

MonoPan®

A New Innovation in Body Panel Technology
for Commercial Vehicles

Lighter body = Heavier loads
+600kgs extra

(Based on MonoPan® body fitted to Isuzu NPR 300 Cab Chassis)



MonoPan® body



Standard body

* using FRP plywood panels

MonoPan® is a unique lightweight thermoplastic composite sandwich panel made of a polypropylene (PP) honeycomb with a face sheet made of fibre reinforced polypropylene on both sides. An additional polypropylene layer on the outside gives a smooth surface.



The special honeycomb core made of polypropylene in MonoPan® is an additional elastic area, whereby high energy absorption without core deformation can be achieved.



MonoPan® view in the cell direction



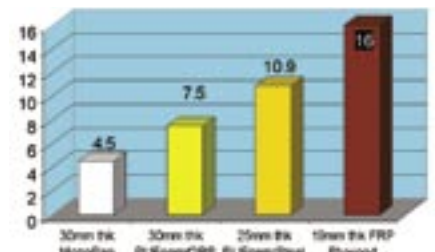
Principle of the energy absorption of MonoPan®

The impact-resistant, load-sharing face sheet increases the effectiveness of this property and promotes the excellent ruggedness of MonoPan®.

MonoPan® is the first sandwich panel where the face sheets are not bonded with an adhesive but are thermofused to the core. Honeycomb and face sheets form a homogeneous, strongly fused thermoformable product: Delamination is not possible anymore. MonoPan® fascinates with its excellent shock resistance and stiffness which offers new possibilities in industrial applications.

Main Features of MonoPan®

- Panels are lightweight, thus improving your payload potential or for volume loading a reduction in operating costs.



Weight of MonoPan® versus other panel types kg/m²

- The fibre reinforced PP skins and the proven PP honeycomb structure can resist high impact, where other materials would be damaged.
- Watertight and no moisture absorption.
- Easy to repair.
- Can be finished with standard vehicle paint systems or decal films.
- 100% recyclable.
- Faster manufacturing process.

**MonoPan® is
lightweight and
impact resistant
and impervious
to water, it is ideal
for use in the
transport industry.**

How to use MonoPan®

Truck Bodies and Mobile Equipment



Rigid Van Bodies



Special Purpose Vehicles



Livestock Crates



Trailers



One Piece Shutter Door



Standard Rear Swing Doors



Flush Rear Swing Doors



Rail Carriage Floors and Internal Panels



Horse Trailers



Caravans and Mobile Homes



Bus Flooring

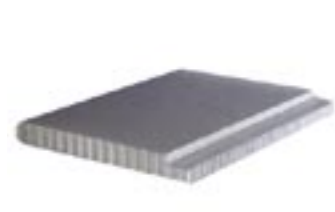


Mobile Control Tower

Manufacturing and Fabrication Methods



Riveting through one skin only of the MonoPan® achieves the high pull strength and load carrying capacity needed for most transport and industrial applications.



MonoPan® being a thermoplastic composite can be easily cut, bent, folded, recessed and edges closed. It can also be glued, welded and painted.



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