

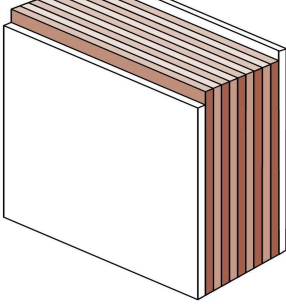
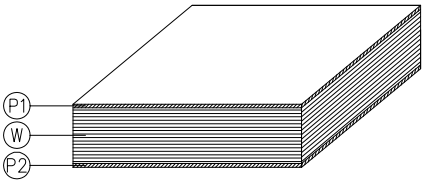
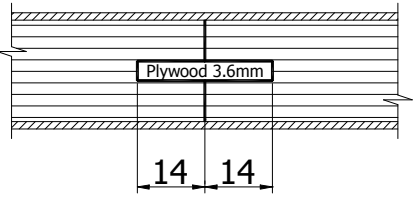
PlyPano

Polyester laminate composite panel

A. Product Description

The PlyPano panels belong to the family of PolyPan “wet-in-wet” processed panels. The PlyPano panels consist of minimum 3 veneers plywood (class 2 of bonding), covered on both sides with a high quality polyester laminate. These strong, smooth, aesthetic and impact resistant panels are ideal for the construction of heavy duty truck bodies.

B. Standard Panel Composition From inside to outside of van

<p>P1 P(olyester)</p>	<p>Premium quality polyester skin reinforced with fibreglass. Composition:</p> <ul style="list-style-type: none"> ▶ CSM: min. 300gr/m² ▶ Polyester resin <p>Colour : white ± RAL 9010 Gelcoat at the inside is optionally available (e.g. for food applications). Product of the latest technology in polyester resin application.</p>	
<p>W W(ood)</p>	<p>The core is a multi veneers plywood panel, consisting of minimum 3 layers which are water tightly glued.</p> <p>The wood has a density of min. 0,48kg/dm³</p> <p>Several successive multiplex panels are vertically fixed one to another with groove and tongue (= best possible connection, see drawing) : for Tpa's 14-17-21-24 and 29mm.</p> <p>Bonding class 2 (covered exterior use). Thickness 4, 9, 12, 15, 18, 21 and 27mm</p>	
<p>P2 P(olyester)</p>	<p>Premium quality polyester skin reinforced with fibreglass. Composition:</p> <ul style="list-style-type: none"> ▶ Gelcoat ▶ CSM: min. 300gr/m² ▶ Polyester resin <p>Colour: white ± RAL 9010 UV resistant. Product of the latest technology in polyester resin application.</p>	

C. Standard Dimensions Other dimensions also available

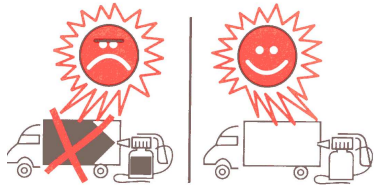
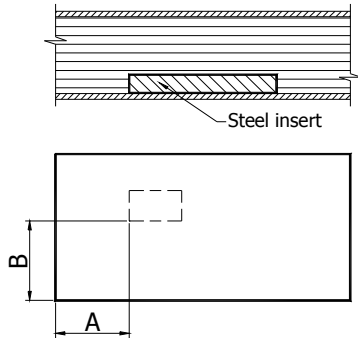
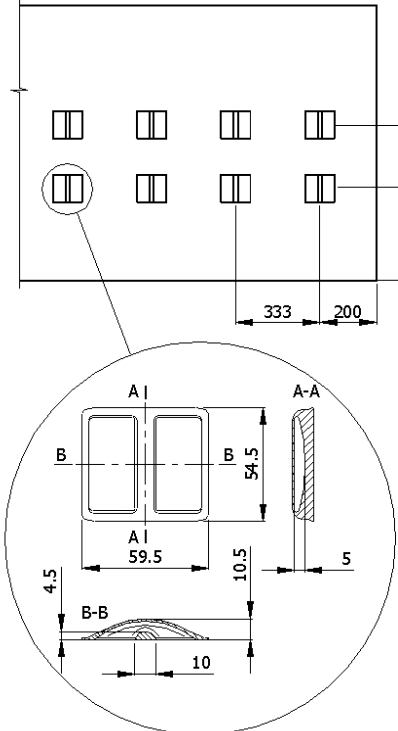
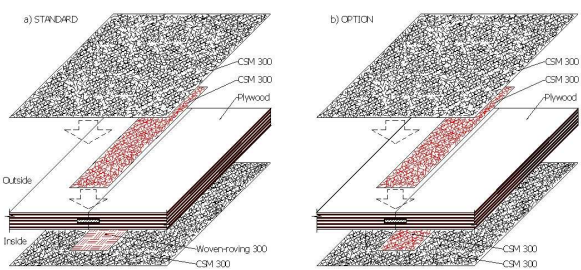
Length (Lpa)	Height (Hpa)	Standard thicknesses:						
<p>La<3m : pay length=standard length 1200 – 2400 - 3000mm La>3m : pay length = order length Max. length is 15300 mm Advised maximal lengths : Tpa 17mm : 8.400mm Tpa 14mm: 7.200mm Tpa 11mm & 6mm : 6.000mm</p>	<p>standard height =2100 mm = pay height; for higher panels the exact height counts 3000 mm = maximum height Thickness tolerance: Tpa=±1 mm for 6,11, 14 and 17, Tpa=0/-3 for 21, 24 & 29mm Advised maximal heights : Tpa 14mm: 2.800mm Tpa 11mm & 6mm : 2.400mm</p>	6mm	11 mm	14 mm	17 mm	21 mm	24 mm	29mm

