

# PRODUCT DATA SHEET

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

## HYRANGER 250 E GREEN MINERAL

Technical ref:  
▶ AT HYRANGER

### DESCRIPTION

HYRANGER 250 E GREEN MINERAL is a stabilised polyester reinforced SBS elastomeric modified bituminous waterproofing membrane. Its surface is finished with coloured mineral chippings. Minimum selvedge width is 6.5cm.

### USE

Cap sheet for use in multi-layer waterproofing systems for flat roofs.

### APPLICATION METHOD

Pour and roll.

### STORAGE

Rolls to be stored upright and away from heat.

### COMPOSITION

(indicative)

Reinforcement (gm/m <sup>2</sup> ) :	Stabilised polyester	250
Binder (gm/m <sup>2</sup> ) :	SBS elastomer	3,100
Surface finish (gm/m <sup>2</sup> ) :	Mineral slates	1,000
Under surface finish (gm/m <sup>2</sup> ) :	Sand	300

### 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	43.1			
		Surface mass	4.30	4.10	4.70	
Visible defects	EN 1850-1	New product	None			
		After ageing to EN 1297	NA			
Adhesion of granules	EN 12039	%	15	0	30	
Resistance to tearing (nail shank)	EN 12310-1	Longitudinal	NA	-	-	
		Cross direction	NA	-	-	
Tensile properties : maximum tensile force	EN 12311-1	Longitudinal	950	770	1150	
		Cross direction	900	740	1100	
Tensile properties : elongation	EN 12311-1	Longitudinal	50	35	65	
		Cross direction	60	40	80	
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	110	100	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	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 :	-	-	None			

http://europa.eu.int/comm/enterprise/construction/internal/dangsub/dangmain.htm  
NA=not applicable due to use of product.

The manufacturer reserves the right to modify, at any time, the characteristics of its products.