

MANUFACTURER

G-P Gypsum Corporation
133 Peachtree Street, N.E.
Atlanta, GA 30303
Technical 1 (800) 225-6119 (EST)

DESCRIPTION

Dens-Glass[®] Gold is a unique, "paperless" sheathing panel made of a patented water resistant and silicone-treated core, surfaced with glass mat facings and a "gold" colored alkali-resistant coating. Providing superb protection from the elements, Dens-Glass Gold panels are highly resistant to delamination and deterioration due to weather.

Dens-Glass Gold exhibits 50-100% greater flexural strength than regular gypsum sheathing, with a dimensional stability that assures resistance to warping, rippling, buckling and sagging for a flat and even substrate. Dens-Glass Gold is noncombustible, with tests showing no flame spread or smoke development. Since Dens-Glass Gold panels are strong in both directions, they may be installed either vertically or horizontally to framing members.

PRIMARY USES

Because of the superior performance of Dens-Glass Gold, it is specified for exterior walls, ceilings and soffits in a wide variety of applications. These include exterior finish systems with insulation (EIFS); cavity walls in brick veneer applications; direct exterior finish systems without insulation (DEFS) for areas with minimal freeze-thaw cycles; cladding such as wood siding, vinyl siding, composition siding, siding, wood shingles, shakes, stone, brick, conventional stucco systems and plywood siding panels requiring a single-ply backing; and interior finish systems that require a substrate panel with superior fire and moisture resistance.

For EIFS applications, Dens-Glass Gold gypsum sheathing is an ideal substrate for adhesive or mechanical application of expanded polystyrene (EPS) or extruded polystyrene insulation, and is recommended in all climate zones.

Dens-Glass Gold is an excellent substrate for DEFS applications in areas with minimal freeze-thaw cycles, and will not delaminate or deteriorate due to weather even during construction delays lasting as long as six months under appropriate storage conditions.

Most exterior sidings and wall coverings—including wood, vinyl, composition, metal, stone, brick, stucco, wood shingles, shakes and plywood panels—may be applied directly over Dens-Glass Gold sheathing with excellent results. Building felt is often not always necessary; consult local building codes for joint treatment alternatives and building felt requirements.

Dens-Glass Gold is an ideal product for exterior ceilings and soffits for both cold and warm climate zones. It resists sagging, even under exceptionally humid conditions. Panels are applied directly to structural framing. Surface and joints may be finished and painted, or the ceiling/soffit may be surfaced with an exterior finish system.

LIMITATIONS

Dens-Glass Gold must be installed yellow side facing out, according to specified manufacturer's guidelines, applicable code requirements and applicable details found in the Gypsum Association publication GA-253.

Dens-Glass Gold is designed to be a component in properly designed cladding or exterior system. The suitability and compatibility of Dens-Glass Gold as part of any system is the responsibility of the system manufacturer. A weather barrier cladding must be applied prior to the expiration of the six (6) months exposure.

Do not use a vapor barrier on the exterior wall behind Dens-Glass Gold in DEFS installations. (Use vapor permeable weather barrier.)

Do not use Dens-Glass Gold as a base for nailing or mechanical fastening. When used in a soffit application, moisture should not be allowed to settle or pond on the top of Dens-Glass Gold.

In all applications, coatings and sealants must be properly and sufficiently applied to protect Dens-Glass Gold from excessive moisture.

Dens-Glass Gold should not be laminated to masonry surfaces; use furring strips or framing spaced at manufacturer's specifications.

Dens-Glass Gold may be used in DEFS (direct applied) exterior wall applications in approved areas.

Dens-Glass Gold should not be applied below grade.

TECHNICAL DATA

Dens-Glass Gold exceeds ASTM E 283 and E 331 test criteria for both Air Infiltration and Static Water penetration with approved joint finish methods as alternates to building felts.

Dens-Glass Gold panels provide 0 flame spread, 0 smoke developed when tested in accordance with ASTM E 84. Noncombustible when tested in accordance with ASTM E 136.

Dens-Glass Gold exceeds ASTM C 79 standards for humidified deflection by a factor of 10 in tests over the standard for regular gypsum sheathing.

Dens-Glass Gold Fireguard[®] qualifies for a one-hour fire resistant construction (UL U337) when tested in accordance with ASTM E 119, and is UL classified.