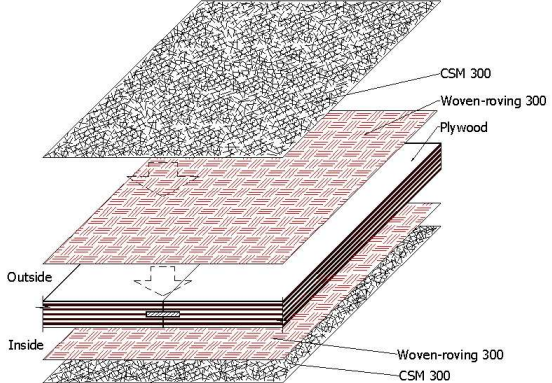
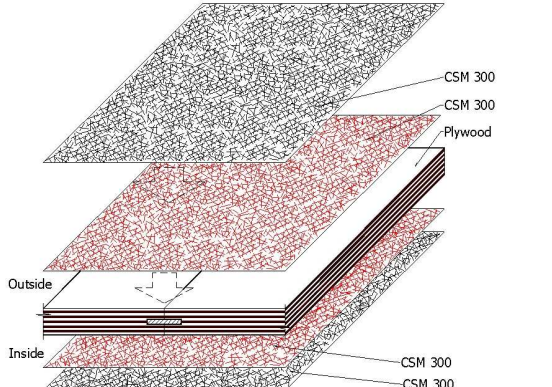
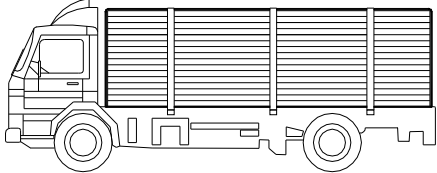

D. Layer thicknesses in mm For standard panel

P1	1 mm						
W	4mm	9 mm	12 mm	15 mm	18 mm	21 mm	27mm
P2	1 mm						

All figures in this technical card are the result of average values obtained in our laboratories. They are given for your information and have therefore no binding effect.

E. Weight		6mm	11 mm	14 mm	17 mm	21mm	24mm	29mm
The weight has been measured, considering a density of 480kg/m ³ in relation to 8% humidity. Applying the standard EN 310		6 kg/m ²	9 kg/m ²	10,8 kg/m ²	12,6 kg/m ²	14,4 kg/m ²	16,2 kg/m ²	19,2 kg/m ²
F. Minimum number of layers in Multiplex								
		3	3	5	5	5	7	7
G. Manufacturing and trimming tolerances								
<input checked="" type="checkbox"/> Maximum length (Lpa) 15400mm (all Tpa)	+/-3mm							
<input checked="" type="checkbox"/> Maximum height (Hpa) 3000mm	+/-3mm							
<input checked="" type="checkbox"/> Thickness (Tpa)	+1/-1 or 0/-3mm							
<input checked="" type="checkbox"/> Squareness: (S)=A-B	+/-5mm							
H. Plywood characteristics		Standard thickness (Tpa)						
		4,0	9,0	12,0	15,0	18,0	21,0	27,0
<input checked="" type="checkbox"/> Bending strength [alongside fibres] min.	N/mm ²	55						
<input checked="" type="checkbox"/> Bending strength [across fibres] min.	N/mm ²	30						
<input checked="" type="checkbox"/> Modulus of elasticity E [alongside fibres] min.	N/mm ²	6500						
<input checked="" type="checkbox"/> Modulus of elasticity E [across fibres] min.	N/mm ²	3000						
<input checked="" type="checkbox"/> Marks of glass fibres or resin, marks of the plywood surface or its layers are absolutely normal and are due to the “wet-in-wet” production of the panels								
<input checked="" type="checkbox"/> Visible joints between the plywood segments are normal. Optic marks due to the reinforcement strips must be accepted.								
<input checked="" type="checkbox"/> The edges of the PlyPano panels are not sealed in standard execution (possible as option)								
I. Operational temperature		From minus 40°C to plus 85°C						
J. Why buy PlyPano Panels?								
<input checked="" type="checkbox"/> PlyPano panels boast an extremely high impact resistance								
<input checked="" type="checkbox"/> PlyPano panels combine strength and aesthetic appearance . The smooth shiny and seamless panels are ideal for application of publicitary messages								
<input checked="" type="checkbox"/> PlyPano panels boast a tremendously solid construction , thanks to the tongue and groove connection between the several successive multiplex panels								
<input checked="" type="checkbox"/> PlyPano panels are resistant against humidity								
<input checked="" type="checkbox"/> PlyPano panels are supplied by a specialist with 25 years of experience in the field of insulation panels.								
<input checked="" type="checkbox"/> PlyPano panels are supplied by a non-competitor!								
<input checked="" type="checkbox"/> PlyPano panels are functional and they allow an easy and quick assembly								
<input checked="" type="checkbox"/> PlyPano panels have extremely good mechanical characteristics								
<input checked="" type="checkbox"/> PlyPano panels are easy to clean								
<input checked="" type="checkbox"/> PolyPan offers you a technical advice and design service to ensure the correct specification of composites are manufactured to suit the application								
K. Applications								
<input checked="" type="checkbox"/> Bodies for trucks and trailers. PlyPano panels are one of the most popular methods of constructing closed bodies, because of the clean, uninterrupted lines, extra internal width facility and very high strength of the material.								
<input checked="" type="checkbox"/> Aircraft support vehicles.								
<input checked="" type="checkbox"/> PlyPano panels are particularly suitable for all applications where strength and stiffness are of utmost importance.								

