

Wood Flooring Application

Mechanically Fastened Wood Flooring

When mechanically fastening wood flooring, fasteners must be long enough to penetrate through the FIBEROCK Brand Underlayment and into the subfloor. The length of the fasteners should be determined by adding the thickness of the underlayment to the length of the fastener recommended by the flooring manufacturer. Follow the recommendations provided

above under "Fastening FIBEROCK Brand Panels for Resilient Floor Covering" for underlayment installation.

Glued-Down Wood Flooring

Glue-down installation of engineered or solid hardwood flooring must be done in strict accordance with the manufacturer's installation instructions. Follow the recommendations provided above under "Fastening FIBEROCK Brand Panels for Resilient Floor Covering" for underlayment installation.



For warranty or product information and literature:
(800) USG-4YOU (874-4968)
www.usg.com

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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 installing 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.



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FIBEROCK® Brand Underlayment

USG

AQUA
TOUGH™

installation guide

Underlayment installation
for vinyl, ceramic tile,
hardwood flooring, laminate
flooring, and carpeting.

Everywhere, every floor.™



FIBEROCK® Brand Underlayment—AQUA TOUGH™ For all the floors in your home

FIBEROCK Brand Underlayment—AQUA-TOUGH is the all-purpose substrate engineered to meet every underlayment need throughout your entire home. Under ceramic tile, it provides the water-resistance needed to stand up to use in bathrooms, kitchens, and entryways. Under vinyl, carpeting, laminate flooring, and hardwood flooring, it offers a smooth, flat, tough surface with no bumps or ridges to show through your flooring. That means that you can now rely on a single underlayment product for use throughout your entire home—in both wet and dry areas—regardless of the flooring materials chosen.

Integral water resistance

This remarkable product is completely different from most commonly used wood-based substrates. Manufactured from a specially treated combination of gypsum and cellulose fibers, FIBEROCK Brand AQUA-TOUGH Underlayment has a tough, uniform, water-resistant composition that helps prevent the problems typically associated with plywood, oriented strand board (OSB), and lauan underlayments. It resists the swelling and warping often seen with wood-based products.

Easy to install

FIBEROCK Brand Underlayment can be easily scored and snapped with minimal effort. In fact, the International Certified Floorcovering Installer Association awarded FIBEROCK Underlayment the “Installer Friendly Seal.”

Proven performance

To provide you with even more assurance, FIBEROCK Brand Underlayment is warranted for 15 years against buckling, warping, delamination, cracking and splitting upon fastening. It has been tested by the Tile Council of America (using the Robinson Floor Method) and approved for residential and light commercial use (as defined by TCA).

Environmentally friendly

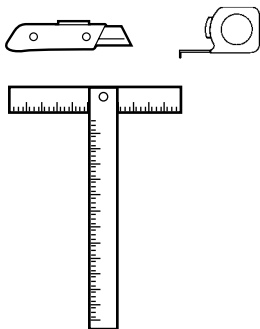
Conventional wood-based underlayments may use endangered, old-growth trees. FIBEROCK Brand Underlayment offers an environmentally friendly alternative to wood-based underlayments because it is made from 95 percent recycled material. In recognition of this environmentally sound product, United States Gypsum Company earned the Green Cross certificate from Scientific Certification Systems—a leading national testing company that evaluates manufacturers' environmental claims.

Introduction

Installing FIBEROCK Brand Underlayment is quick and easy. Just follow the simple installation steps to create a perfect base for your floor covering. Do not use on concrete subfloors or over heavily cushioned, thick-foam backed, and perimeter-adhered vinyl flooring.

Tools

In general, common tools like those shown below are used to install FIBEROCK Brand Underlayment. Specialized tools may be required for working with some floorings, such as ceramic tile.



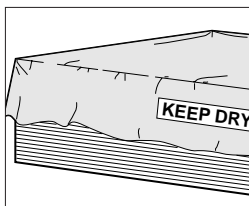
Fasteners

FIBEROCK Underlayment is easily applied over framing with hot-dipped galvanized roofing or ring shank underlayment nails; corrosive-resistant wood screws or 1/4" crown chisel-point staples. Choose a fastener length that is approximately equal to the combined thickness of the underlayment and subfloor. Do not allow fasteners to penetrate through subfloor.

