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 **Renotech Oy**

MARINE SOLUTIONS

RENOTECH DGG



**MOISTURE
RESISTANCE**



**FIRE
RESISTANCE**



EASE-OF-USE



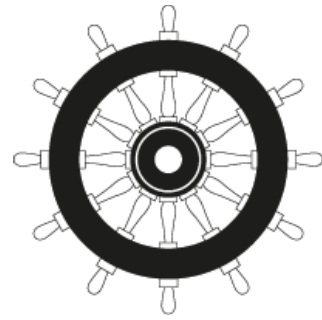
VERSATILITY



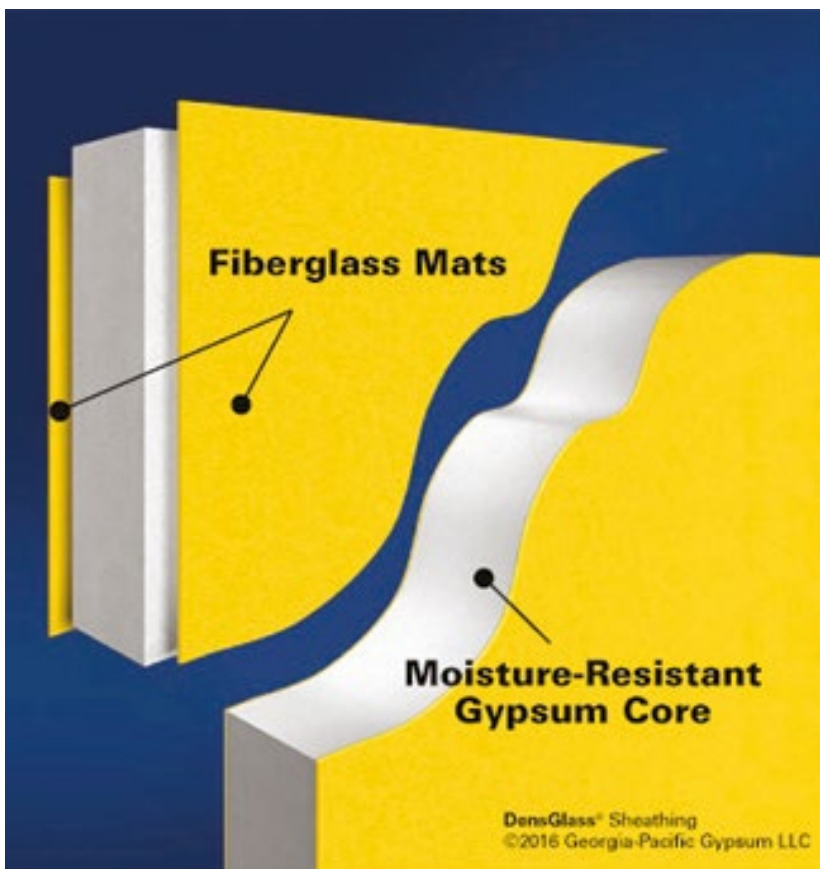
RENOTECH DGG

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MED



RENOTECH DGG (*DensGlass® Sheathing*) is a MED certified incombustible, moisture- and mold proof gypsum sheet.

- The yellow fiberglass mat prevents the formation of mold food source.
- Backed with a limited warranty against delamination and deterioration for up to 12 months of exposure to normal weather conditions.*

*For complete warranty details, visit www.buildgp.com/warranties.

When tested, as manufactured, in accordance with ASTM D3273, DensGlass Sheathing has scored a 10, the highest level of performance for mold resistance under the ASTM D3273 test method.

AVAILABLE SIZES AND DIMENSIONS

MED certified Renotech DGG is available in 12,7 and 15,9 mm thickness. W 1219 x L 2438 mm. Other lengths are available upon request.

RENOTECH DGG is an excellent indoor wall and ceiling substrate. It is an outstanding material for constructing large-scale, seamless and durable indoor surfaces.

Renotech DGG is easy to install. Installed DGG sheathing is resistant to warping and sagging, even in humid conditions.

MOLD RESISTANCE

In independent testing, DensGlass sheathing, with its fiberglass mat design, has achieved a score of 10, the highest level of performance for mold resistance under ASTM D3273.

