

USG  
Tile &  
Flooring  
Solutions



## **USG DUROCK® BRAND CEMENT BOARD WITH EDGE GUARD™**

### **Installation Guide**



# USG DUROCK® BRAND CEMENT BOARD WITH EDGE GUARD™

For more than 30 years, USG Durock® Brand Cement Board has set the standard for proven performance in the backerboard category. The new USG Durock® Brand Cement Board with EdgeGuard™ offers enhanced, proprietary edge performance and minimizes spin-out and crumbling. USG Durock® Brand Cement Board with EdgeGuard™ installs quickly and easily, while maintaining the brand's tradition of quality and reliability.

## **Benefits include:**

- Enhanced edge performance
- Easy to cut and fasten
- Water durable and mold resistant
- Exceptional tile bond
- Noncombustible
- Warranted for interior and exterior application

Water durable and mold resistant, with better tile bond than fiber-cement boards or bare plywood, USG Durock® Brand Cement Board with EdgeGuard™ cement board is an outstanding backerboard for a wide variety of reasons. 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**

Receives rating of "0" for no mold growth as tested per ASTM G21. Scores a 10 out of 10 on ASTM D3273.

# WHAT YOU'LL NEED

## Floors thickness 1/4 in. (6 mm), 1/2 in. (12.7 mm), 5/8 in. (16 mm)

Subfloor should be minimum 5/8 in. (16 mm). APA span-rated plywood or OSB with an Exposure 1 classification or better.

## Countertops 1/4 in. (6 mm), 1/2 in. (12.7 mm), 5/8 in. (16 mm) thickness

Minimum 3/4 in. (19 mm). APA span-rated plywood or OSB with an Exposure 1 classification or better.

Cover base with USG Durock™ Brand Tile Membrane, 15 lb. (6.8 kg) felt or 4-mil polyethylene and attach with 1/4 in. (6 mm) galvanized staples.

## Walls and Ceilings 1/2 in. (12.7 mm) and 5/8 in. (16 mm) thickness only

Maximum stud spacing: 16 in. (406 mm) o.c. Maximum allowable deflection, based on stud properties only, L/360. Maximum fastener spacing: 8 in. (203 mm) o.c. for wood and steel framing; 6 in. (152 mm) o.c. for ceiling applications.

## Waterproofing

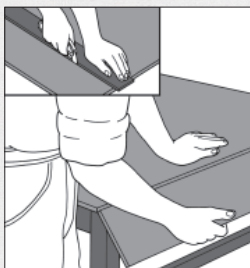
If waterproofing is desired, use USG Durock™ Brand Waterproofing Membrane or USG Durock™ Brand Liquid Waterproofing Membrane. See *USG Durock™ Brand Waterproofing Membrane* submittal sheet (CB595) or *USG Durock™ Brand Liquid Waterproofing Membrane* submittal sheet (CB817) for product information.

**NOTE: USG Durock® Cement Board with EdgeGuard™ has a rough side and a smooth side. The smooth side is ideal for mastic applications, as it increases adhesive coverage. The rough side is ideal for mortar applications, as it enhances bonding and reduces tile slip. However, mastic or thin-set mortar can be used on either side of the board without compromising performance.**

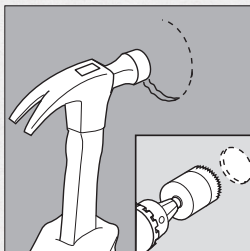
## Cutting

USG Durock® Brand Cement Board with EdgeGuard™ panels should be cut to size with a knife and straightedge. 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 USG Durock® Brand panels.

- Utility knife: Using a straightedge, 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 in. (89 mm) 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.



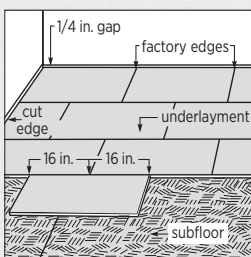
**WARNING:** Dust can contain silica. Prolonged breathing can cause lung damage and cancer. See SDS for more information.

## Floor Installation

1/4 in. (6 mm), 1/2 in. (12.7 mm), 5/8 in. (16 mm)

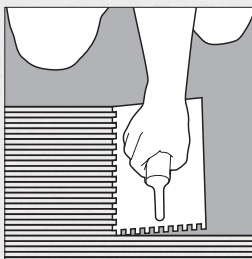
### POSITIONING

Fit ends and edges of panels closely but not forced together, maintaining 1/4 in. (6 mm) space between panels and perimeter walls. Stagger joints a minimum 16 in. (406 mm) so four corners never meet. Offset panel joints a minimum 8 in. (203 mm) from subfloor joints.



### LEVELING BED

Apply Type 1 organic adhesive with 5/32 in. (5 mm) v-notched trowel, latex-fortified mortar with 1/4 in. (6 mm) 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.



