

# USG FIBEROCK® BRAND AQUA-TOUGH™ AR INTERIOR PANEL



## FEATURES & BENEFITS

### Gypsum-fiber abuse-resistant panels outperform paper-faced gypsum board in abuse-prone areas

- Aqua-Tough™ panels provide increased resistance to moisture and mold
- No face paper to scratch or tear
- Resist denting, breaking and puncturing, even in high-traffic areas
- Provide excellent fire resistance
- Offer an economical alternative to concrete block and plaster construction
- Ideal for institutional, commercial and residential interiors
- Certified, recycled content of 97 percent

## DESCRIPTION

USG Fiberock® Brand Aqua-Tough™ AR Interior Panels are engineered to provide increased resistance to moisture, mold, abrasion, indentation and penetration for interior walls and ceilings in demanding construction applications. These Gypsum-fiber panels are designed to outperform paper-faced gypsum board. Strong, solid and durable, they are approved for use in wet areas, including residential showers and tub surrounds. They also resist denting, breaking and puncturing—even in high-traffic areas. USG Fiberock Aqua-Tough AR Interior Panels are code approved for use in noncombustible construction. They have exceptional surface-burning characteristics (ASTM E84, Flame Spread 5, Smoke Developed 0) and fire resistance (ASTM E119). 15.9mm. USG Fiberock Aqua-Tough AR Interior Panels may be used in lieu of Type X gypsum panels in over 50 fire-rated wall assemblies as listed in the Underwriters Laboratories Inc. (UL) Fire Resistance Directory under “Type FRX-G.”

## ADVANTAGES

**Abuse Resistant:** Engineered to provide increased resistance to abrasion, indentation and penetration, this panel outperforms paper-faced or glass mat-faced panels, with no paper face to tear or scratch.

**Water Resistant:** Water resistant through the core and suitable for use in wet areas including residential showers and tub surrounds.

**Mold Resistant:** In independent lab tests per ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber, USG Fiberock Aqua-Tough AR Interior Panels earn the highest score: 10.

**Fire Resistant:** Superior fire resistance and exceptional surface-burning characteristics. The 15.9mm panel is UL Classified for fire resistance (FRX-G) and listed in more than 50 UL wall designs.

**Finishing Flexibility:** Features a smooth, paintable surface that can also be finished with ceramic tile.

**Environmentally Friendly:** Made from 97% recycled materials.

**PRODUCT DATA  
SIZES AND PACKAGING**

Size (thickness x width x length)	Units (pcs.)
12.7 mm x 1220 mm x 2440 mm	30
12.7 mm x 1220 mm x 2745 mm	30
12.7 mm x 1220 mm x 3045 mm	30
12.7 mm x 1220 mm x 3660 mm	30
15.9 mm x 1220 mm x 2440 mm	24
15.9 mm x 1220 mm x 2745 mm	24
15.9 mm x 1220 mm x 3045 mm	24
15.9 mm x 1220 mm x 3660 mm	24

**TECHNICAL DATA**

Property	Unit of Measure	ASTM Test Method	15.9mm USG Fiberock® Brand Aqua-Tough™ AR Interior Panel	12.7mm USG Fiberock® Brand Aqua-Tough™ AR Interior Panel
Flexural Strength	lbf	C473	> 155	>110
Compressive Strength	psi	n/a	> 500	>500
Nail-Pull Resistance	lb (10 mm head diameter, dry)	C473	> 145	>120
Weight	psf	C473	3.1	2.4
Mold Resistance	-	D3273	10 (no growth)	10 (no growth)
Surface-Burning Characteristics	flame/smoke	E84	5/0	5/0
Thermal	"R"/k value	C518	-	30/1.84

Compliance with Standards: Meets ASTM C1278.  
Edge Configuration: Long edges tapered; ends cut square.

**ABUSE-RESISTANT PERFORMANCE**

ASTM C1629 Performance	Units (pcs.)
*Abrasion	Level 1
Indentation	Level 1
Soft Body Impact	Level 2
Hard Body Impact	Level 1

\* With a standard primer and two coats of finish paint, USG Fiberock® Brand Aqua-Tough™ AR Interior Panels will achieve level 3 abrasion resistance.

