

Technical Data Sheet

FORCE 4000 TRAFIC FLAME FREE Capsheet

Description	Force 4000 Traffic Flame Free is a stabilised polyester reinforced, SBS elastomeric modified bitumen waterproofing membrane with anti-root additive. The membrane has a self protected natural slate mineral granule finish and a self adhesive under surface. Minimum selvedge width is 8cm.
Use	Capsheet in Cityflor Neo-Bitumen® flame free, self adhesive, warm roof, multi-layer bitumen membrane waterproofing system for living roofs.
Application method	<p>Fully bonded, with fully sealed joints, by flame free self adhesive hot air welding techniques, to form a continuous watertight layer.</p> <p>The Force 4000 Traffic Neo-Bitumen® flame free membrane must be laid loose and positioned prior to removal of the protective silicone release film from the underside of roll.</p> <p>Simultaneously unroll the membrane and remove the protective silicone release film exposing the Neo-Bitumen® self adhesive surface and ensure full adhesion to the membrane/prepared surface below, using hot air activation/flame-free tooling as necessary.</p> <p>A heavy metal roller should be used to remove any air bubbles and ensure full bonding is achieved.</p> <p>Lap joints are secured using flame free self adhesive hot air tooling and a 2mm bead of bitumen should be visible along the selvedge.</p> <p>At head laps mineral granules should be heated and removed using flame free hot air tooling techniques ensuring a black to black bond is achieved and a 2mm bead of bitumen is visible along the head lap.</p>

Storage	Rolls to be stored upright and away from heat.
Composition	(indicative)

Reinforcement (g/m²) :	Stabilised polyester reinforced with glass-fibre	230
Binder :	Anti-root SBS elastomer (self adhesive on under surface)	
Surface finish :	Mineral self protection with silicone film on selvedge	
Under surface finish :	Peel-off silicone film	

Characteristics		Standard(BS)	Units	Values	Tolerance	
					Min	Max
Dimensions	Length	EN 1848-1	m	8	-1% MLV	
	Width		m	1	-1% MLV	
	Straightness		-	20mm x 10m	Pass	
Nominal roll weight	kg		46.5			
	Thickness (selvedge)		mm	4.00	±0.2	
Visible defects		EN 1850-1	-	None		
Adhesion of granules		EN 12039	%	30 max.	MDV	
Resistance to tearing (nail shank)	Longitudinal	EN 12310-1	N	200	-30%	
	Cross direction			200		
Tensile properties: maximum tensile strength	Longitudinal	EN 12311-1	N/50 mm	1200	±20%	
	Cross direction			960		
Tensile properties : elongation at break	Longitudinal	EN 12311-1	%	45	-15 absolute	
	Cross direction			50		
Flexibility at low temperature		EN 1109	°C	-25	MLV	

Characteristics		Standard(BS)	Units	Values	Tolerance	
					Min	Max
Flow resistance at elevated temperature	New product	EN 1110	°C	100	MLV	
	After ageing to EN 1296	EN 1296/1297		-15	+15	
Dimensional stability	Longitudinal	EN 1107-1 A	%	±0.3	MLV	
	Cross direction					
Self Adhesion Properties		ASTM D 1000	N/10mm	20	-5	
Water vapour transmission properties		EN 1931	Sd/m	170	±60	
Watertightness (A)		EN 1928	kPa	500	MLV	
Reaction to fire		EN 13501-1	-	PND		

PND=Performance not determined. MDV=Manufacturer declared value. MLV=Manufacturer limiting value.

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