



TWINTEX[®] P PP

PP Glass Plates

PRODUCT DESCRIPTION

TWINTEX[®] P PP is a consolidated plate made of TWINTEX[®] fabrics. Consolidation is done by heating above melting temperature of PP matrix (180°C-230°C / 360°F-450°F) and applying a pressure before cooling step under pressure. Depending on parts to be produced, diaphragm, thermo compression, co-moulding with plastic compound and local reinforcement, process can be used.



PRODUCT REFERENCE

Example: TWINTEX[®] P PP 60 1485 1/1 NATUR 1500x3000 (HPR)

- P: plate
- PP: polypropylene matrix
- 60: glass content by weight (%)
- 1485: nominal weight (g/m²)
- 1/1: balanced product
- NATUR: natural color, heat and UV stabilizations
- BLACK: black color, heat and UV stabilizations
- 1500x3000: dimensions : width x length (mm)
- (HPR): High Performance Reinforcement glass

Other possibilities:

TWINTEX[®] plates can also be laminated with films or non-woven materials, on one or both faces.

NEW NOMENCLATURE

P - WR t – 1490 – PP 60 W - --- / 02 – 150x300

- Plate: P
- Weaving pattern: WR (Woven Roving) / LT (Non Crimp Fabric)
- Orientation: t (balanced) / x (unbalanced)
- Rounded nominal weight (g/m²)
- Thermoplastic resin: PP
- Glass fiber ratio (%wt)
- Color: B (black) / W (natural)
- Internal code
- 02: High Performance Reinforcement glass
- Dimensions: width x length (cm)

PRODUCT APPLICATION

TWINTEX[®] P PP is mainly used for the following applications:
Automotive – Transportation – Sports & Leisure – Building & Construction.

FEATURES AND PRODUCT BENEFITS

- Ready to Use Product – The Thermoplastic Resin is inside
- Ease of Storage conditions
- Fast Processing Cycle Time
- High Mechanical Properties with Impact Resistance and Weight Saving
- No solvent Emission
- Recyclability

COMPOSITE MECHANICAL CHARACTERISTICS (AFTER MOLDING)

VALUES GIVEN IN WARP / WEFT DIRECTIONS OR AVERAGE OF BOTH DIRECTIONS FOR BALANCED PRODUCTS				Woven 1-1	Woven 4-1
Tensile	Strength		MPa (psi x 10 ³)	360 (52.2)	520 (75.4)
	Modulus	ISO527	GPa (psi x 10 ⁶)	15.3 (2.2)	160 (23.2) 22.2 (3.2) 7.4 (1.1)
Flexural	Strength		MPa (psi x 10 ³)	240 (34.8)	360 (52.2)
	Modulus	ISO14125	GPa (psi x 10 ⁶)	14.0 (2.0)	120 (18.1) 20.4 (3.0) 6.6 (1.0)
Impact Un-notched Charpy		ISO179	kJ/m ²	180	220 110
Glass content		ISO1172		60%wt / 35%vol	

- Mechanical property data developed in accordance with standard ISO specifications
- Mechanical testing performed on 3mm thick molded samples
- Relative values shown are accurate to the best of our knowledge, but should not be used for design purposes since absolute values can be influenced by processing conditions.
- More specific data are available upon request.

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PRODUCT AVAILABILITY*

TWINTEX® plates are available as coils palletized or/and as cut-to-size plates palletized

Code NEW NOMENCLATURE	Color	Nominal Weight (g/m ²)	Structure	Approximate thickness after consolidation (mm)	Standard dimensions width x length (cm)
Twintex® P PP 60 745 P-WRt-0750-PP60 B or W	natural or black	745	balanced	0.5	150x300
Twintex® P PP 60 1485 P-WRt-1490-PP60 B or W	natural or black	1485	balanced	1.0	150x300
Twintex® P PP 60 935 P-WRx-0940-PP60 B	black	935	4/1	0.8	100x300
Twintex® P PP 60 1870 P-WRx-1870-PP60 B	black	1870	4/1	1.6	100x300

* Other Twintex® plates are available upon request

PACKAGING

Each product of TWINTEX® P PP glass plate is wrapped in a polyethylene bag and palletized

STORAGE

TWINTEX® P PP products must be stored in its original packaging, away from humidity and at moderate temperature.

The best conditions are:

- Temperatures between 15°C and 35°C (60°F and 95°F)
 - Humidity between 35% and 65%

If product is stored at low temperature (below 15°C/60°F), it is advisable to condition it in the workshop, for at least 24 hours before use, to prevent condensation.

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Twintex_PPP_ww_09-2008_Rev5