**GOOD DESIGN PRACTICES**

1. USG Fiberock® Brand Aqua-Tough™ AR Interior Panel are designed for interior use only.
2. Panels may be attached to wood or steel-stud framing and furring channels.
3. For abuse-resistant or fire-resistant construction, 20-gauge or heavier studs are required.
4. For improved abuse-resistant system performance, USG Boral ME Metal Beads and Trims or USG Sheetrock® and Beadex® Brand Paper-Faced Metal Corner Bead and Trim and USG Sheetrock® Brand Tuff-Hide™ Primer-Surfacer are recommended.
5. Where USG Fiberock® Brand interior panel systems abut or intersect dissimilar construction or building structural components, isolation techniques, such as caulk and/or slip tracks, are required.
6. USG Boral Control joints should be spaced at a maximum of 8.5 m o.c. in walls and above door jambs; 8.5 m o.c. in ceilings (50 ft. with perimeter relief) and at L-, T- or U-intersections. Location of control joints is the responsibility of the professional/architect.

**GOOD DESIGN PRACTICES**

**STORAGE OF MATERIALS**

**INSTALLATION**

7. Framing members should be straight and true. Studs and joints must be in true alignment; bridging, firestops, etc. must not protrude beyond plane of framing. Due to strength and rigidity of USG Fiberock interior panels, it may be difficult to compensate for out-of-plane imperfections in framing.

All materials shall be delivered in their original unopened packages and stored in an enclosed shelter providing protection from damage and exposure to the elements. All materials should be stored flat.

- A. Position all ends and edges of all gypsum-fiber panels over framing members, except when joints are at right angles to framing members, as in perpendicular application or when end joints are back-blocked.
- B. Install panels vertically whenever possible. For horizontal panel application, panels must be gapped 1.6 mm. End joints should be loosely fit. Install panels a minimum of 10 mm. above the floor. To minimize end joints, use panels of maximum practical lengths. Stagger end joints in successive courses with joints on opposite sides of a partition placed on different studs.
- C. Attach panels to framing supports by: standard single nailing method, double nailing method, or power-driven screws. Space fasteners not less than 10 mm. from edges and ends of panels and drive as recommended for specified fastening method. Drive fasteners in field of panels first, working toward ends and edges. Hold panel in firm contact with framing while driving fasteners. Drive fastener heads slightly below surface of gypsum-fiber panels in a uniform dimple.
- D. Concealment of joints, fasteners and trims in areas that will be painted: For taping use USG Sheetrock® Brand Paper Joint Tape with USG Sheetrock® Brand Durabond® Joint Compound. For finishing use a USG Boral Sheetrock® Brand All Purpose Joint Compound. In areas that will be tiled, finish joints with USG Durock™ Brand Tile Backer Tape and latex-fortified mortar or Type I mastic.
- E. For non-fire-rated partition designs, refer to the table below for fastener spacing. For UL fire-rated partition designs, refer to the specific UL design for proper fastener spacing.

	Thickness	Application	Frame Spacing	Fastener Spacing	
				Nails	Screws
Ceilings (Wood- or Steel-Framed)	12.7 mm	Parallel	406 mm o.c.	180 mm o.c.	305 mm o.c.
	12.7mm	Perpendicular	406 mm o.c.	180 mm o.c.	305 mm o.c.
	15.9 mm	Parallel	406 mm o.c.	180 mm o.c.	305 mm o.c.
	15.9 mm	Perpendicular	610 mm o.c.	180 mm o.c.	305 mm o.c.

	Thickness	Frame Spacing*	Fastener Spacing	
			Nails	Screws
Walls	12.7 mm	610 mm o.c.	203 mm o.c.	305 mm o.c.
	12.7 mm	406 mm o.c.	203 mm o.c.	406 mm o.c.
	15.9 mm	610 mm o.c.	203 mm o.c.	305 mm o.c.
	15.9 mm	406 mm o.c.	203 mm o.c.	406 mm o.c.

F. If waterproofing is desired, use USG Durock™ Brand Waterproofing Membrane. See USG Durock™ Brand Waterproofing Membrane (CB595) for product information. For fluid-applied waterproofing, use USG Durock™ Brand Liquid Waterproofing and Crack Isolation Membrane. See USG Durock™ Brand Liquid Waterproofing and Crack Isolation Membrane (CB817) for product information.

