Qatar Plastic & Wooden Products Company

Qatar Plastic & Wooden Products Company (QPPC) was established in 1998 and commercial production commenced in 2000. The production facility is located in Mesaieed Industrial City. The company is a shareholding partnership between Qatar Petrochemical Company (QAPCO), Qatar Industrial Manufacturing Company (QIMC).

Main Activities

QPPC produces plastic film for industrial packaging using the blown extrusion process. Products can be manufactured from different kinds of polymer to satisfy customer requirements. Printing is done using Flexographic printing lines in up to six colours, which ensures excellent quality. An analysis certificate detailing the composition, dimension and mechanical properties of the product is provided with every delivery.

Products

The Company produces the following products:

- FFS (form, fill and seal) film
- Shrinkable film & hood
- Construction foil (polythene sheet)
- Polyethylene sleeve (blue & black)
- Greenhouse and agricultural film
- Top open bags
- General purpose film
- Heavy duty trash bags
- WPC (Wood-Plastic Composite)
- Heat Treated Wooden Pallets (ISPM-15)

As part of diversification and in addition to the existing products, QPPC started the commercial production of a new product – Wood-Plastic Composite (WPC) – in the beginning of 2017 at the QPPC plant on the same premise. WPC (Wood-Plastic Composite) is made from two components – wood fiber and HDPE. The most common application of WPC is for outdoor decking of swimming pool areas, marinas, public areas, wall cladding, ceiling, beach walkways etc.



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wood plastic composite

A next generation material



product of



Material Description

The WPC (Wood-Plastic Composite) profiles extruded in the QPPC production unit, are produced with the use of a compound containing vegetable fibers (wood flour from 60 to 70%) and inorganic fillers (HDPE from 30 to 40%). The compound is admixed with antioxidants (to avoid thermal oxidation phenomena), lights stabilizers (to prevent phenomena of photodegradation) and master batches (to give the requested color to the finished product). Also, the WPC compound is characterized by high water resistance and good balance between extrusion output and mechanical properties. The surface of the boards can be brushed or not brushed.

Our profiles have the following features:

• Longer lifespan in various weather and climatic conditions

AND DESCRIPTION OF

- Greater resistance to salt corrosion and naturally prone to resist mould attacks
- Greater upkeep of the mechanical properties under typical outdoor weather conditions
- Low water absorption
- Aesthetic finish comparable to typical outdoor natural wood
- Multiple colours which can be obtained thanks to the thermoplastic matrix base
- Production flexibility allows decreasing scrap percentage (cuts made according to Customers' requirements)

Applications

The used compound is intended for extrusion of solid and hollow profiles for outdoor applications where good atmospheric agent resistance as well as stiffness is required. The main applications are for external installation like:



Dimensions and Type of Profiles

NOVELTY produces the following profil





The colours reproduced here are indicative only; we recommend to select the colour based on the actual product samples.

les	Decking	Cladding	Ceiling	Fencing
	-	1	1	1
	_	✓	✓	✓
	1	✓	_	_
	1	1	_	-
	1	1	_	-

Tabacco Cedro

Properties

Properties		Test Method	Unit	Value
Density		EN ISO 1183-1	g/cm ³	1,246 ± 0
Determination of flexural pro Modulus of Elasticity Bending Strength	perties	ISO 178	MPa MPa	<mark>2.567 ± 470</mark> 17,1 ± 5
Determination of tensile prop Modulus of Elasticity Elongation at break	perties	EN ISO 527	MPa %	3.936 ± 375 0,4 ± 0,2
Impact strength (Charpy, unnotched)		EN ISO 179	Kj/m ²	2,7 ± 0,9
Swelling in Water 1 day Water Absorption 1 day	1/1	DIN EN 317	%	$0,2 \pm 0,1$ $0,6 \pm 0$
Coefficient of linear thermal expansion (0°C – 115°C)		ASTM E 831	µm/(m·°C)	37 ± 0
Brinnel Test (Resistance to Indentation)		EN 1534:2010	kg/mm ²	7 ± 1,1
		Test Method	Result	
Resistance to burning cigarette		N 438-2:2005	Burn evident extended over the entire test area	
		Test Method	Unit	Value
Determination of moisture re Boil Test (5h) Change in Weight Change in Length	sistance	EN 1087-1:1995	% %	1,69 ± 0 0,06 ± 0
Bending Test Modulus of Elasticity Bending Strength		EN 310	MPa MPa	3705 ± 185 20,6 ± 0,6
		Test Method	Result	
Resistance to Fungi Basidiomycetes Xylophagous			The product under test must be considered as totally resistant to attack of basidiomycetes xylophagous	
Xylophagous	lycetes	ENV 12038:2002	considered as t attack of basidi xylophagous	otally resistant to omycetes
Xylophagous STAIN RESISTANCE	lycetes	ENV 12038:2002	considered as t attack of basidi xylophagous	otally resistant to omycetes
Xylophagous STAIN RESISTANCE Test Method	Spotting Substance	ENV 12038:2002	considered as to attack of basidi xylophagous	ntact Time
Xylophagous STAIN RESISTANCE Test Method	Spotting Substance	ENV 12038:2002	considered as to attack of basidi xylophagous Co 16 h	ntact Time
Xylophagous STAIN RESISTANCE Test Method EN 438-2: 2005	Spotting Substance * Acetone * Coffee (a 80°C)	ENV 12038:2002	considered as to attack of basidi xylophagous Co 16 h 5 3	ntact Time 10 h
Xylophagous STAIN RESISTANCE Test Method EN 438-2: 2005	Spotting Substance * Acetone * Coffee (a 80°C) * Sodium Hydrox	ENV 12038:2002	Co Co 16 h 5 3 -	ntact Time 10 h - 4
Xylophagous STAIN RESISTANCE Test Method EN 438-2: 2005	Spotting Substance * Acetone * Coffee (a 80°C) * Sodium Hydrox * Hydrogen Pero	ENV 12038:2002 kide (soluz. 25%) xide (soluz. 30%)	Co Co 16 h 5 3 - -	ntact Time 10 h - 4 5

5 = no visible change; 4 = slight change; 3 = slight sign; 2 = pronounced sign; 1 = surface structure change