

ALSAN TRAFIK HP 500

TECHNICAL DATA SHEET APTDS-E-07-01

DESCRIPTION

ALSAN TRAFIK HP 500 traffic coating system is a polyurethane membrane designed to waterproof vehicular and pedestrian traffic areas on concrete decks. It can also be installed on concrete decks for balconies. This system is composed of three products for light pedestrian traffic and four products for vehicular traffic:

ALSAN TRAFIK HP 515 is a two-component polyurethane resin used as a primer on concrete.

ALSAN TRAFIK EP 110 is a two-component epoxy primer and vapour barrier, used as primer and vapour barrier on slab on grade. (see details on the product data sheet).

ALSAN TRAFIK HP 520 is a single component polyurethane resin waterproofing membrane.

ALSAN TRAFIK HP 530 is a single component polyurethane resin wear coat. It is installed in one or more layers depending on the traffic density.

ALSAN TRAFIK HP 540 is a single component aliphatic polyurethane resin finish coat.

***ALSAN TRAFIK HP 500** system is approved by Canadian Food Inspection Agency.

SURFACE PREPARATION

1. Concrete must be fully cured (28 days) with a minimum hardness of 24 MPa (3500 psi). Surface needs to be sound, clean and free of dust or debris.
2. Concrete surface must be prepared to obtain concrete surface profile (ICRI CSP) of 2, 3 or 4. To obtain such a profile, the use of special equipment such as shot blasting is recommended.
3. Concrete substrate should have a maximum moisture content of 1.5 kg/100 m²/24 h (ASTM F1869) and internal content of 75 % RH (ASTM F2170) and be prepared as required to provide proper adhesion of the membrane system to the substrate with a minimum bond strength of 1.4 MPa (200 psi) as per CAN/CSA-A23.1-04/A23.2-04 section 6B.
4. Cracks of more than 1.6 mm (1/16 in) width need to be repaired with ALSAN ACTIF.
5. When needed, concrete reparation must be done with a mix of ALSAN TRAFIK EP 110 and silica fume or with appropriate products.

APPLICATION

1. Surface will be primed with **ALSAN TRAFIK HP 515** using a roller or a squeegee. **ALSAN TRAFIK EP 110** primer can also be used. Remove the lid, remove the plastic insert (part B) and pour the entire content into part A. Then, the two parts are mixed thoroughly for at least 2 to 3 minutes for an homogeneous consistency. Pot life after mixing is 15-20 minutes at 25 °C (77 °F). It must be dry and tack free before applying **ALSAN TRAFIK HP 520** (maximum recoat window: 36 h).

2. Once primer **ALSAN TRAFIK HP 515** or **ALSAN TRAFIK EP 110** is completely dry, apply **ALSAN TRAFIK HP 520** (mixed with ALSAN ACCELERATOR) with a 6 mm (3/16 in) notched squeegee. Back roll the surface to level.

3. Once **ALSAN TRAFIK HP 520** is completely dry (minimum 12 hours), apply ALSAN TRAFIK HP 530 (maximum recoat window: 36 h) with a roller. Spread aggregates to create a non-slip surface once the installation is completed and while the surface is still wet, roll the **ALSAN TRAFIK HP 530** to well encapsulate the aggregates. In ramps, spread aggregates at refusal and remove excess after curing before installing second layer of **ALSAN TRAFIK HP 530** (heavy duty traf c). Second layer coverage rate of **ALSAN TRAFIK HP 530** will drop considerably.

4. Once the last coat of **ALSAN TRAFIK HP 530** is completely dry (minimum 6 hours), apply the transparent finish coat of ALSAN TRAFIK HP 540 with a roller (maximum recoat window: 36 h). **ALSAN TRAFIK HP 540** can be coloured with **ALSAN TRAFIK HP COLORANT** (see product technical data sheet).

Traf c is allowed 72 hours after the installation of **ALSAN TRAFIK HP 540**. Traf c is allowed 72 hours after the installation of **ALSAN TRAFIK HP 540**.

For proper curing, minimum application temperature is 5 °C (41 °F). The above drying times are for ideal application conditions, 22 °C (72 °F) and 50 % relative humidity. Drying times are longer at lower temperature and/or with lower relative humidity.

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PACKAGING

Specifications	PRIMER: ALSAN TRAFIK HP 515	MEMBRANE: ALSAN TRAFIK HP 520	WEAR COAT: ALSAN TRAFIK HP 530	FINISH COAT: ALSAN TRAFIK HP 540
Physical state	Liquid	Self-leveling liquid	Self-leveling liquid	Liquid
Colour	Part A: Transparent Part B: Brownish	Grey	Grey, Dark Grey	Transparent
Specific gravity @ 25 °C (77 °F)	Part A: 0.95 kg/L Part B: 1.22 kg/L	1,12 kg/L	1,08 kg/L	0,98 kg/L
Packaging	Part A: 4.1L Part B: 3L	19 L	19 L	19 L
Coverage	Mix of A+B (7.1L): 56 m2 (600 ft2) Wet film thickness 125 µm (5 mils).	28 m2 (300 ft2)/pail Wet film thickness 700 µm (28 mils).	56 m2 (600 ft2)/pail, per coat Wet film thickness 300 µm (13 mils).	70 m2 (750 ft2)/pail Wet film thickness 250 µm (10 mils).

* Primer (515) coverage may vary from 37 m2 to 56 m2 (400 ft2 to 600 ft2) depending of concrete porosity.
Note: All coverage rates are approximate and may vary due to the application technique and surface roughness.

PROPERTIES

PROPERTIES	STANDARDS	PRIMER: ALSAN TRAFIK HP 515	MEMBRANE: ALSAN TRAFIK HP 520	WEAR COAT: ALSAN TRAFIK HP 530	FINISH COAT: ALSAN TRAFIK HP 540
Brookfield viscosity @ 25 °C	-	Part A: 250 cP Part B: 125 cP	1000 - 3000 cP	2000 cP	250 cP
Solids by weight	-	100 %	75 %	72 %	66 %
Ultimate elongation	ASTM D412	-	600 %	500 %	100 %
Tensile strength	ASTM D412	-	8 MPa	13 MPa	13 MPa
Bond strength	CAN/ CSA-A23.1-04/ A23.2-04 Sec- tion 6B	> 3 MPa	-	-	-
Hardness (Shore A)	ASTM D2240	-	80	96	> 100
Pot life @ 22 °C	-	15-20 min	-	-	-
Fully cured					
0 °C		8h			
5 °C	-	6h	-	-	-
22 °C		2h			
30 °C		1h			

(All values are nominal)

STORAGE

Shelf life: 18 months, properly stored in original unopened containers. For more information, refer to instruction on the label of the can and to relevant Material Safety Data Sheet (MSDS).