STRENGTH

Fiberglass mats penetrate into the panel to make an integrated unit, that offers superb strength; outstanding resistance to delamination, deterioration, warping and job site damage. The flexural strength of Renotech DGG is approximately the same in both directions. This means DGG panels can be installed either vertically or horizontally. DGG panels also protect and help stabilize structural framing.

STABILITY

Renotech DGG is extremely resistant to rippling, buckling and sagging, even under humid conditions—which makes it particularly suitable for soffits. In actual tests, DensGlass panels exceeded ASTM C1396 standards for humidified deflection by a factor of five times over the standard for paper-faced gypsum sheathing.

FIRE RESISTANCE

Renotech DGG is incombustible (ASTM E136 and CAN/ULC S114).

MOISTURE RESISTANCE

DensGlass sheathing integrates a water-resistant, treated core with a fiberglass mat face and back to provide superb moisture protection.

EASY TO HANDLE

DGG panels are lightweight and easy to handle. They can be cut and fastened with standard drywall tools and fasteners.

WARRANTY

Renotech DGG is covered by manufacturer's 12-month limited warranty against delamination and deterioration for exposure to normal weather conditions; and a five-year limited warranty against manufacturing defects.

For a copy of the limited warranty, visit manufacturer website at www.buildgp.com/warranties.

CERTIFICATION

Renotech DGG is MED certified (MEDB00003JZ).



SUSTAINABILITY

Renotech Oy and the DGG manufacturer (Georgia-Pacific Gypsum) are both committed to using resources efficiently to provide innovative products and solutions that meet the needs of customers and society, while operating in a manner that is environmentally and socially responsible, and economically sound.

PROPERTIES

PRODUCT COMPARISON	RENOTECH DGG 12,7 mm	RENOTECH DGG 15,9 mm
Width,, nominal ⁵	1219 mm (± 2,4 mm)	1219 mm (± 2,4 mm)
Length, standard ⁵	2438, 2743, 3048 mm (± 6 mm)	2438, 2743, 3048 mm (± 6 mm)
Weight, nominal ⁹	9 kg/m ²	12 kg/m ²
Bending radius (lengthwise)	1829 mm ⁶	2438 mm ⁶
Racking strength (dry) ⁷ Ultimate - not design value	7878 N/m	9544 N/m
Flexural strength, parallel ²	356 N	445 N
Compressive strength	3445 kPa	3445 kPa
Humidified deflection ^{2, 5}	6 mm	3 mm
Permeance ³	1300 ng/Pa•s•m ²	970 ng/Pa•s•m ²
R value ⁴	0,099 m ² •K/W	0,118 m ² •K/W
Combustibility	Noncombustible	Noncombustible
Linear expansion with moisture change ¹⁰	158,75 x 10 ⁻⁶ mm/mm %RH	158,75 x 10 ⁻⁶ mm/mm %RH
Surface burning characteristics (per ASTM E84 or CAN/ULC-S102) flame spread/smoke developed	0/0	0/0
Thermal expansion coefficient ¹¹	15,3 x 10 ⁻⁶ mm/mm/°C	15,3 x 10 ⁻⁶ mm/mm/°C

¹ Specified values per ASTM C1396.

² Tested in accordance with ASTM C473.

³ Tested in accordance with ASTM E96 (dry cup method).

⁴ Tested in accordance with ASTM C518 (heat flow meter).

⁵ Specified values per ASTM C1177.

⁶ Double fasteners on ends as needed.

⁷ Tested in accordance with ASTM E72.

⁸ As defined and Tested in accordance with ASTM E136 or CAN/ULC S114.

⁹ Approximate weight for design and shipping purposes. Actual weight may vary based on manufacturing location and other factors.

¹⁰ As stated by Gypsum Association GA-235.

¹¹ Tested in accordance with ASTM E228-85.

DELIVERY, STORAGE AND HANDLING

All DGG sheets delivered are MED marked, bearing brand and supplier name. The plastic packaging used to wrap gypsum panel products for shipment, is intended to provide temporary protection from moisture exposure during transit only, and is not intended to provide protection during storage after delivery. Such plastic packaging shall be removed immediately upon receipt of the shipment. **WARNING:** Failure to remove protective plastic shipping covers can result in condensation which can lead to damage, including mold.