<h3>L. Painting instructions</h3>	
<ul style="list-style-type: none"> ☑ The PlyPano panels can be painted, respecting the instructions of the paint manufacturer. ☑ The pin hole test should be executed before starting to paint. ☑ Do not paint the PlyPano panels in dark colours! 	<p style="text-align: center;">Do not paint in dark colours</p>  <p style="text-align: center;">No! OK!</p>
<h3>M. Available options</h3>	
<ul style="list-style-type: none"> ☑ Black steel inserts of thickness 5mm incorporated under laminate (possible at inside and outside). <p>Available dimensions of inserts: 200x300, 270x90, 150x80. Other dimensions on special requests only. Position of inserts must be defined by determining of A and B parameters.</p> <p style="text-align: right; font-size: small;">TEVC advises a minimal Tpa of 14mm for PlyPano panels with inserts.</p>	
<ul style="list-style-type: none"> ☑ Lashing pot <p>Available for Tpa's 14, 17, 21, 24 and 29mm</p> <p>Advised centre-distance 333mm between lashing pots (minimum 200mm).</p> <p>Maximum load of 750kg per m panel length (for 3 lashing pots in row)</p> <p>Maximum load of 250kg per single lashing pot</p>	
<ul style="list-style-type: none"> ☑ CSM 300 strips for reinforcing the joints at the inside (instead of woven-roving strips) <p style="text-align: center;">Basic execution of PlyPano panels : outside : CSM 300 strips on joints inside : woving roving strips on joints</p> <p style="text-align: center;">Option : outside : CSM 300 strips on joints inside : CSM 300 strips on joints</p>	

<p><input checked="" type="checkbox"/> Additional woven roving mat (300gr/m²) for improved shock resistance</p> <p>300gr/m² woven roving</p> <p>Caution : the glass structure may be visible ... as this risk can not be excluded, claims in this regard will NOT be accepted</p> <p>When choosing this option, applying to both sides is strongly recommended (otherwise risk of bending panels because of different laminate thicknesses)</p>	
<p><input checked="" type="checkbox"/> Additional CSM 300 layer (300gr/m²) for extra aesthetic panels and improved strength</p> <p>CSM 300gr/m²</p> <p>For mirror smooth PlyPano panels</p> <p>When choosing this option, applying to both sides is strongly recommended (otherwise risk of bending panels because of different laminate thicknesses)</p>	
<p><input checked="" type="checkbox"/> Increased thickness of gelcoat layer for smoother looks of the laminate surface.</p> <p>Mostly applied on the outside of the panel Gelcoat in standard white RAL 9010 colour</p>	
<p><input checked="" type="checkbox"/> The edges of PlyPano panels sealed with pigmented polyester resin.</p>	
<p><input checked="" type="checkbox"/> Polyester skin painted in the mass</p> <p>Several shades of white (Ford Frozen white, RAL +/-9016, IC334) are available as standard colours. Other RAL colours are also possible with a slightly longer delivery time. Metallic colours are not available</p>	
<p>N. Transportation and packaging</p>	
<p><input checked="" type="checkbox"/> The PlyPano panels will be supplied to you, horizontally stacked on flat bed trailers</p>	
<p><input checked="" type="checkbox"/> To avoid contact with humidity and dirt, during and after the transport, the panels will be packed in a high resistant plastic film.</p>	
<p><input checked="" type="checkbox"/> They will be clearly identified with an easily removable PolyPan trade mark label, attached to the bottom left of the inside of the panel, for easy identification before assembly. A detailed technical drawing of the panel is attached to each panel.</p>	
<p>O. Storage and handling</p>	
<p><input checked="" type="checkbox"/> When available, PolyPan recommends the use of vacuum lifting equipment when handling the PlyPano panels. If not, the light panels can easily be handled by 2 or 4 persons.</p>	
<p><input checked="" type="checkbox"/> Always store them flat and support them every 2 metres in dry weatherproof conditions.</p>	