Dens-Glass Gold conforms to ASTM C 117.

INSTALLATION

1. The surface of framing and furring members to receive Dens-Glass Gold should not vary more than 1/4" from the plane of faces of adjacent members.
2. End joints, if required, should be offset; joints should fit snugly and flashing installed around all openings.
3. Dens-Glass Gold panels of the maximum lengths possible should be used to minimize the number of joints. Edge joints must be located parallel to and with vertical orientations on framing. End joints of adjacent lengths of Dens-Glass Gold must be staggered.
4. Dens-Glass Gold must be attached to wood framing with nails spaced 4" o.c. at perimeter for racking shear resistance, 8" o.c. at perimeter where racking shear resistance is not required, and 8" o.c. in field.
5. For metal framing installations, Dens-Glass Gold must be attached to metal framing with screws spaced 8" o.c. at perimeter and 8" o.c. in field.
6. Fasteners must be driven so as to bear tight against and flush with surface of sheathing. Fasteners must NOT be countersunk.
7. Fasteners must be located a minimum of 3/8" from edges and ends of sheathing panels.

SUBMITTAL APPROVALS: (Stamps or Signatures)

- 1/2" — 12.7mm
- 5/8" — 15.9mm, type X

8. Where Dens-Glass Gold is used in applications involving veneer systems, any joint treatment required should be in accordance with sheathing manufacturer's instructions and requirements of local governing authorities.
9. Where Dens-Glass Gold is used in applications of painted ceilings and soffits, joint tape must be applied over joints and embedded in a specified, setting type joint compound. For smooth finish, the surface should be skim coated with joint compound.

10. If required, building paper or equal should be installed with flashing around openings. For DEFS, a secondary weather barrier (not a vapor barrier) should be applied behind Dens-Glass Gold.

Lengths: 8', 9' or 10' standard, tolerance +1/4"

Other lengths available upon request

Edges: Square

Conforms to ASTM C 1177, Glass Mat Gypsum Substrate for Use as Sheathing.

PRODUCT DATA

Thicknesses: 1/2"—12.7mm
5/8"—15.9mm Fireguard®

Width: 4'—1220mm standard, tolerance up to -1/8"

PHYSICAL PROPERTIES		
PROPERTIES	1/2" DENS-GLASS® GOLD SHEATHING	5/8" DENS-GLASS® GOLD FIREGUARD®, TYPE X
Thickness, nominal inches	1/2"	5/8"
Width, nominal	4' - 1/8"	4' - 1/8"
Length, standard	8', 9', 10' ± 1/4"	8', 9', 10' ± 1/4"
Weight, lbs./M sq. ft., nominal	1900	2500
Surfacing	Glass fiber mat	Glass fiber mat
Racking strength, lbs./ft. (dry) (Ultimate—not design value)	617	711
Flexural strength, parallel, lbs. (4' direction)	80 ⁷	100 ⁷
Humidified deflection, inches	2/8" ⁷	1/8" ⁷
Surface Water Absorption, grams ⁴	.84	.73
Permeance (perms) ⁵	23	12
R value ⁶	.56	.67
Flame Spread/Smoke Developed	0	0
Linear verification with change in moisture in/in/%RH	6.25 x 10 ⁻⁶	6.25 x 10 ⁻⁶
Comparative values are based on tests conducted in accordance with ASTM C 473 and ASTM E 72. ¹ Gypsum Association GA-253.254. ² Minimum requirements for ASTM C 79 standard specification. ³ Maximum requirements for ASTM C 79 standard specification. ⁴ Tested in accordance with ASTM C 79. ⁵ Tested in accordance with ASTM C 355 (dry cup method). ⁶ Tested in accordance with ASTM C 518 (heat flow meter). ⁷ Minimum requirements for ASTM C 1177 standard specification.		

Technical Information

U.S.A. and Canada: 1-800-225-6119

Sales Information and Order Placement

U.S.A.	CANADA
Midwest: 1-800-876-4746	Atlantic Provinces: 1-800-563-1696
South: 1-800-327-2344	Quebec: 1-800-361-0486
Northeast: 1-800-947-4497	Ontario: 1-800-387-6823
West: 1-800-824-7503	Prairies: 1-800-661-6589
	British Columbia: 1-800-663-6402

For additional literature 1-800-BUILD GP (284-5347).