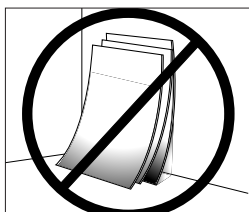
Storage

- Protect panels from the elements with adequate covering during delivery and storage.
- Store panels flat on an even, dry surface. Allow panels to acclimate to the temperature and humidity at the job site prior to installation.
- Handle panels in an upright position to prevent breakage.

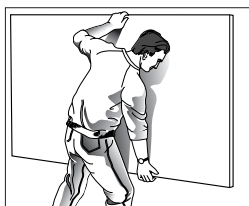
Correct



Incorrect



Correct



Incorrect



Preparation

Crawl Space Requirements

Crawl-space requirements may vary based on geographic location. Consult local building codes for more specific information.

Subfloor Requirements

The subfloor system should be designed for a deflection limit of $L/360$ for the span. The subfloor should be APA Span-Rated Plywood or OSB with an Exposure 1 classification or better with T&G or back blocked at the unsupported edges.

Minimum Subfloor Thickness

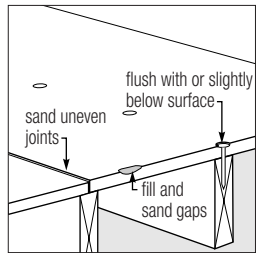
Resilient Flooring Application

- Joist spacing at 16", 19.2", and 24" o.c., 23/32" subfloor

Ceramic Tile Application

- Joist spacing at 16" o.c., 19/32" subfloor
- Joist spacing at 19.2" o.c., 23/32" subfloor
- Joist spacing at 24" o.c., 23/32" subfloor

Wood Subfloor



- Sand all uneven subfloor joints.
- Reset any protruding fasteners. All fasteners should be flush with or slightly below the subfloor surface.
- Fill any subfloor voids or depressions with patching compound. Floor must be flat and well-secured.
- Remove all debris from subfloor and vacuum carefully to eliminate excess dust and dirt.
- Make sure floor is completely dry before installing underlayment. Excess moisture in the subfloor may cause underlayment joints to show through floor covering.

Existing Vinyl Floor

CAUTION: Do not install FIBEROCK Brand Underlayment over heavily cushioned, thick-foam backed, or perimeter-fastened floor coverings.

- Ensure existing floor is level and meets appropriate design requirements.
- Make sure that back of existing vinyl covering is fully adhered and bonded.
- Repair any missing or broken tiles, curling seams, severe gouges, or protrusions by filling with floor leveler.

Panel Cutting and Layout

1 Cutting FIBEROCK Brand Panels

For most cuts, use the “score and snap” method. Score one side of the panel twice with utility knife, then snap downward along the score line. Smooth rough edges with rasp.



2 Cutouts

For more difficult cuts, combine the “score and snap” method with use of a handsaw or low rpm power saw. To cut holes in panels (for plumbing, etc.) use a holesaw, keyhole saw, or variable speed jigsaw.

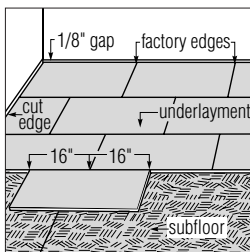
3 Panel Layout

Place panels fastener marking up. Panels should be installed at normal room temperature and humidity conditions.

Lay panels so that cut edges are against the wall, with factory edge meeting factory edge (see diagram). Leave a 1/8” space between panel and wall.

Lightly butt panels together; do not force. The gap between panels should be no more than 1/32” (0.8 mm).

Offset joints 8”-12” (203 mm 305 mm) from the subfloor joints. Stagger the joints a minimum of 16” o.c. so that four panel corners never meet.



Avoid heavy traffic and moving heavy items across the underlayment panels prior to installation of the final floor covering. Allow a minimum of 24 hours after floor-covering installation before placing heavy appliances or furniture on floor.

