

## Product benefits of Polysystem FG TNT



### EXCELLENT ENVIRONMENTALLY FRIENDLY SOLUTION

Polysystem membranes are 100% recyclable, including packaging such as tapes and labels.



### SUPERIOR SPEED AND SAFETY DURING INSTALLATION



### EXCELLENT RESISTANCE TO HIGH AND LOW TEMPERATURE



### SUPERIOR LIFE SPAN



### EXCELLENT RESISTANCE TO UV RADIATION

Polysystem membranes do not require any kind of protection and can be directly exposed to the elements.



### EXCELLENT PUNCTURE RESISTANCE

Polysystem membranes perform excellently when mechanically fastened.

## Polysystem FG TNT

*Flexible polyolefin membranes (TPO) reinforced with glass fibre, laminated on the lower surface with a layer of non-woven polypropylene fabric. This is produced by co-extrusion of Fortuline R Polyolefin alloy*

### Description

Over the last 15 years the European market has seen a trend towards consolidation in the area of TPO-based waterproofing products.

For years designers and installers alike have benefitted from the technical properties and the environmental advantages offered by these waterproofing sheets.

As one of the first manufacturers to see the possibilities offered by TPO (especially its environmentally friendly properties), Polysystem developed the range of Polysystem TPO products.

With the challenges of the future in mind, we have reorganised our product list, dividing the products into categories representing the use for which each is designed.

The new Polysystem range, alongside the more traditional roof waterproofing membranes, Polysystem, now also includes a range of Polysystem Hydro products for hydraulic applications as well as Polysystem Sub materials for use in underground conditions.

We are confident that our wide range of membranes and accessories for specific applications complete a product portfolio, which will meet all the requirements of our clients.

### Polysystem FG TNT

**Polysystem FG TNT** is a waterproofing membrane reinforced with glass fibre laminated on the lower surface with a layer of non-woven polypropylene fabric. This is produced by co-extrusion of Fortuline R polyolefin alloy.

The upper and lower surfaces are coloured differently so that the integrity of the membrane layer can be monitored more easily during installation and service life.

**Polysystem FG TNT** membranes are ideal for use in roof waterproofing adhered, mechanically fastened, ballasted and roof gardens.

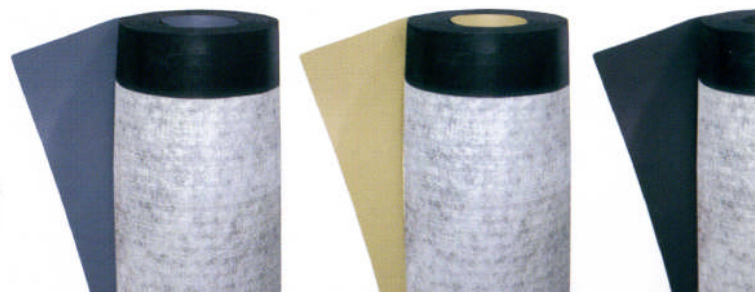
**Polysystem FG TNT** has been designed to provide excellent resistance to the ageing effects of UV radiation and heat, and to ensure the longest possible service life even under the harshest conditions.

The non-woven fabric layer, as well as providing a surface that is ideal for adhering, considerably increases the resistance of the waterproofing layer to puncture.

The glass fibre reinforcement considerably increases the stability of the waterproofing layer in the presence of significant thermal movement.



**POLISYSTEM UK LTD.®**



## Field of use

### EN 13956

- roof waterproofing, exposed, adhered
- roof waterproofing, exposed, mechanically fastened
- roof waterproofing, covered, ballasted
- roof waterproofing, covered, roof gardens

## Installation

Weld using hot air (indicative conditions: 350°C at 2m/min)

## Standard colours

Grey top surface and black underneath (single layer)

**N.B. Other colours available on request**

Characteristics	Norms	U.M.	Tolerance	Test results			
Standard thickness (1)	EN 1849-2	mm	-5%;+10%	1.20	1.50	1.80	2.00
Mass per unit area	EN 1849-2	kg/m <sup>2</sup>		1.08	1.35	1.62	1.80
<b>Tensile properties</b>							
Max load (MD/CMD)	EN 12311-2 A	N/mm <sup>2</sup>	≥	700	800	850	900
Elongation at break (MD/CMD)		%	≥	650	700	750	800
<b>Tear strength</b>							
MD max load	EN 12310-2	N	≥	150	180	200	230
Elongation at break (MD/CMD)		N	≥	150	180	200	230
Static indentation	EN 12730-B	kg	≥	25			
Impact	EN 12691-B	mm	≥	1000	1250	1500	1750
Cold flexibility (2)	EN 495-5	°C	≤	-40			
<b>Dimensional stability</b>							
MD	EN 1107-2	%	≤	0.1			
CMD		%	≤	0.1			
Watertightness	EN 1928	kpa	≥	200			
Vapour permeability	EN 1931	μ	≤	50,000			
Shear of weldings	EN 12317-2			Pass			
Peeling of weldings	EN 12316-2	N/cm	≥	60			
Reaction to fire	EN 13501-1			E roof			
External fire performance	EN13501-5			NPD			
Resistance to root penetration	BBA 04/4109			Pass			
UV resistance	EN 1297			Pass			
Dangerous substances				The product does not contain hazardous substances			

Tolerances according to EN 13956

- 1) Standard thickness 1.5mm. Other thicknesses up to 3mm available on demand
- 2) Not tested at lower temperature

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