

Kemline PVC

Flexible High Strength, PVC Membrane

Description	Kemline PVC membrane is a thermoplastic synthetic membrane made by co-extrusion from plasticized PVC. It has different physical, chemical properties with high tearing strength, enhanced with 2 ply's in different colors. Multiple colors are available on request		
Where to use	• Waterproofing of basins and tanks • Waterproofing of canals and tunnels • Waterproofing of reservoirs		
Advantages	• High resistance to tear • High elongation at break • High mechanical properties • No odor and zero - VOC • Resistance to perforation by roots • High puncture resistance • Used for fresh or salt water • Includes a signal layer		
Properties			
Thickness ±5%	1.5 mm	2 mm	3 mm
Roll length/width	20 m / 2.1m – other lengths are available on request		
Water permeability - EN 1928 – DIN 53495	≤ 2%		
*Water tightness to liquid water – EN 1928	No leakage was observed during 1MPa test / 24 hours		
Resistance to static loading – EN12730 – ASTM D751 ≥10 Bars	≥ 20 Kg	≥ 20 Kg	≥ 20 Kg
*Tensile strength – EN ISO 527 – EN 12311-2	Longitudinally ≥ 15 N/mm ²	Longitudinally ≥ 16 N/mm ²	Longitudinally ≥ 16 N/mm ²
	Machine Direction	Machine Direction	Machine Direction
	Transverse ≥ 15 N/mm ²	Transverse ≥ 15 N/mm ²	Transverse ≥ 16 N/mm ²
	Cross Direction	Cross Direction	Cross Direction
*Elongation at break – EN ISO 527 – EN 12311-2	Longitudinally ≥ 300%	Longitudinally ≥ 300%	Longitudinally ≥ 300%
	Machine Direction	Machine Direction	Machine Direction
	Transverse ≥ 300%	Transverse ≥ 300%	Transverse ≥ 300%
	Cross Direction	Cross Direction	Cross Direction
*Resistance to impact – EN ISO 12691 – No perforation	No leakage/puncture was observed while 500g load was dropped from a height of 1250mm		
*Resistance to tear – ISO 34-1	≥ 100 on both Longitudinally & Transverse directions		
Reaction to fire – EN 13501-1 – DIN 4102/1 – B1	Class E		
Determination of water vapor transmission – EN 1931	≥ 18.000 μ ± 30%		
*Peel resistance of joint – EN 12316-2	≥ 540 N/50mm	≥ 540 N/50mm	≥ 540 N/50mm
Dimensional stability – EN 1107-2 – ASTM D1204 – DIN 16726/53377	≤ ± 2%		
*Foldability at low temperature – EN 495-5 – -20 °C	No Cracks		
Visible defects – EN 1850-2	Pass		
Effects of liquid chemicals – EN ISO 14414	Resistant		
Root penetration CEN/TS 14416	Pass – Not affected		
Shear resistance EN 12317-2	14.3 N/mm ²		

Surface Preparation	• Surface must be sound, clean and dry, free from dust, laitance, grease • Sweep or vacuum any dust or loose particles • concrete compressive Strength after 28 days should be 25 Mpa and tensile bond 1.5 Mp
Application	Adjacent Kemline PVC waterproofing membrane sheets shall be joined by hot-air welding to produce homogeneous, watertight seams. Joint Welding Welding may be carried out using: • Hand-held hot-air welding equipment for detailing and confined areas • Automatic hot-air welding machine for straight seam welding • Automatic double-track hot-air welding machine with integrated air channel, where specified, to facilitate seam integrity testing Installation Recommendations • Ensure membrane surfaces are clean, dry, and free from dust, moisture, oil, or other contaminants prior to welding • Welding parameters, including temperature, travel speed, air flow, and pressure, shall be adjusted according to membrane thickness, equipment type, and prevailing site conditions • Carry out trial welds at the start of each working day and whenever weather conditions change to verify optimum welding parameters • Avoid welding during rain, standing water, or when moisture is present within the overlap area • During periods of intense solar radiation or high surface temperatures, adjust welding settings or schedule installation during cooler periods of the day to maintain consistent weld quality • Completed seams shall be visually inspected and mechanically tested using an approved seam probe. Any defects shall be repaired by re-welding • The recommended application temperature is +5°C to +28°C • The recommended testing temperature is 23 ± 2 ° C at a relative humidity 50 ± 5% according to EN 12311-2 and/or EN 12310-2 • Welding parameters shall be adjusted to suit ambient and substrate conditions and verified by trial welds prior to installation
Shelf life & Storage	Kemline PVC has a shelf life of 36 months if kept in original packs in a dry condition
Health and Safety	• Use goggles, gloves and a breathing mask when applying • Apply forced ventilation in confined spaces • Remove splashes from skin with hand cleaner or soap and water • Eye splashes to be washed with plenty of water
Additional Information	PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range for our customer's satisfaction PROKEM reserves the right to change the properties of its products All orders are accepted subject to our current term of sale & delivery Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request PROKEM extends technical services to include after-sales support to assist users in the proper handling of our products