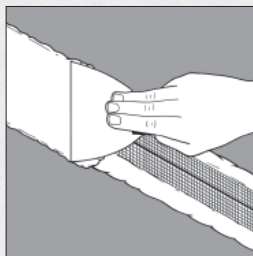
### FASTENING

Secure panels while adhesive is still wet. Space fasteners 8 in. (203 mm) o.c. around the perimeter and in the field of the board.

Wood framing and countertops: fasten with 1-1/2 in. (38 mm) 11-gauge hot-dipped galvanized roofing nails, or 1-1/4 in. (32 mm) USG Durock™ Brand 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

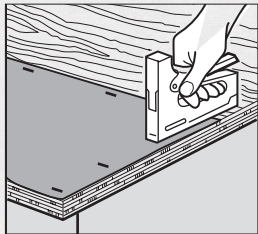
Tile or almost any flooring material.\*

\*Not for use with vinyl flooring.

## Countertop Installation

1/4 in. (6 mm), 1/2 in. (12.7 mm), 5/8 in. (16 mm)

Cover plywood base with USG Durock™ Brand Tile Membrane, 15 lb. (6.8 kg) felt or 4-mil polyethylene and attach with 1/4 in. (6 mm) galvanized staple.



### POSITION

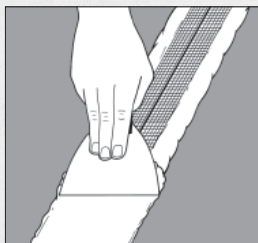
Fit ends and edges of panels closely but not forced together. Stagger panel joints from plywood base joints.

### FASTEN

Space fasteners 8 in. (203 mm) 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 in. (6 mm) cement board is used, 1/2 in. (12.7 mm) or 5/8 in. (16 mm) cement board is preferred in this application.

## Wall & Ceiling Installation

1/2 in. (12.7 mm) & 5/8 in. (16 mm) only

### FASTENING

Fasten to studs spaced 16 in. (406 mm) o.c. Space fasteners 8 in. (203 mm) o.c. for walls, 6 in. (152 mm) o.c. for ceilings. Fit ends and edges of panels closely but not forced together.

- Wood framing: 1-1/2 in. (38 mm) hot-dipped galvanized roofing nails or 1-1/4 in. (32 mm). USG Durock™ Brand Tile Backer Screws for wood framing or equivalent.
- Steel framing: 1-1/4 in. (32 mm) USG 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 in. (6 mm) spacer strip or shim around lip of bathtub or shower pan to hold bottom edge of panel off the fixture.

### FINISH

Install tile.

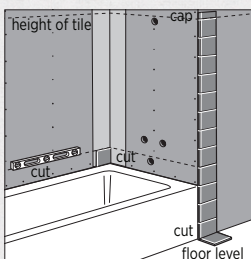
See SA932EG for finishing recommendations to nontiled cement board.

## Planning Your Tile Installation

1/4 in. (6 mm), 1/2 in. (12.7 mm), 5/8 in. (16 mm)

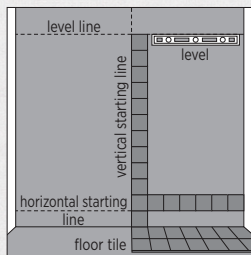
### POSITIONING

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.

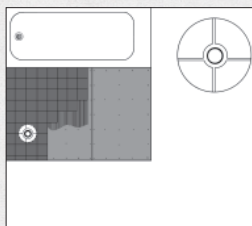


On walls where tile will reach the floor, determine whether floor is level by measuring distance to desired tile height on both sides of area to be tiled. If there is a difference (e.g., the floor is lower on one side), lay one vertical row of tile from highest point down to floor. Affix tiles with dabs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

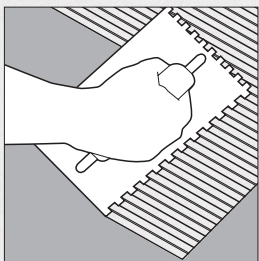


On bathroom floors, start by placing full tiles in front of bathtub or shower and along the adjoining wall to avoid cut tiles in this highly visible area.

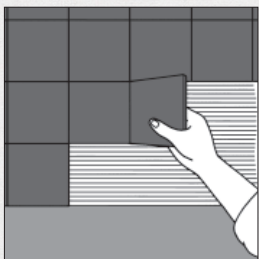


## Installing Ceramic Tile

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.

## **CUSTOMER SERVICE**

800 621-9523

## **TECHNICAL SERVICE**

800 USG.4YOU (874-4968)

## **PRODUCT INFORMATION**

See [usg.com/edgeguard](http://usg.com/edgeguard) for the most up-to-date product information.

### **DANGER**

Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause cancer by inhalation of respirable crystalline silica. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use only in a well-ventilated area, wear a NIOSH/MSHA-approved respirator. Wear protective gloves/protective clothing/eye protection. If swallowed, inhaled, or skin irritation occurs get medical attention. If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Dispose of in accordance with local, state, and federal regulations. For more information call Product Safety: 800 507-8899 or see the SDS at [usg.com](http://usg.com)

**KEEP OUT OF REACH OF CHILDREN.**

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### **SAFETY FIRST!**

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