

FIBEROCK® Panels



VHI Abuse-Resistant

FIBEROCK® Brand VHI (Very High Impact) 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 or plaster construction
- Ideal for institutional, commercial, and residential interiors

Description

FIBEROCK VHI Abuse-Resistant Panels are engineered with reinforcing fiber mesh to provide increased resistance to abrasion, indentation, and penetration for interior walls and ceilings in demanding construction applications. These strong, solid, and durable high-performance panels resist denting, breaking, and puncturing—even in high-traffic areas—outperforming paper-faced gypsum board.

These panels provide exceptional surface burning characteristics (ASTM E84, Flame Spread 5, Smoke Developed 0) and fire resistance (ASTM E119). 5/8" panels may be used in lieu of Type X gypsum panels in over 50 "Type FRX-G" fire-rated wall assemblies as listed in the UL Fire Resistance Directory.

FIBEROCK VHI Abuse-Resistant panels are installed and finished using standard drywall techniques.

Advantages

Environmentally friendly Made from 95 percent recycled material.

Reduced life-cycle costs Ensure durability and reduced maintenance costs.

Quick, dry installation Score-and-snap to size; attach quickly with screws or nails and standard drywall installation techniques.

Increased strength Reinforced throughout for greater strength, stiffness, and abuse resistance than paper-faced gypsum board.

Improved resistance to fastener pull-through Provide superior nail holding compared to paper-faced gypsum board.

Mold and mildew resistance Provide superior resistance to mold growth.

Excellent fire resistance Certified by Underwriters Laboratories as a Type X panel, 5/8" panels can be used in many fire-rated wall assemblies. For code compliance, including use in non-combustible construction, refer to our evaluation reports.

Limitations

1. FIBEROCK VHI Abuse-Resistant Panels require weather-protected storage. Not designed for exterior exposure.
2. Panels should not be used in wet areas.
3. Panels should not be exposed to sustained temperatures in excess of 125 °F (51.6 °C).
4. Minimum 20-gauge steel framing is required.

WARNING: Store all FIBEROCK panels flat. Panels are heavy and can fall over, causing serious injury or death. Do not move unless authorized.

Product Data

Dimensions

Thickness/in.	Weight/lbs./ft. ²	Length/ft.
1/2	2.4	8, 9, 10, 12
5/8	2.9	8, 9, 10, 12

Physical Properties

Nail-Pull Resistance (lb_f)

Thickness	FIBEROCK VHI Panel	Gypsum Wallboard Standard Specification
5/8" (15.9 mm)	195	87

Flexural Strength (Ib_f)

Thickness	FIBEROCK VHI Panel Either Direction	Gypsum Wallboard Standard Specification	
		Across Panel Width	Parallel to Panel Length
5/8" (15.9 mm)	243	147	46

Bending Radius*

Product	Bending Radius
5/8" FIBEROCK VHI Panel	> 50 ft.

Note Panels applied perpendicular to framing. Panels are not to be wetted for application. Panels should be fastened 16" o.c. starting in the center of the panel and working out toward the edges.

Compliance with Standards

Meets ASTM C1278; meets CAN/ULC-S101 and -S102. Meets or exceeds the physical properties of ASTM C36 and CAN/CSA A82-27.

Fire Hazard Classification

Flame spread 5, smoke developed 0.

Edge Configuration

Long edges tapered; ends cut square.

Comparative Abuse-Resistant Performance**Abrasion****Surface Abrasion—ASTM D4977 (modified)**

Number of Cycles	5/8" FIBEROCK VHI	5/8" Paper-Faced Drywall with 0.010" Plastic Laminate	5/8" Type X
30	0.284"	0.500"	0.462"

Note Values reflect the average abrasion depth following the number of cycles shown. Testing performed using the abrasion test apparatus specified in ASTM D4977 with a 25 lb. added weight. Independent testing performed by H. P. White Laboratories, Inc. Three identical specimens were tested for each product.

Indentation**Surface Indentation—ASTM D5420**

5/8" FIBEROCK VHI	5/8" Paper-Faced Drywall with 0.010" Plastic Laminate	5/8" Type X
0.11"	0.16"	0.21"

Note Values reflect the average measured depth of indentation. Testing performance using the Gardner test apparatus specified in ASTM D5420, with 5/8" die at 72 in.-lb. drop energy. Independent testing performed by H. P. White Laboratories, Inc. Three identical specimens were tested for each product.

Hard-Body Impact

5/8" FIBEROCK VHI	5/8" Paper-Faced Drywall with 0.010" Plastic Laminate	5/8" Type X
175 ft.-lbs.	80 ft.-lbs.	27 ft.-lbs.

Note Values reflect the minimum impact energy required for a 2" steel pipe cap to completely penetrate the panel when supported by 16" o.c. framing. Independent testing performed by H. P. White Laboratories, Inc. Three identical specimens were tested for each product.

Soft-Body Impact (Based on ASTM E695)

Criterion	5/8" FIBEROCK VHI	5/8" Paper-Faced Drywall with 0.010" Plastic Laminate	5/8" Type X
Structural Failure	>480 ft.-lbs.*	300 ft.-lbs.	120 ft.-lbs.

* No failure observed up to apparatus capacity of 480 ft.-lbs.

Note Values reflect the minimum impact energy required for the following: "Surface Failure"—First evidence of creasing or other damage at panel surface. "Structural Failure"—Complete penetration through panel. Testing performed in accordance with ASTM E695 using a 60 lb. leather bag. Panels supported by 16" o.c. framing. Independent testing performed by H. P. White Laboratories, Inc. Three identical specimens were used for each product.

Good Design Practices

1. FIBEROCK VHI Abuse-Resistant Panels are designed for interior use on walls and ceilings.
2. Panels can be attached to wood or steel framing (20 gauge or heavier required).
3. Use SHEETROCK® Brand Joint Tape and SHEETROCK® Brand DURABOND® Setting-Type Joint Compound for embedment of tape (do not use fiberglass tape). Standard ready-mixed compounds (non-lightweight) can be used for the balance of finishing. For areas subject to critical lighting conditions, a level 5 gypsum board finish is recommended. Please refer to Gypsum Association Guidelines GA-214-96 and USG publications J510 and J1613.
4. For additional abuse resistance, SHEETROCK™ Brand Paper Faced Metal Corner Bead and Trim and SHEETROCK® Brand TUFF-HIDE™ Primer-Surfacer are recommended. (See Section 3.4.1 in Architectural Specifications for more information).
5. Where FIBEROCK 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 30 ft. on center in walls and above door jambs; 30 ft. on center in ceiling design (50 ft. with perimeter relief) and at L-, T-, or U-intersections. Location of control joints is the responsibility of the design professional/architect.
7. For veneer plaster applications, see Section 3.4.2 in Architectural Specifications.
8. 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 FIBEROCK panels, it may be difficult to compensate for out-of-plane imperfections in framing.

Submittal Approvals

Job Name		
Contractor		Date

Trademarks

The following trademarks used herein are owned by United States Gypsum Company: DIAMOND, DURABOND, EASY SAND, FIBEROCK, IMPERIAL, SHEETROCK, TUFF HIDE. SNAPPER SHEAR is a trademark of Pacific International Tool & Shear.

Note

Products described here may not be available in all geographic markets. Consult your U.S. Gypsum 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 and industrial hygiene practices during handling and installation of all products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

