

# PRODUCT DATA SHEET

n° of certification organisation: 0679  
Year mark was 1<sup>st</sup> fixed : 2006

**Technical ref:**  
AT HYRANGER TS

## HYRENE (HYRANGER) TS FMP

### DESCRIPTION

HYRANGER TS FMP is a glass-fibre reinforced SBS elastomeric modified bituminous waterproofing membrane. Minimum side lap width is 6cm shown by a white line. A second white line 16cm from the edge allows the material to be identified after installation.

### USE

Base or intermediate layer of the HYRANGER TS multi-layer waterproofing system for flat roofs.

### APPLICATION METHOD

Torched.

### STORAGE

Rolls to be stored upright and away from heat.

### COMPOSITION

(indicative)

Reinforcement (gm/m <sup>2</sup> ) :	Glass-fibre	50
Binder (gm/m <sup>2</sup> ) :	SBS elastomer	3,100
Surface finish (gm/m <sup>2</sup> ) :	Macro perforated film + sand	100
Under surface finish (gm/m <sup>2</sup> ) :	Thermofusible film	10

### CHARACTERISTICS

	STANDARD(BS)	UNITS	VALUES	Tolerance		
				Min	Max	
Dimensions	EN 1848-1	Length	10		-1%	
		Width	1		-1%	
		Straightness	-	Pass		
	EN 1849-1	Nominal roll weight	35.4			
		Thickness (on finished product)	2.80	2.65	3.00	
Visible defects	EN 1850-1	New product	-	None		
		After ageing to EN 1297	-	NA		
Adhesion of granules	EN 12039	%	NA	-	-	
Resistance to tearing (nail shank)	EN 12310-1	Longitudinal	NA	-	-	
		Cross direction	NA	-	-	
Tensile properties : maximum tensile force	EN 12311-1	Longitudinal	250	200	500	
		Cross direction	150	120	280	
Tensile properties : elongation	EN 12311-1	Longitudinal	3	2	4	
		Cross direction	3	2	4	
Peel resistance of joint	EN 12316-1	Maximum force	Selvedge	NA	-	-
			End joint	NA	-	-
		Average force	Selvedge	NA	-	-
			End joint	NA	-	-
Shear resistance of joint	EN 12317-1	Maximum force	Selvedge	NA	-	-
			End joint	NA	-	-
Flexibility at low temperature	EN 1109	Surface	-16		≤	
		Under surface	-16		≤	
Flow resistance at elevated temperature	EN 1110	New product	100		≥	
		After ageing to EN 1296	NA	-	-	
Resistance to impact	EN 12691	mm	30		≤	
Resistance to static loading	EN 12730 (A)	kg	PND		≥	
Dimensional stability	EN 1107-1	%	0.1		≤	
Form stability under cyclic temperature change	EN 1108	%	NA			
Water vapour transmission properties	EN 1931	New product	-	μ=20000		
		After ageing to EN 1296	-	NA		
Watertightness	EN 1928	New product	-	Pass	<10 kPa	
		After ageing to EN 1296	-	NA		
Watertightness after stretching at low temperature	EN 13897	%	NA			
Reaction to fire	EN 13501-1	-	F			
Resistance to root penetration	EN 13948	-	NA			
Dangerous substances consult : <a href="http://europa.eu.int/comm/enterprise/construction/internal/dangsub/dangmain.htm">http://europa.eu.int/comm/enterprise/construction/internal/dangsub/dangmain.htm</a>	-	-	None			

NA=not applicable due to use of product.  
PND=performance not determined.