Technical Data Sheet
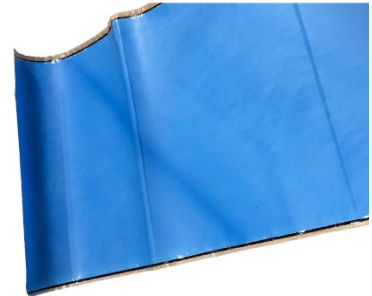
Zemseal® PA

self-adhesive water- and radonproof membrane

Product

Description	**Zemseal® PA** is a self-adhering waterproofing membrane consisting of SBS rubberized asphalt compound, which is integrally laminated to a tough, high-density cross-laminated polyethylene film. The membrane is specifically designed to be self-adhered to a prepared substrate providing a high-performance waterproofing barrier even under hydrostatic head pressures to 70 m.
Uses	**Zemseal® PA** is designed for use as a self-adhered sheet waterproofing membrane in above or below grade applications. Principal application is on concrete foundation walls, plaza decks, tunnels, and parking decks in both vertical and horizontal orientations. Combined with **Zemseal® water based primer**, offers excellent performance.
Characteristics / advantages	▪ 1,5mm thick, SBS modified membrane ▪ Excellent cold weather application properties ▪ No VOC's and low odor ▪ Double side-lap feature offers superior water-tightness ▪ Factory controlled thickness ▪ Fully adhered systems prevent lateral water movement ▪ Resists up to 70m of positive-side head pressure ▪ Radon proof

Product Data

Appearance	Thickness	1,5 mm
	Roll Length	20,3 m
	Roll Width	91,4 cm
	Top Surface	cross-laminated polyethylene (HDPE)
	Bottom Surface	Siliconized Release Film
	Gross Coverage	18,6 m²
	Net Coverage*	17,3 m²
	*Based on 65 mm laps both sides and end laps.	

Packaging	rolls are wrapped in a dark blue plastic shrink foil
	20 rolls per pallet
Storage	Store in original cartons, on pallets or elevated platform. Protect from weather or store in an enclosed area below 49°C. Double stacked pallets are not recommended. If double stacking is necessary, use a plywood sheet to distribute the load.

Material Properties

Color	blue
Thickness	1,5 mm
Application Temp	-10°C and above
Elongation (ASTM D412)	300% (To ultimate failure of rubberized asphalt)
Tensile Strength (Membrane) ASTM D412 – modified	2,24 Mpa
Peel Strength (ASTM D903)	1,6 kg/cm (1576 N/m)
Minimum Puncture Resistance – Membrane (ASTM E154)	22,7 kg (222 N/m) minimum
Flexibility at -26°C (ASTM D1970)	Pass
Water Vapor Transmission (ASTM E96)	0,02 perms (1.14 ng/Pa.s.m^2)
Lap Peel Strength @ 4°C (ASTM D1876)	580 N/m
Hydrostatic Head (ASTM D5385)	70 m of water pressure
Moisture Absorption (ASTM D570-81)	0.1% maximum

Limitations	Non-resistant to oils and solvents. Not designed for use in direct contact with potable water or permanent exposure and must be covered to prevent damage from sunlight. Good practice calls for the membrane to be covered immediately following application. Refer to minimum cure time requirements of sealant and mastics prior to applying polystyrene insulation. Do not use in contact with flexible PVC/vinyl products. Use only **Zemseal® Sealant** for terminations and penetration sealant to assure sealant compatibility. Avoid using solvent-based primer in below-grade applications when expecting temperatures above 5°C during the full installation, to avoid possible hazardous fume accumulations. Use waterbased **Zemseal PA primer** (Aquatac Primer) instead.
Disclaimer / Notes:	All technical data stated in this TDS are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control. Recommendations with regard to product application given in the present technical data sheet for practical assistance of product users are based on our experience and our present scientific and practical body of knowledge. These recommendations, however, are given without engagement and do not establish a contractual relationship or subsidiary duties. These recommendations do not relieve users of their liability and of their own responsibility to test, whether our product is adequate for the intended purpose of application. Please refer to the latest edition of this Technical Data Sheet on our web presence www.maxfrank.com

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