Technical Data Sheet

HYRANGER TS PY

1.	**Description**	Hyranger TS PY is a stabilised polyester reinforced SBS elastomeric modified bituminous waterproofing membrane. Minimum side lap width is 6cm shown by a red line. A second red line 16cm from the edge allows the material to be identified after installation.
2.	**Use**	Base or intermediate layer of the Hyranger TS multi-layer waterproofing system for flat roofs. It can also be used as the top layer under site applied added protection.
3.	**Application method**	Installed fully bonded, with fully sealed joints, using torch-on techniques, to form a continuous layer.
4.	**Storage**	Rolls to be stored upright and away from heat.
5.	**Composition**	(Indicative).

Reinforcement (g/m²)	Stabilised polyester	180
Binder (g/m²)	SBS elastomer	2,700
Surface finish (g/m²)	Macroperforated film+sand	100
Under surface finish (g/m²)	Thermofusible film	10

Characteristics			Standards (BS)	Units	Value	Tolerance	
						Min	Max
Dimensions	Length		EN 1848-1	m	7	-1%	
	Width			m	1	-1%	
	Straightness			-	Pass		
	Nominal roll weight			kg	23		
	Thickness (on finished product)		EN 1849-1	mm	2.65	±5%	
Visible defects	New product		EN 1850-1	-	None		
	After ageing to EN 1297			-	NA		
Adhesion of granules			EN 12039	%	NA	-	-
Resistance to tearing (nail shank)	Longitudinal		EN 12310-1	N	150	120	-
	Cross direction				150	120	-
Tensile properties: maximum tensile force	Longitudinal		EN 12311-1	N/50mm	700	500	
	Cross direction				500	440	
Tensile properties: elongation	Longitudinal		EN 12311-1	%	40	25	
	Cross direction				40	25	
Peel resistance of joint	Maximum force	Selvedge	EN 12316-1	N/50mm	NA	-	-
		End joint			NA	-	-
	Average force	Selvedge			NA	-	-
		End joint			NA	-	-
Shear resistance of joint	Maximum force	Selvedge	EN 12317-1	N/50mm	NA	-	-
		End joint			NA	-	-
Flexibility at low temperature	Surface		EN 1109	°C	-15	≤	
	Under surface				-15	≤	
Flow resistance at elevated temperature	New product		EN 1110	°C	100	≥	
	After ageing to EN 1296				NA	-	-
Resistance to impact			EN 12691	mm	600	≥	
Resistance to static loading			EN 12730 (A)	kg	20	≥	
Dimensional stability			EN 1107-1	%	0.5	≤	
Form stability under cyclic temperature change			EN 1108	%	NA		

Characteristics		Standards (BS)	Units	Value	Tolerance	
					Min	Max
Water vapour transmission properties	New product	EN 1931	-	μ=20000		
	After ageing to EN 1296		-	NA		
Watertightness	New product	EN 1928	-	Pass	<10kPa	
	After ageing to EN 1296		-	NA		
Watertightness after stretching at low temperature		EN 13897	%	NA		
Reaction to fire		EN 13501-1	-	NA		
Resistance to root penetration		EN 13948	-	NA		

NA=Not applicable due to use of product.

NPD=No performance determined.

Axter Ltd reserves the right to modify and update this data at any time without prior notice. Only the latest version of this document is valid, available for download at www.axter.co.uk/downloads. Once downloaded, documents are uncontrolled. Users should always confirm they are referring to the latest version prior to use. Further assistance is available from Axter Ltd's Technical Support Team, email: technical@axterltd.co.uk, telephone: 01473 935008.

The intended use of this product should be verified with Axter Ltd prior to adoption to ensure its suitability and compliance with specifications, project requirements, industry regulations, legislation, good practice, installation techniques and all other relevant guidance. Axter Ltd accepts no liability for non-compliant use of this product.