

Coretinium®

A unique and durable composite solution that delivers weight savings to the transport sector.

With a combination of high performance Colorcoat® pre-finished steel and a rigid polymer honeycomb core, Coretinium® provides a composite solution with exceptional rigidity to weight ratio that can help reduce vehicle weight, cut CO₂ emissions and increase payloads.

Coretinium® is ideally suited to a range of transport applications such as; bus floors, commercial trailer side walls, floors and doors, and recreational trailers such as horse boxes.



Coretinium® features and benefits

- Manufactured from thin gauge pre-finished steel that provides exceptional rigidity at a relatively low weight compared to commonly used alternatives. This enables reduced vehicle weight lowering fuel consumption and CO₂ emissions.
- Highly optimised polymer core based on a recognised automotive grade, which maintains its performance even in extreme climates.
- Enhanced adhesion layer that maintains bond integrity in moist and humid conditions. Significantly reducing future refurbishment requirements.
- Fire resistant steel layer satisfies R118 Annex 6 legislation enabling this lightweight composite solution to be used in passenger transport.
- Available in a choice of colours, Coretinium® provides a perfect surface for direct adhesive bonding or decorating with vinyl wraps reducing manufacturing time.
- Open honeycomb core structure allows for single sided riveting enabling secret-fix solutions and maintaining the overall aesthetics of the vehicle.

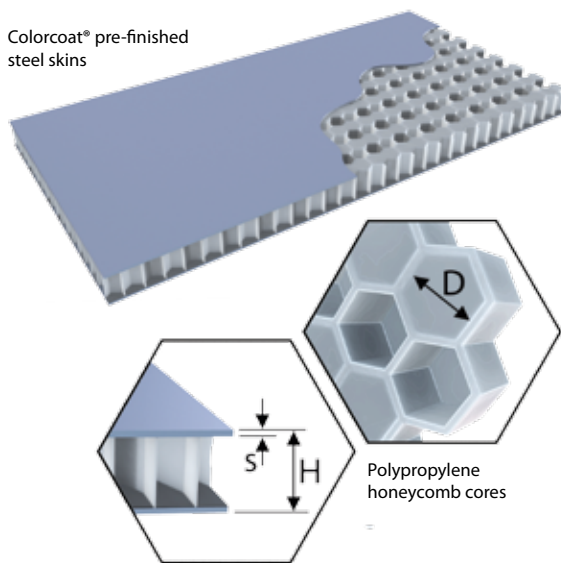
Product information

Product code	Skin ⁽¹⁾ thickness s (mm)	Core height (mm)	Total height ⁽²⁾ H (mm)	Core cell diameter D (mm)	Panel weight (kg/m ²)	Rigidity E ⁻¹ (kNcm ² /m)
10mm Coretinium®	0.4	9.2	10.0	7.0	7.50	36,000

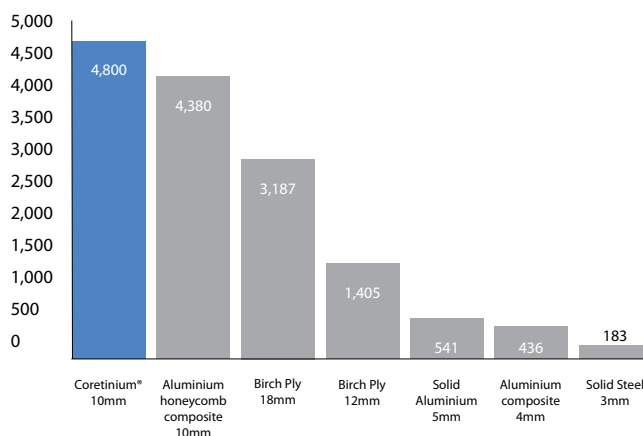
⁽¹⁾ Standard Colorcoat® pre-finished steel face based on 0.4mm S220 Galvalloy™ - other face thicknesses & grades available on request subject to minimum order quantity.

⁽²⁾ Standard thickness tolerance +/- 0.2mm.

Coretinium® - The combination of two high performance materials



Exceptional rigidity to weight significantly reduces vehicle weight Specific rigidity (kNcm²/m per kg)



Recyclable

At the end of its life the Coretinium® composite product can be considered as general steel scrap and be completely recycled via the steel making process without the need to separate the core from the skins.

Exceptional bond strength

Thanks to its high bond surface area and unique adhesive solution, the bond strength of Coretinium® is typically twice as strong as other commonly used composite materials.

Fire safe

Coretinium® passes R118 – Annex 6 making it an ideal flooring solution for passenger transport.

Coretinium® is supplied with Colorcoat Prisma® - the ultimate combination of durability and aesthetics.

Colorcoat Prisma® is made up of a number of layers, which perform different functions. The Galvalloy™ metallic coating and high build primer provide the corrosion resistance, and the topcoat utilises the latest polymer technology to provide abrasion and UV resistance. The Galvalloy™ metallic coating is a special mix of zinc and aluminium that provides unrivalled corrosion protection, even at cut edges.

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Language English 1015

Tata Steel

Shotton Works, Deeside,
Flintshire, CH5 2NH

T: +44 (0) 1244 812345

Colorcoat Connection® helpline

T: +44 (0) 1244 892434

F: +44 (0) 1244 892321

E: coretinium@tatasteel.com