

# USG DUROCK™ BRAND ULTRALIGHT FOAM TILE BACKERBOARD



## DESCRIPTION

- Lightweight, waterproof and vapor retardant
- Rugged facer on extruded foam core
- Fastens without washers
- Cuts easily with utility knife and dust free
- Suitable for continuous-use steam shower
- Ideal for use with USG Durock™ Brand Shower System components

## PRODUCT DATA

USG Durock™ Brand UltraLight Foam Tile Backerboard offers architects, builders and tile contractors a strong, lightweight, waterproof and vapor-retardant tile base for wet areas Res1, Res2, Res3, Res4, Com1, Com2, Com3, Com4, as defined by the *Tile Council of North America Handbook 2014*. The board is readily applied over wood or steel framing spaced 16" o.c. with corrosion-resistant wood or steel screws or hot-dipped galvanized roofing nails. Unlike other foam boards, washers are not required for installation.

### Sizes and Packaging

Size (thickness x width x length)	Units (pcs) <sup>1</sup>
1/4" x 3' x 5'	60
1/2" x 3' x 5'	50
1/2" x 4' x 8'	25
5/8" x 3' x 5'	40
1" x 25" x 8'	15
1-1/2" x 25" x 8'	10
2" x 25" x 8'	8

1. Shipped in packaging units as shown.

**Standards:** USG Durock™ UltraLight Foam Tile Backerboard (core) meets International Building Code requirements up to 2" thick when tested in accordance with ASTM E84. 2"-thick panels, when finished with 4"x4" tile, pass full-scale room corner test without ceiling assembly and without washers in accordance with NFPA286. The board also meets IAPMO PS 106 Tileable Shower Receptors and Shower Kits. It is listed in IAPMO ES report ER-0294 and ICC-ES report PMG1275. Panels meet the School Classroom criteria CA Specification 01350 (CA Department of Health Services Standard Practice for the testing of VOC emissions). Use tile-setting mortar meeting one of the following standards: ANSI A118.1, A118.4, or A118.15.

**Availability:** USG Durock™ UltraLight Foam Tile Backerboard is distributed throughout the United States and Canada. Contact a USG sales office or representative for additional information.

**Composition and Materials:** USG Durock™ UltraLight Foam Tile Backerboard is composed of a rugged thermoplastic facer and backing, combined with an extruded foam core.

**Delivery and Storage:** All materials should be delivered and stored in their original unopened package and stored in an enclosed shelter providing protection from damage and exposure to the elements. Store all USG Durock™ UltraLight Foam Tile Backerboard panels flat.

**Environmental Conditions:** In cold weather and during USG Durock™ UltraLight Foam Tile Backerboard panel and tile installation, temperatures within the building shall be maintained within the range of 40°F to 100°F.

**Interior Applications:** Wood framing shall approximate the moisture content it will reach in service prior to the application of the foam tile backerboard.

## INSTALLATION

- A. Install board with ends and edges closely abutted, but not forced together. Stagger end joints in successive courses.
- B. For flooring applications over a wood-based substrate, laminate USG Durock™ UltraLight Foam Tile Backerboard to subfloor using tile-setting mortar. Fasten to subfloor with 1-1/4" USG Durock™ Brand Tile Backer Screws for wood framing (or equivalent) or 1-1/2" hot-dipped galvanized roofing nails spaced 8" o.c. in both directions 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 panel surface to ensure firm panel contact with subfloor. Do not overdrive fasteners. Finish joints with USG Durock™ Brand Waterproofing Membrane Band (5" wide) adhered with tile-setting mortar and treat fastener penetrations with USG Durock™ Brand Sealant. Apply only enough sealant to sufficiently cover the fastener head and then strike flush using a 1" putty knife in order to minimize spread of sealant. Do not use USG Durock™ Tile Backer Tape for waterproofing or steam room applications. Use tile-setting mortar to set tiles.
- C. For wall application, fasten USG Durock™ UltraLight Foam Tile Backerboard panels to framing with specified fasteners. Drive fasteners into field of panels first, working toward ends and edges. Hold panels in firm contact with framing while driving fasteners. Space fasteners maximum 8" o.c. for walls, 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 panel surface to ensure firm panel contact with framing. Do not overdrive fasteners. Approved fasteners include: USG Durock™ Tile Backer Screws for steel framing (or equivalent), 1-1/4" and 1-5/8" for 14- to 20-gauge steel framing; USG Durock™ Tile Backer Screws for wood framing (or equivalent), 1-1/4", 1-5/8" and 2-1/4" for wood framing; nails 1-1/2" hot-dipped galvanized roofing nails. Finish joints with USG Durock™ Brand Waterproofing Membrane Band (5" wide) adhered with tile-setting mortar and treat fastener penetrations with USG Durock™ Brand Sealant. Apply only enough sealant to sufficiently cover the fastener head and then strike flush using a margin trowel or similar in order to minimize spread of sealant. Use tile-setting mortar to set tiles.
- D. Panels are cut to size by scoring both sides and snapping using a knife and straight edge.
- E. For 1", 1-1/2" and 2" thick board, fasten with 2-1/2", 3" and 3-1/2" (respectively) corrosion-resistant wafer-head screws with a minimum head diameter of 3/8" (10 mm).

For technical assistance, call USG Technical Service at 800 874-4968.

