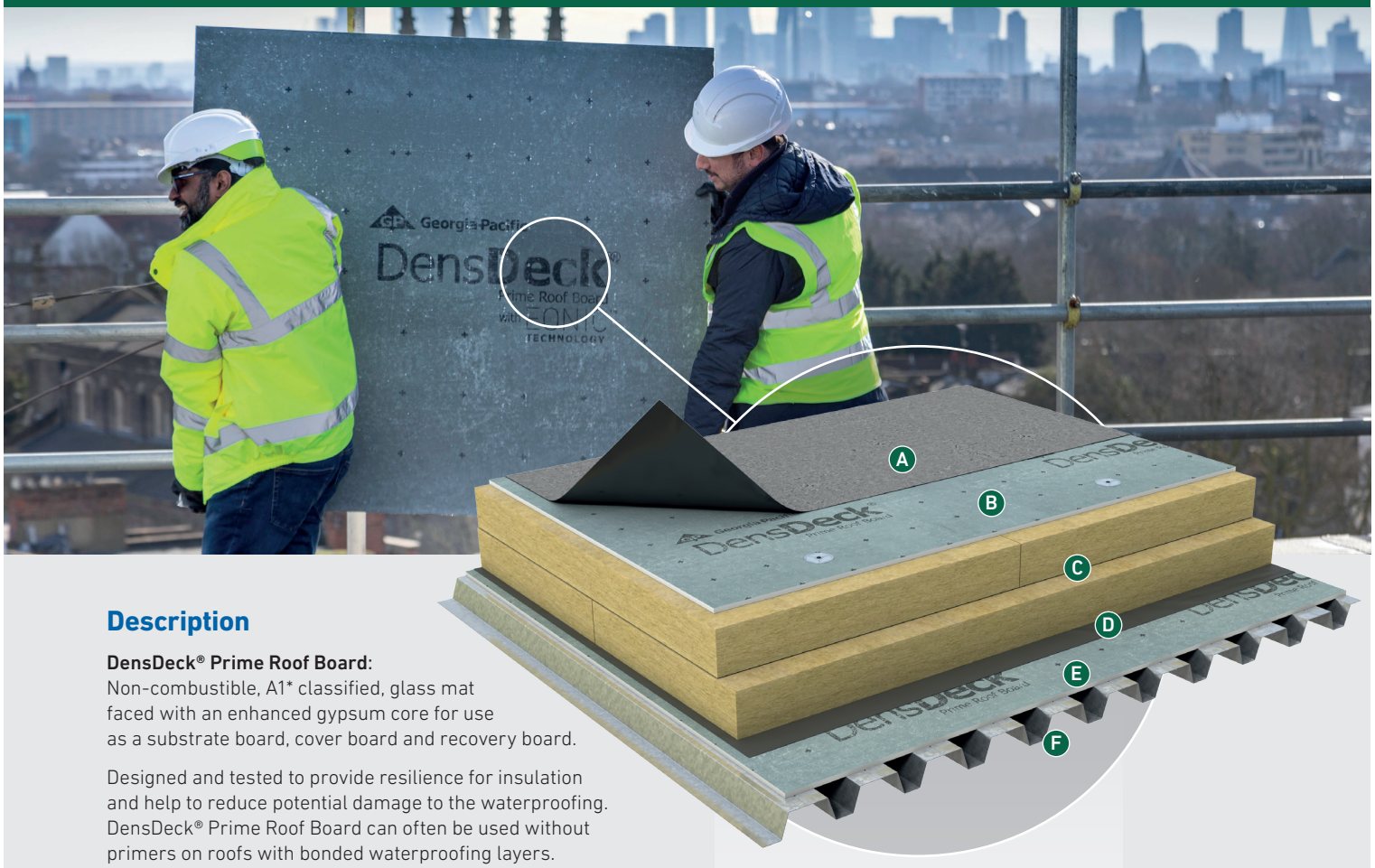
PRODUCT DATA SHEET

DENSDECK® PRIME ROOF BOARD



Description

DensDeck® Prime Roof Board:
Non-combustible, A1* classified, glass mat faced with an enhanced gypsum core for use as a substrate board, cover board and recovery board.

Designed and tested to provide resilience for insulation and help to reduce potential damage to the waterproofing. DensDeck® Prime Roof Board can often be used without primers on roofs with bonded waterproofing layers.