G. Install trim at all internal and external angles formed by the intersection of either panel surfaces or other surfaces. Apply (metal) (paper-faced) corner bead to all vertical or horizontal external corners in accordance with manufacturer's directions.

---

## SURFACE TREATMENT

---

### OPTION A

USG Fiberock interior panels must be surface treated with one of the options, in accordance with USG Boral ME recommendations. Option A may be used when surface uniformity is not of concern, (i.e., the surface uniformity stipulation has been waived by the job managerial and/or inspection authorities and conditions described in Option B (below) do not exist.)

Apply a skim coat of joint compound at a trowel-applied consistency to entire surface and let dry using a USG Boral Sheetrock® Brand ready-mix all purpose type joint compound or USG Sheetrock® Brand Cover Coat Compound.

Note: When properly prepared as a skim coating material, these ready mixed joint compounds can be used in a skim coat operation.

The skim coated surface must be smooth and free of tool marks and ridges (a light sanding of the skim coating may be necessary to remove tool marks). Remove sanding dust from surface, then apply one coat (5-10 mils Wet Film Thickness) of USG Sheetrock® Brand First Coat™ Primer over the entire surface. Allow surface to dry prior to decorating.

Note: A single full coverage coat of USG Boral Sheetrock® Brand Tuff-Hide Primer-Surfacer may be used in lieu of a skim coat of joint compound and the application of USG Sheetrock® Brand First Coat Primer.

---

### OPTION B

Recommended in areas where one or more of the following conditions exist:

- 1) Exposure to critical/ severe lighting.
  - 2) Paints with sheen levels other than flat are specified.
  - 3) High value spaces exist.
  - 4) Final surface smoothness and uniformity are expected and/or specified.
- Apply two separate skim coat of joint compound at a trowel-applied consistency to entire surface and let dry using a USG Boral Sheetrock® Brand ready-mix all purpose type joint compound or USG Sheetrock® Brand Cover Coat Compound.

Note: When properly prepared as a skim coating material, these ready mixed joint compounds can be used in a skim coat operation.

The skim coated surface must be smooth and free of tool marks and ridges (a light sanding of the skim coating may be necessary to remove tool marks). Remove sanding dust from surface, then apply one coat (5-10 mils Wet Film Thickness) of USG Sheetrock® Brand First Coat™ Primer over the entire surface. Allow surface to dry prior to decorating.

Note: A single full coverage coat of USG Boral Sheetrock® Brand Tuff-Hide Primer-Surfacer may be used in lieu of the second skim coat of joint compound and the application of USG Sheetrock® Brand First Coat Primer.

---

## VENEER PLASTER

Joints should be treated with USG Sheetrock® Brand Paper Joint Tape and USG Sheetrock® Brand Easy Sand™ or Durabond® Joint Compound. Joint surfaces must be treated with a separate coat of joint compound to fully conceal the paper tape. When the joint is completely dry, treat entire wall surface with USG plaster bonder according to application directions. Then apply USG Diamond® Veneer Basecoat Plaster from 1.6 mm to 2.4 mm. thickness using a scratch and double-back technique. This is accomplished by applying a light, thin coat over the entire area, and immediately doubling back with plaster from the same batch to achieve full thickness. When basecoat plaster is firm, broom the surface to leave it

rough and open for finish. With basecoat set and partially dry, apply USG Imperial® Veneer Finish Plaster using a scratch and double-back technique. Complete finishing when material is firm. Leave finished surface smooth and dense for decorating.

---

**CERAMIC TILE APPLICATIONS**

USG Fiberock Aqua-Tough AR Interior Panels are acceptable for use as a ceramic tile backer. Refer to the TCNA Handbook for specific system and finishing requirements.

---

**SURFACE TREATMENT**

1. USG Fiberock Aqua-Tough AR Interior Panels are designed for interior use only and should not be used in exterior applications.
2. Panels should not be exposed to sustained temperatures in excess of 50 °C.
3. For fire-resistant or abuse-resistant construction over steel framing, a minimum of 20-gauge steel framing is required.