

# Technical Data Sheet

## FORCE 4000 DALLE TRAFIC

<b>Description</b>	FORCE 4000 DALLE TRAFIC is a 4mm thick stabilised polyester reinforced, SBS elastomeric modified bituminous waterproofing membrane. Both surfaces have a film finish and on the upper surface there is a red marker line along the selvedge indicating the 100mm lap width and differentiating this anti-root TRAFIC membrane from the standard Force 4000 Dalle membrane.
<b>Use</b>	Top layer in single layer waterproofing system with anti-root additive for use under insulation in inverted flat roofs.
<b>Application method</b>	Fully bonded, with fully sealed joints, using torch-on technique to form continuous layer.
<b>Storage</b>	Rolls to be stored upright and away from heat.
<b>Composition</b>	(indicative)

<b>Reinforcement (g/m<sup>2</sup>) :</b>	Stabilised polyester	180
<b>Binder (g/m<sup>2</sup>) :</b>	SBS elastomer	5,000
<b>Surface finish (g/m<sup>2</sup>) :</b>	Thermofusible film	10
<b>Under surface finish (g/m<sup>2</sup>) :</b>	Thermofusible film	10

Characteristics		Standards (BS)	Units	Value	Tolerance		
					Min	Max	
Dimensions	Length	EN 1848-1	m	8	-1%		
	Width		m	1	-1%		
	Straightness		-	Pass			
	Nominal roll weight		kg	42.0			
	Thickness (on finished product)	EN 1849-1	mm	4.00	3.80	4.20	
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	NA			
	Cross direction			NA			
Tensile properties: maximum tensile force	Longitudinal	EN 12311-1	N/50 mm	700	600	900	
	Cross direction			600	500	730	
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	Selvage	NA	-	-
				End joint	NA	-	-
	Average force			Selvage	NA	-	-
				End joint	NA	-	-
Shear resistance of joint	Maximum force	EN 12317-1	N/50mm	Selvage	600	500	730
				End joint	700	600	900
Flexibility at low temperature	Surface	EN 1109	°C	-16	≤		
	Under surface			-16	≤		
Flow resistance at elevated temperature	New product	EN 1110	°C	100	≥		
	After ageing to EN 1296			NA			
Resistance to impact		EN 12691	mm	2000	≥		
Resistance to static loading		EN 12730 (A)	kg	20	≥		
Dimensional stability		EN 1107-1	%	0.5	≤		

Characteristics		Standards (BS)	Units	Value	Tolerance	
					Min	Max
Form stability under cyclic temperature change		EN 1108	%	NA		
Water vapour transmission properties	New product	EN 1931	-	$\mu=20000$		
	After ageing to EN 1296		-	NA		
Watertightness	New product	EN 1928	-	Pass	<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.