

GEORGIA-PACIFIC DENS-SHIELD® THE ULTIMATE TILE BACKER

Dens-Shield, The Water Moisture Resistant, Easy Handling Tile Backer. For Interior Walls, Floors, Ceilings & Countertops.

Up to the introduction of Dens-Shield in 1987, there had been no ideal product to cope with the high levels of moisture encountered in baths, showers, kitchens and other wet, high humidity areas. Before, it was often necessary to put up with the disadvantages of heavy, hard-to-work-with cementitious backer units, which do not keep water or moisture out of the stud cavity by themselves.

Now there's Dens-Shield Tile Backer. Dens Shield has an exclusive heat-cured coating designed to protect your tile installation by stopping water at the surface with a treated core embedded in the front and back by inorganic glass mats. Dens-Shield with a clean score and snap is easy to handle and install.

Moisture Resistant

The key points to Dens-Shield®'s water resistance are a heat-cured, copolymer proprietary surface coating and its proprietary silicone treated core. Its excellent vapor retardant qualities enable Dens-Shield to outperform cementitious board products.

Georgia-Pacific's unique proprietary design makes it possible for Dens-Shield* to offer:

- High resistance to wicking, mold, rot and other moisture and water-related deterioration.
- Resistance to sag makes it ideal for ceilings.
- Dimensional stability - no warping, rippling, or buckling.
- Lightweight and easy to handle. Scores and snaps cleanly with a standard utility knife.

Superior Strength

The embedded glass mats make Dens-Shield products durable and strong in both directions, and unlike competitive tile backers, Dens-Shield may be installed either parallel or perpendicular to the wall framing, resulting in fewer panel joints. All of this makes Dens-Shield tile backer easier to apply, resulting in a more permanent installation, at a lower cost.

Meets or exceed ASTM specification C 1178.

*Patents 4,810,569, 4,879,175, Patent Pending.

Easy to Install and Lightweight

Dens-Shield tile backer is comparable in weight to conventional gypsum board, and has a considerable weight advantage over alternative tile bases. It's over 33% lighter than cementitious backer units, and 83% lighter than 1" thick metal lath and cement mortar bed. Overall, that makes Dens-Shield easier to handle on the job site and faster to install.

For more information, contact Georgia-Pacific Corporation, Commercial Sales Department (DSB), P. O. Box 105605, Atlanta, Georgia 30348-5605. Or call (800)225-6119. In Georgia, call

(770)521-5587.

DESCRIPTION

For high-moisture commercial and residential application, Dens-Shield® tile backer provides outstanding performance and workability. Dens-Shield, which is covered by U.S. patents, and is backed by a Georgia-Pacific 20-year limited warranty** is easier to handle and install, and is more water-resistant than other tile backer products.

The proprietary Dens-Shield design consists of a water-barrier coating and treated core penetrated front and back by inorganic glass mats. The integral glass mats make the product durable, dimensionally stable, and lightweight: Dens-Shield tile backer is over 33 percent lighter than Portland cement board products and 83 percent lighter than 1" thick metal lath and cement plaster bed.

Tests for surface water absorption, vapor transmission, and wicking attest to Dens-Shield's superior water and moisture resistant characteristics. (See Properties Table below for details.)

Dens-Shield tile backer is ideal for use in wall and ceiling applications in commercial and residential high-moisture areas such as baths, showers, laundries, swimming pool areas and locker rooms. Dens-Shield tile backer must be installed so that tile is applied on the coated grey side of the board. Dens-Shield is suitable for counter tops, and residential as well as light commercial floor tile* applications. Dens-Shield is not suitable for exterior applications.

Dens-Shield is intended for use in wall, ceiling and floor applications. Do not use where there is prolonged exposure to temperatures exceeding 125°F and/or there is continuous exposure to extreme humidity, such as steam rooms, saunas, or fireplaces. Vapor retarders should never be installed directly behind Dens-Shield.

Dens-Shield tile backer should not be used as a base for nailing or mechanical fastening. Dens-Shield should not be installed using adhesives by themselves; use nails or screws alone or in combination with adhesive. With proper preparation, Dens-Shield is a suitable substrate for tile, paint, and wallpaper.

Dens-Shield assemblies achieve 1 and 2 hour fire ratings when tested in accordance with ASTM E 119.

Available in 5/8" Dens-Shield Fireguard®.

1/4" Dens-Shield flooring underlayment is available in 4' x 4' panels and is rated for residential and light commercial use under ceramic tile.

Minimum bending radii is 12' for 1/2" Dens-Shield and 16' for 5/8" Dens-Shield Fireguard.

*Floor Grade Tile Sizes:

Residential: 2" x 2" or larger

Light Commercial: 4" x 4" or larger

CODE COMPLIANCE

ICBO #4465

(See table below for allowable values and/or conditions of use concerning material presented in this document.)