Panel Installation

Resilient Floor Application

1 Fastening

Use hot-dipped galvanized roofing or ring-shanked underlayment nails, corrosive-resistant wood screws or chisel-point staples with 1/4" minimum crown for attachment. Avoid resin-, rosin-, and cement-coated fasteners that can discolor vinyl flooring.

Choose a fastener length that is approximately equal to the combined thickness of the underlayment and subfloor. Do not allow fasteners to penetrate through subfloor.

Hold panels flat and in tight contact with the subfloor while fastening. When using a pneumatic tool, apply pressure on the gun to hold the panel tightly to the subfloor before shooting the fastener in. Do not hold the trigger and bounce the tool.

Follow the fastener pattern on the panel face, spacing fasteners as follows:

- 1/2" (12.8 mm) from the panel edge;
- every 2" (51 mm) or less around the perimeter; and
- 4" (101 mm) in the field.

Ensure that all fasteners are flush with or slightly below the underlayment surface. Avoid countersinking too deeply, which can cause movement of the panel off of the subfloor, resulting in joint show-through.

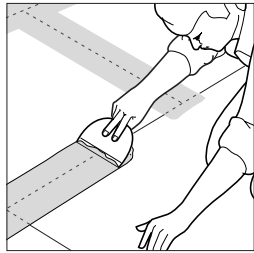
Fasten one panel at a time. Begin at one end and fan out across the panel. *Do not tack corners.*

Improper fastening of underlayment panels is one of the primary factors in joint and fastener-head show-through in vinyl flooring.

2 Finishing FIBEROCK Brand Underlayment Joints

Sand uneven panel joints until they are smooth and even. If you cannot feel the seam, sanding is not required. Avoid over-sanding.

Apply compound to the joints between panels to create a smooth, flat surface. This may require more than one coat. Use an approved patching compound recommended by the vinyl flooring manufacturers. (For perimeter-bonded, felt-backed resilient flooring, joint patching may not be required. See the note on page 7 for more information.)



Allow compound to dry; sand again until smooth and even. Remove all debris from underlayment; vacuum carefully to eliminate excess dust and dirt.



You can now install your floor covering, carefully following the manufacturer's instructions.

Note: For perimeter-bonded, felt-backed resilient floor covering, joint patching is not required when installing this type of floor covering in new construction. When laying out underlayment panels, lightly butt ends together and sand all joints until they are smooth. Remove dust, dirt, and debris from the underlayment surface prior to application of floor covering.

Ceramic Tile Floor Application

1 Lamination

Laminate FIBEROCK Brand Underlayment to minimum 5/8" thick exterior grade plywood/OSB using Type I organic adhesive, latex portland cement mortar, or dry set mortar. Apply adhesive with 5/32" V-notched trowel, mortar with 1/4" square-notched trowel.



2 Fastening

Fasten underlayment to subfloor using hot-dipped galvanized roofing or ring-shanked underlayment nails, corrosive-resistant wood screws spaced 8" o.c. with perimeter fasteners 1/2" from ends and edges, or with 1/4" minimum crown chisel-point staples spaced 4" o.c. in the field and 2" o.c. around the perimeter.

3 Finishing FIBEROCK Brand Underlayment Joints

Sand uneven panel joints. Prefill all joints with tile-setting mortar or adhesive, and then immediately embed DUROCK Brand Interior Tape over the joints. Strike joints flush. Additional fill coats may be required.

4 Ceramic Tile Installation

Note: Refer to ANSI A108.4 or A108.5 for complete tile installation instructions. Refer to mortar, tile, and grout manufacturer's recommendations for proper tile type and size; mixing instructions; and set and cure times. Spread mortar with a notched trowel. Set tile units into place with a twisting motion.

For Countertops

Install minimum 3/4" exterior-grade plywood or OSB base across the wood cabinet supports. Position ends and edges over supports.

Fasten panel to base with hot-dipped galvanized roofing or ring-shanked underlayment nails or corrosive-resistant screws, spaced 8" o.c. in both directions with perimeter fasteners 1/2" from ends and edges; or with 1/4" minimum crown staples spaced 4" o.c. in the field and 2" o.c. around the perimeter. It is optional to laminate underlayment to the base using fasteners and mortar. Use latex portland cement mortar applied with a 1/4" square-notched trowel.