## LIMITATIONS

1. The maximum installed weight of the finish system should not exceed 15 psf.
2. Wall applications: Maximum stud spacing: 16" o.c. Framing shall be designed (based on stud properties alone) not to exceed L/360 deflection for tile and thin brick. Maximum fastener spacing: 8" o.c. for wood and steel framing.
3. Floor applications: Maximum joist spacing 19.2" o.c. The subfloor system should be designed with a deflection limit of L/360 for the span. Some finish materials may require a more rigid subassembly (such as large format tile and natural stone products). In these cases, follow the manufacturer's minimum requirements. The subfloor should be a minimum 23/32" thick APA Span-Rated Plywood or OSB with an Exposure 1 classification or better with tongue and groove or back blocked at the unsupported edges. Use only 1/4" board for floor applications.
4. 1/4" USG Durock™ UltraLight Foam Tile Backerboard is not intended for use as a shower pan base.
5. Steel framing must be 20-gauge equivalent or heavier.
6. Designed for positive or negative uniform loads up to 15 psf for hard surfaces such as tile.
7. Do not use drywall screws or drywall nails. Do not use drywall joint tape.
8. Do not use 1/4" USG Durock™ UltraLight Foam Tile Backerboard as the sole substrate in wall applications. Minimum board thickness for open stud wall framing with studs spaced 16" o.c. is 1/2" thick.
9. USG Durock™ UltraLight Foam Tile Backerboard should not be used with vinyl flooring, carpet or any other types of polymer-based flooring.
10. USG Durock™ UltraLight Foam Tile Backerboard is not intended for use as a structural panel.
11. Tile should not be installed with organic mastics on USG Durock™ UltraLight Foam Tile Backerboard.
12. In conditions that require vapor consideration, design professionals and/or architects should use caution to prevent double vapor barriers. USG Durock™ UltraLight Foam Tile Backerboard is vapor retardant.
13. Product should not be exposed to temperatures exceeding 212°F (100°C).
14. Product is not compatible with organic solvents or organic-based adhesives.

**LIMITATIONS CONT.**

15. For swimming pool areas or steam shower applications, the design professional should consider fasteners with increased corrosion resistance to account for exposure to pool chemicals and/or cleaning agents.
16. Panels have not been tested for use in exterior applications.
17. The location and detailing of control joints is the responsibility of the design professional. The proper use of control joints will accommodate stresses within and placed upon the tile backer to minimize the chances for development of cracks and joint ridges.

**TECHNICAL DATA**

USG Durock® Brand UltraLight Foam Tile Backerboard								
Property	Unit of measure	ASTM test method	1/4"	1/2"	5/8"	1"	1-1/2"	2"
Weight	psf	C473	0.31	0.35	0.38	0.50	0.60	0.71
Hydrostatic pressure resistance	Pass/fail	ANSI A118.10	Pass	Pass	Pass	Pass	Pass	Pass
Fungus and micro-organism growth resistance	Pass/fail	ANSI A118.10	Pass	Pass	Pass	Pass	Pass	Pass
Shear bond strength (7d dry, 7d wet)	psi	ANSI A118.10	>50	>50	>50	>50	>50	>50
Nail pull resistance	lbs, (0.375" head diameter, wet or dry)	CT325	>60	>60	>60	>60	>60	>60
Floor System Service Rating	Passes cycles 1-6	C627	Residential*	N/A	N/A	N/A	N/A	N/A
Room corner test	Pass/fail	NFPA 286	Pass	Pass	Pass	Pass	Pass	Pass
Surface-burning characteristics (core)	Flame/smoke	E84	10/250	10/250	10/250	10/250	10/250	10/250
Flexural strength (16" span, 12" wide)	lbs	C203	>35	>45	>55	>75	>90	>110
Linear expansion	%	D1037	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Impact load test on walls	Pass/fail	CSA B45.5/IAPMO Z124	N/A	Pass	Pass	Pass	Pass	Pass
Water vapor permeance	Perm	E96 procedure E (100°F, 90% RH)	N/A	<0.1	<0.1	<0.1	<0.1	<0.1

**FLOOR SYSTEM SERVICE RATING**  
 1/4" USG DUROCK™  
 ULTRALIGHT FOAM TILE  
 BACKERBOARD TESTED  
 AT THE TILE COUNCIL  
 OF NORTH AMERICA  
 PER ASTM C627

Joist spacing (In)	Plywood or OSB	Minimum tile size	Rating
16	23/32"	2" x 2"	Residential
19.2	23/32"	4" x 4"	Residential

**SUBMITTAL APPROVALS**

Job Name	
Contractor	Date

**PRODUCT INFORMATION**

See usg.com for the most up-to-date product information.  
 Product safety information: 800 507-8899 or usg.com. Customer Service: 800 USG-4YOU (874-4968).  
**KEEP OUT OF REACH OF CHILDREN.**

**TRADEMARKS**

The trademarks USG, DUROCK, IT'S YOUR WORLD. BUILD IT., the USG logo, the design elements and colors, and related marks are trademarks of USG Corporation or its affiliates.

**NOTE**

The information in this document is subject to change without notice. USG Corp. assumes no responsibility for any errors that may inadvertently appear in this document. Consult your USG 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/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation.

CB655-USA-ENG/rev. 1-17  
 © 2017 USG Corporation  
 and/or its affiliates.  
 All rights reserved.

Manufactured by  
 United States  
 Gypsum Company  
 550 West Adams Street  
 Chicago, IL 60661

800 USG-4YOU  
 800 (874-4968)  
 usg.com