SBCCI PST & EST #9567

BOCA #90 30

New York City:
MEA 65-88-M

Los Angeles, CA
RR 24917

Wisconsin
DIHL #910014-S

**See complete warranty copy, available from Georgia-Pacific for terms, conditions & limitations.

DENS-SHIELD® PROPERTIES (ASTM C 1178)

Thickness, nominal, inches: 1/4
Width, nominal, inches: 48
Length, nominal, inches: 48
Weight, lbs./Msf nom.: 1100
Minimum size floor tile: 2 x 2

Thickness, nominal, inches: 1/2
Width, nominal, inches: 32, 48
Length, nominal, inches: 60 or 96
Weight, lbs./Msf nom.: 2000
Flexural strength, min.
Across – lbs: 100
Parallel – lbs.: 80

Thickness, nominal, inches: 5/8
Width, nominal, inches: 48
Length, nominal, inches: 96
Weight, lbs./Msf nom.: 2550
Flexural strength, min.
Across – lbs.: 140
Parallel – lbs.: 100

Surface water absorption
(Cobb test) 1 gr. max.: <.5
Percolation test - 48 hrs.: passes
Vapor transmission, perms 3: <1.5
Humidified deflection, in.1: <2/8
Wicking resistance 4
24 hours, inches: .31
Robinson floor test rating: residential and light commercial

1. ASTM C 473 test procedure
2. Meets ICBO test requirements
3. ASTM C 355, dry cup method
4. CTI - T83

Note: Specified values are as defined in ASTM C 630. Values are based on tests conducted in accordance with ASTM C 473.

20 YEAR LIMITED WARRANTY

THE DENS-SHIELD® LIMITED WARRANTY TWENTY-YEAR LIMITED WARRANTY

GEORGIA-PACIFIC CORPORATION (“G-P”) warrants to the initial consumer purchaser (“Owner”) of Dens-Shield® Tile Backer or Dens-Shield® Fireguard® (“Dens-Shield”) that, subject to the conditions and limitations specified below, the Dens-Shield (1) will be free of manufacturing defects that make it unsuitable for its intended use; (2) will not crack, chip, or delaminate; and (3) will not decay as a result of exposure to moisture. The term of this warranty shall be for twenty (20) years commencing on the date of purchase of the Dens-Shield by the Owner or installing contractor of the Dens-Shield.

This warranty shall not apply to and G-P shall not be liable for:

- (1) Dens-Shield not stored or installed in accordance with G-P’s installation instructions, standard building practices, and all applicable building codes. Such installation instructions are available from the selling dealer and from the address below.
- (2) Damage to Dens-Shield resulting from causes other than normal use conditions, such as improper handling, misuse or abuse after installation, impact of falling objects, moisture or abuse after installation, impact of falling objects, moisture contact with the back of Dens-Shield, vandalism, earthquake, hurricane, tornado, floor, fire, other acts of God, and failure or distortion of a wall or the foundation of the structure (including settling of the structure or movement of framing members).
- (3) Any defect, damage, or failure or any coating, finish, tile, etc. applied or attached to Dens-Shield at any time.
- (4) Any damage to Dens-Shield resulting from repair to surfaces installed over Dens-Shield, such as tile.

In the event that Dens-Shield does not comply with the terms of this warranty, G-P will reimburse the cost of repair or replacement of the affected Dens-Shield, up to a maximum of two times the original uninstalled purchase price of the affected panels. Any cost or expense beyond this amount shall be the Owner’s responsibility. All claims must be made in accordance with the claims and inspection procedure set forth below.

ANY IMPLIED WARRANTY, INCLUDING WARRANTY FOR A PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY IS HEREBY LIMITED IN DURATION TO THAT OF THE EXPRESS WARRANTY CONTAINED IN THIS DOCUMENT, UNLESS A SHORTER PERIOD IS PERMITTED BY LAW, IN ANY EVENT, G-P SHALL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (SUCH AS PERSONAL INJURIES OR DAMAGE TO A STRUCTURE OR ITS CONTENTS). THIS

DOCUMENT STATES THE ENTIRE LIABILITY OF G-P WITH RESPECT TO DENS-SHIELD.

Some states do not allow limitation on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. The provisions of this warranty are applicable only to Dens-Shield sold in the United States or Canada.

This warranty is personal to the Owner and is not assignable or transferable under any circumstances. G-P's obligations under this warranty shall terminate upon the transfer of ownership o the structure.

Any and all claims must be made in writing within ten (10) days after discovery of the defect to Georgia-Pacific Corporation, GA 030 - 21, 133 Peachtree Street, N.E., Atlanta, Georgia 30303, Attn: Dens-Shield Marketing Manager. G-P must be given a reasonable opportunity to inspect the claim. G-P shall not be liable for any cost of repaid or replacement which is not authorized in writing by G-P.