Wear protective gloves. All materials should be kept dry. Gypsum panel products shall be neatly stacked flat with care taken to prevent sagging or damage to edges, ends and surfaces. Gypsum panel products and accessories shall be properly supported on risers on a level platform, and fully protected from weather, direct sunlight exposure, and condensation. Gypsum panel products shall be stacked flat rather than on edge or end. **WARNING:** Gypsum panel products stacked on edge or end can be unstable and present a serious hazard in the workplace should they accidentally topple.

FITTING AND CUTTING

DGG panel seams must always be placed over the hull's structural beam. Leave a 1–3 mm gap between the butt joint. Fill the butt joint gap with CA120 adhesive plaster or similar.

Cut DGG sheets with utility knife, circular saw or jigsaw. Dust and fibers produced during the handling and installation of the product may cause skin, eye and respiratory tract irritation. Avoid breathing dust and minimize contact with skin and eyes. Wear long sleeve shirts, long pants and eye protection. Always maintain adequate ventilation. Use a dust mask or an approved respirator as appropriate in dusty or poorly ventilated areas.

DGG sheathing can be installed slightly curved lengthwise. See Properties table for bending radius.

RECOMMENDATIONS AND LIMITATIONS

Renotech DGG is moisture resistant, but it is not intended for immersion in water.

Avoid any condition that will create moisture in the air and condensation on DGG sheathing.

Renotech DGG manufacturer nor supplier, does not warrant and is not responsible or liable for the performance of the cladding or exterior systems applied over DGG sheathing. The suitability and compatibility of any system is the responsibility of the system manufacturer or design authority.

Do not use DGG sheathing as a base for nailing or mechanical fastening.

Do not laminate masonry surfaces to DGG sheathing; use furring strips or framing.

Renotech DGG is not intended for tile applications.

DensGlass Sheathing should not be used in lieu of plywood.

For all installations, design details such as fasteners, sealants and control joints per system specifications must be properly installed. Openings and penetrations must be properly flashed and sealed. Failure to do so will void the warranty.

Fasteners should be flush to the face of the board, not countersunk.

INSTALLATION

Renotech DGG is intended for indoor ceiling and wall applications.

Install DGG sheets yellow fiberglass mat exposed. Fasten DGG sheets to the hull framing system, using screws and adhesive. Substrates and surfaces must be clean and dust-free. Use only shipyard approved, flexible adhesive. Fasteners should be driven flush with the panel surface (not countersunk). Fasten screws every 150–200mm. Studs cc407, width 40mm.

1. Fasten always using screws and adhesive. Clean the steel framing of any oil or grease. Follow the adhesive manufacturer's application instructions.
2. Leave a 1–3 mm gap between sheet butt joints. Fill the gap with CA120 adhesive plaster or similar.
3. Use the adhesive plaster or similar to cover visible screw heads and any larger surface flaws.
4. Skim coat the DGG board crosswise (short edge to short edge) with CA120 adhesive plaster, using a wide spatula. The layer must be smooth and uniform. The layer should almost completely cover the yellow surface.
The CA120 layer levels any sheet rippling.
5. Smooth the plaster surface gently with sanding paper. Do not expose the yellow fiberglass mat. Oversanding must be patched with CA120 adhesive plaster and smoothed again.
6. Apply a layer of diluted Otex paint primer. Allow the primer to dry completely.
7. Patch any smaller flaws with lightweight filler. Often it is necessary to skim coat the entire surface.
8. Apply second layer of paint primer, and let it dry.
9. Apply top coat, follow the paint manufacturer's application instructions.

LIABILITY:

Renotech Oy is not liable for any material or other damage caused by failing to adhere to instructions given herein. Renotech Oy must approve all post-installation modifications to/affecting DGG components. Failure to notify/seek approval for modifications, releases Renotech Oy of all damage liability.

➔ ***Renotech Oy participates in the design of the project-specific installation/fastening, free of charge.***



Renotech DGG is fastened to solid steel structure with adhesive and screw's.



A layer of CA120 adhesive plaster, applied across the DGG sheet (short to short edge), levels any sheet surface rippling.



The finished Renotech DGG surface is smooth and seamless.



A layer of CA120 adhesive plaster has been applied across the DGG sheets. The yellow fiberglass mat is barely visible.



Renotech DGG can be bent to shape (see Properties for bending radius, p. 4).





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