Benefits

Georgia-Pacific, with over 35-years of experience in flat roofing, offers DensDeck® Prime Roof Board, a non-combustible, A1* classified, cover board and substrate board that can provide multiple benefits to a wide range of flat roofs, such as:

- Added fire resistance layer.
- Improved resilience of the insulation layer to foot traffic in construction or during maintenance cycles.
- Additional support for the waterproofing layer; enhancing resistance to punctures and hail damage.
- With a relatively low weight the board is easily maneuvred.
- The board can be cut with standard drylining tools using 'score and snap' and does not require gapping.
- DensDeck® Prime Roof Board does not generally need a primer in bonded or bituminous build ups.
- When used as a component in a suitable assembly, can help improve airborne sound reduction.

A Waterproofing layer, such as: TPO, PVC, EPDM, and bitumen

B **Cover board - DensDeck® Prime Roof Board**

C Insulation, such as: PIR board, mineral wool, etc.

D Vapour control layer (VCL)

E **Substrate board - DensDeck® Prime Roof Board**

F Structural deck, such as: steel, concrete, timber, etc.

* The A1 classification for DensDeck® Prime Roof Board is based on the assessment of Exova_Report No. 185630 - in 2010. GP Gypsum is currently in the process of reviewing and updating this classification.

Physical Properties

Properties	Test Standard	6.4 mm (¼ inch)	12.7 mm (½ inch)	15.9 mm (⅝ inch)
Thickness, nominal (mm)	15283-1: 2008 + A1: 2009	6.4 ± 1.6	12.7 ± 0.8	15.9 ± 0.8
Width, standard (mm)	15283-1: 2008 + A1: 2009	1,219 ± 3	1,219 ± 3	1,219 ± 3
Length, standard (mm)	15283-1: 2008 + A1: 2009	2,438 ± 6.4	2,438 ± 6.4	2,438 ± 6.4
Weight[1], nominal (kg/m^2)	-	5.9	9.8	12.2
Coated Facing Type	-	glass mat	glass mat	glass mat
Reaction to Fire Classification[2]	EN 13501-1: 2007 + A1: 2009	A1	A1	A1
Flexural strength (Flexural breaking load) – Longitudinal (N)	15283-1: 2008 + A1: 2009	≥ 435	≥ 807	≥ 969
Flexural strength (Flexural breaking load) – Transverse (N)	15283-1: 2008 + A1: 2009	≥ 398	≥ 725	≥ 870
Flute spanability (mm)	ASTM E661.22	67	127	203
Permeance (ng/Pa.S.m^2)	ASTM E96.16	> 1710	> 1300	> 970
Thermal conductivity (W/m.K)	EN12664: 2001	0.12	0.16	0.17
Linear Variation with change in temperature (mm/mm/°C)	GA-235-2023	15.3 x 10^{-6}	15.3 x 10^{-6}	15.3 x 10^{-6}
Linear Variation with change in moisture (mm/mm/%RH)	GA-235-2023	11.7 x 10^{-6}	11.7 x 10^{-6}	11.7 x 10^{-6}
Water Absorption	15283-1: 2008 + A1: 2009	H1	H1	H1
Compressive Strength (kPa)	ASTM C473.19	6,205	6,205	6,205
Surface Water Absorption (g)	ASTM C1177.17	1	1	1
Fire Classification	ASTM E136	Non-combustible	Non-combustible	Non-combustible
Bending Radius (mm)	-	1,219	1,829	2,438
Mould Resistance[3]	ASTM D3273.R2005	10 (highest possible)	10 (highest possible)	10 (highest possible)
Water vapour permeability (μ)	ISO 12572: 2016	14.6	10.0	8.1

1 Represents approximate weight for design and shipping purposes. Actual weight may vary based on manufacturing location and other factors.

2 The A1 classification for DensDeck® Prime roof boards is based on the assessment of Exova Report No. 185630 – in 2010. GP Gypsum is currently in the process of reviewing and updating this classification.

