg.com
Customer Service: 800 USG-4-YOU (800 874-4968).

For warranty or product information and literature:
800 USG.4YOU (874-4968)

usg.com