

# PRODUCT DATA SHEET

## FORCE LINE 3.5

**Technical ref:**  
▶ FT AXTER

### DESCRIPTION

FORCE LINE 3.5 is a polyester reinforced elastomeric (SBS) modified bituminous membrane. Its surface is finished with mineral chippings. The minimum selvedge width is 6cm.

### USE

Cap sheet in a single or multi-layer roof waterproofing system.

### APPLICATION METHOD

Torched.

### STORAGE

Rolls to be stored upright and away from heat.

### COMPOSITION

(indicative)

Reinforcement (gm/m <sup>2</sup> ) :	Stabilised polyester	120
Binder (gm/m <sup>2</sup> ) :	Elastomer	3000
Surface finish (gm/m <sup>2</sup> ) :	Mineral slates	1200
Under surface finish (gm/m <sup>2</sup> ) :	Thermofusible film	10

### CHARACTERISTICS

	STANDARD	UNITS	VALUES	Tolerance		
				Min	Max	
Dimensions	EN 1848-1	Length	8	-0%		
		Width	1	-1%		
		Straightness	-	Pass		
		Nominal roll weight	37.6		39.8	
	EN-1849-1	Thickness	3.50	3.3	3.7	
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	450	320	490	
		Cross direction	270	250	310	
Tensile properties : elongation	EN 12311-1	Longitudinal	30	10	50	
		Cross direction	55	10	75	
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	-10	≤		
		Under surface	-10	≤		
Flow resistance at elevated temperature	EN 1110	New product	90	≥		
		After ageing to EN 1296	100	90	110	
Resistance to impact	EN 12691	mm	NA	≥		
Resistance to static loading	EN 12730 (A)	kg	NA	≥		
Dimensional stability	EN 1107-1	%	0.3	≤		
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		
		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.

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