3 When tested, as manufactured, in accordance with ASTM D3273, DensDeck® Prime Roof Boards have scored a 10, the highest level of performance for mould resistance under the ASTM D3273 test method. The score of 10, in the ASTM D3273 test, indicates no mould growth in a 4-week controlled laboratory test. The mould resistance of any building product when used in actual job site conditions may not produce the same results as were achieved in the controlled, laboratory setting. No material can be considered mould proof. For additional information, go to **www.buildgp.com/safetyinfo**

Applications

DensDeck® Prime Roof Board is used in resilient flat roof assemblies in both new build and refurbishment projects. DensDeck® Prime Roof Board can contribute to the resilience of a flat roof in several ways:

1. As a cover board installed between the insulation and the waterproofing, it helps to:
   - protect the insulation
   - reduce the stress on the waterproofing
   - add rigidity to the entire roof assembly.
2. As a substrate board installed under the insulation layer, it:
   - provides a uniform substrate for the vapour control layer
   - can provide a safer working platform during construction.
3. As a recovery board installed over an existing flat roof:
   - provides a uniform substrate for new insulation and or waterproofing layers.
4. Parapet:
   - can be used in vertical application on parapets (min. thickness 12.7 mm).

Storage and Handling

- DensDeck® Prime Roof Boards should be stored level and off the ground or roof deck and protected from rain, snow, or other high moisture conditions.
- Use a waterproof ventilated covering that allows for air flow to prevent moisture build up.
- Ensure the supporting surface can carry the weight of the boards, space out the units across the deck appropriately.
- When moving boards carry upright to prevent flexing and cracking. Care should be taken to protect edges and ends from damage when laying down.

Packaging

- Packed on ISPM15 heat treated wood pallets in compliance with IPPC / APHIS / ALSC.

Disposal

- Disposing of any waste material must be carried out in accordance with local regulations.

Application and Installation

Protect DensDeck® Prime Roof Boards from moisture before, during, and after installation. Only lay down as much as can be covered in the same day on a rolling front and ensure the board edges are tightly butted.

Avoid application of DensDeck® Prime Roof Boards during rain, heavy fog and any other conditions that may deposit moisture on the surface, and avoid the overuse of non-vented, direct-fired heaters during winter months. When roofing systems are installed on new poured concrete or light weight concrete decks or when re-roofing over an existing concrete deck, a vapour barrier should be installed above the concrete to limit the migration of water from the concrete into the roof assembly.

Moisture vapour movement by convection must be eliminated, and the flow of water by gravity through imperfections in the roof system must be controlled. After a leak has occurred, no condensation on the upper surface of the system should be tolerated, and the water introduced by the leak must be dissipated to the building interior in a minimum amount of time.

Always consult the roofing system manufacturer or design authority for specific instructions for applying other products to DensDeck® Roof Boards. Consult the system manufacturer or design authority for fastener type and spacing or specific instructions for adhering the DensDeck® Prime Roof Boards.

Pallet Quantities

Name of Product	Nominal Thickness (mm)	Width (mm)	Length (mm)	Board Weight (kg)	Number of Boards per Pallet	Pallet Surface (m^2)	Pallet Weight (kg) (Product + Pallet)
DensDeck® Prime Roof Board SKU 20000057	6.4	1,220	2,440	17.6	84	250.05	1,584 + 31
DensDeck® Prime Roof Board SKU 133150	12.7	1,220	2,440	29.2	50	148.84	1,469 + 31
DensDeck® Prime Roof Board SKU 133160	15.9	1,220	2,440	36.9	40	119.07	1,495 + 31
Tolerance	± 1.6 mm	± 3 mm	± 6.4 mm	-	-	-	-

Georgia-Pacific Gypsum

Contact

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FM Class 1

UL Class A
UL 790 Classification
UL 1256 Classification

A1 Classification Europe
(Non-combustible material)

CSA 123.21

The information contained herein with relation to DensDeck® Prime Roof Board constitutes general information or guidance solely for consideration by appropriate professionals. This information may not be appropriate for all projects, assemblies, systems or conditions, and it may be necessary or appropriate to seek independent advice or testing within the context of such project, assembly or system. Ultimately, the design and detailing of the project, assembly or system is the responsibility of a professional, and all projects must comply with applicable building codes and standards. GP Gypsum disclaims any responsibility or liability for the use of this information and for the architecture, design, engineering or workmanship of any project, assembly or system. GP Gypsum makes no representation or warranty, express or implied, concerning this information contained herein and specifically disclaims any implied warranty of fitness for a particular use.

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