

USG FIBEROCK® BRAND AR INTERIOR PANELS



FEATURES & BENEFITS

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

- 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 AR Interior Panels are engineered to provide increased resistance to 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 resist denting, breaking and puncturing—even in high-traffic areas. USG Fiberock 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). 15.9 mm USG Fiberock AR Interior Panels may be used in lieu of Type X gypsum panels in over 50 fire-rated wall assemblies as listed in the UL Fire Resistance Directory

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.

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 AR Interior Panels earn the highest score, 10.

Fire Resistant: Superior fire resistance and exceptional surface burning characteristics. The 15.9 mm 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 3050 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 3050 mm	24
15.9 mm x 1220 mm x 3660 mm	24

TECHNICAL DATA

Property	Unit of Measure	ASTM Test Method	15.9 mm USG Fiberock® Brand Aqua-Tough™ AR Interior Panel	12.7 mm 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 AR Interior Panels will achieve level 3 abrasion resistance

GOOD DESIGN PRACTICES

1. USG Fiberock AR Interior Panels 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 Beads and Trims or USG Sheetrock® and Beadex® Brand Paper-Faced Metal Corner Bead and Trim and USG Boral ME Sheetrock® Brand Tuff-Hide™ Primer-Surfacer are recommended.
5. Where USG Fiberock AR Interior Panels systems abut or intersect dissimilar construction or building structural components, isolation techniques, such as caulk and/or slip tracks, are required.
6. Control joints should be spaced at a maximum of 8.5 m. on center in walls and above door jambs; 8.5 m on center in ceilings 15.25 m with perimeter relief) and at L-, T- or U-intersections. Location of control joints is the responsibility of the professional/architect.

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 AR Interior Panels, it may be difficult to compensate for out-of-plane imperfections in framing.

STORAGE OF MATERIALS

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.

INSTALLATION

- 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 of an inch. End joints should be loosely fit. Install panels a minimum of 9.5 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 9.5 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 tables below for fastener spacing. For UL fire-rated partition designs, refer to the specific UL design for proper fastener spacing.

	Fastener Spacing				
	Thickness	Application	Frame Spacing	Nails	Screws
Ceilings (Wood- or Steel-Framed)	12.7 mm	Parallel	406 mm o.c.	178 mm o.c.	305 mm o.c.
	12.7 mm	Perpendicular	406 mm o.c.	178 mm o.c.	305 mm o.c.
	15.9 mm	Parallel	406 mm o.c.	178 mm o.c.	305 mm o.c.
	15.9 mm	Perpendicular	610 mm o.c.	178 mm o.c.	305 mm o.c.

	Fastener Spacing			
	Thickness	Frame 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.	610 mm o.c.
	15.9 mm	406 mm o.c.	203 mm o.c.	406 mm o.c.

- F. 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

USG Fiberock AR Interior Panels must be surface treated with one of the options, in accordance with USG 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.

OPTION A

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 Sheetrock® Brand Tuff-Hide Primer-Surfacers 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 Sheetrock® Brand Tuff-Hide Primer-Surfacers may be used in lieu of the second skim coat of joint compound and the application of USG Sheetrock® Brand First Coat Primer.

OPTIONAL VENEER PLASTER

Joints should be treated with USG Sheetrock® Brand paper joint tape and USG Sheetrock® Brand Easy Sand™ or Durabond® Setting-Type 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 tight, 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

Joints should be treated with USG Sheetrock® Brand paper joint tape and USG Sheetrock® Brand Easy Sand™ or Durabond® Setting-Type Joint Compound. Joint surfaces must be treated with a separate coat of joint

LAMITATIONS

1. USG Fiberock 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.