

# Technical Data Sheet

## HYRANGER 40 FR (Fire Resisting) Capsheet

<b>Description</b>	<p>HYRANGER 40 FR is a stabilised polyester reinforced SBS elastomeric modified bitumen waterproofing membrane with graphite fire resisting technology. Its surface is finished with coloured mineral chippings and its under surface with thermofusible film. Minimum selvedge width is 6cm.</p> <p>HYRANGER 40 FR membrane achieves the highest fire performance classification shielding the roof from both spread of flame and fire penetration. It is classified Broof(t4) in accordance with Table 1 of BS EN 13501-5: 2015 + A1: 2009. Hyranger achieves the highest designation code of EXT.F.AA when tested in accordance with BS 476:Part 3:2004 Incorporating Amendment 1: 2006 and Amendment 2: 2007.</p>
<b>Use</b>	<p>Capsheet for use in warm roof multi layer reinforced bitumen membrane (RBM) waterproofing system for flat roofs on new build and refurbishment projects.</p>
<b>Application method</b>	<p>Installed fully or partially bonded, with fully sealed joints, using torch-on technique to form a continuous layer.</p>
<b>Storage</b>	<p>Rolls to be stored upright and away from heat.</p>
<b>Composition</b>	<p>(indicative)</p>

Reinforcement (g/m <sup>2</sup> ) :	Stabilised polyester	180
Binder (g/m <sup>2</sup> ) :	SBS elastomer	3,000
Surface finish (g/m <sup>2</sup> ) :	Mineral slates	1,000
Under surface finish (g/m <sup>2</sup> ) :	Thermofusible film	10

Characteristics		Standard(BS)	Units	Values	Tolerance		
					Min	Max	
Dimensions	Length	EN 1848-1	m	5 or 10	-1%		
	Width		m	1	-1%		
	Straightness		-	Pass			
	Nominal roll weight		kg	44 (10m) 24 (5m)			
	Thickness (selvedge)	EN 1849-1	mm	3.50	3.30	3.70	
Visible defects	New product	EN 1850-1	-	None			
	After ageing to EN 1297		-	NA			
Adhesion of granules		EN 12039	%	15	0	30	
Resistance to tearing (nail shank)	Longitudinal	EN 12310-1	N	NA	-	-	
	Cross direction			NA	-	-	
Tensile properties: maximum tensile force	Longitudinal	EN 12311-1	N/50 mm	600	500	950	
	Cross direction			600	500	700	
Tensile properties: elongation	Longitudinal	EN 12311-1	%	35	25	55	
	Cross direction			35	25	60	
Peel resistance of joint	Maximum force	EN 12316-1	N/50mm	Selvedge	NA	-	-
				End joint	NA	-	-
	Average force			Selvedge	NA	-	-
				End joint	NA	-	-
Shear resistance of joint	Maximum force	EN 12317-1	N/50mm	Selvedge	NA	-	-
				End joint	NA	-	-
Flexibility at low temperature	Surface	EN 1109	°C	-16	≤		
	Under surface			-16	≤		

Characteristics		Standard(BS)	Units	Values	Tolerance	
					Min	Max
Flow resistance at elevated temperature	New product	EN 1110	°C	100	≥	
	After ageing to EN 1296			100	90	120
Resistance to impact		EN 12691	mm	NA	≤	
Resistance to static loading		EN 12730 (A)	kg	NA	≥	
Dimensional stability		EN 1107-1	%	0.5	≤	
Form stability under cyclic temperature change		EN 1108	%	NA		
Water vapour transmission properties	New product	EN 1931	-	μ=20000		
	After ageing to EN 1296		-	NA		
Watertightness	New product	EN 1928	-	Pass	at 10 kPa	
	After ageing to EN 1296		-	NA		
Watertightness after stretching at low temperature		EN 13897	%	NA		
Reaction to fire		EN 13501-1	-	PND		
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.

The manufacturer reserves the right to modify, at any time, the characteristics of this product.