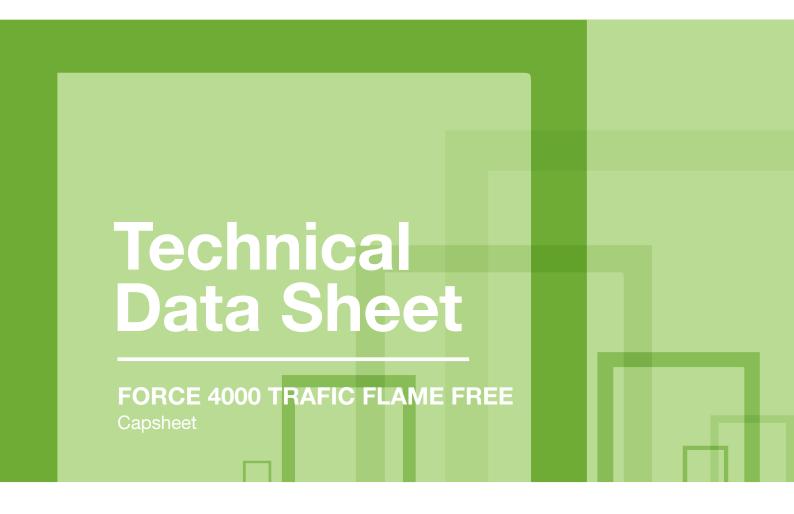
Bitumen Waterproofing



Description	Force 4000 Trafic 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	Fully bonded, with fully sealed joints, by flame free self adhesive hot air welding techniques, to form a continuous watertight layer.		
	The Force 4000 Trafic 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.		
	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.		
	A heavy metal roller should be used to remove any air bubbles and ensure full bonding is achieved.		
	Lap joints are secured using flame free self adhesive hot air tooling and a 2mm bead of bitumen should be visible along the selvedge.		
	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.		

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		m	8	-1% MLV	
	Width	EN 1848-1	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	EN 12310-1		200		
Tensile properties: maximum tensile strength	Longitudinal	EN 12311-1	N/50 mm	1200	±20%	
	Cross direction			960	±2U70	
Tensile properties : elongation at break	Longitudinal	EN 12311-1	%	45	-15 abso	luto
	Cross direction	LIN 12011-1		50	10 absolute	
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 Cross direction	EN 1107-1 A	%	±0.3	MLV	
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	-	NPD		

NPD=No Performance Determined. MDV=Manufacturer declared value. MLV=Manufacturer limiting value.

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