

### Description

Talrakseal® HP a cold applied, pitch-free, two component high performance Polyurethane sealant suitable for sealing of joints in concrete floors and pavements and is resistant to fuel, oil and hydraulic fluid spillage, which remains elastic in extreme weather conditions. It can be poured into the joint or applied using a sealant gun.

### Features and benefits

- Resistant to fuels, oils and grease – suitable for application in runways, truck terminals. Loading bays, parking lots etc.
- Elastomeric but tough - suitable for moving and static joints
- Pourable – self levelling and fast application into the horizontal joints
- Less maintenance – User friendly and durable. Not affected by microorganisms,
- Impermeable and resistant to chemicals to prevent damage of the fields - Suitable for Airport joint sealing
- Environmentally friendly – No coal tar or bitumen.

### Primary Application

Talrakseal® HP is used for sealing of expansion and construction joints in concrete paving such as airstrips, oil jetties, truck terminals, garages, parking lots, warehouses, shop floors, automobile industries etc. It is particularly suitable for concrete floors on which oil and fuels are expected to spill.

### Standards compliance

Talrakseal® HP meets the requirements of Standard specifications of EN 14188-1:2004 and U.S. Federal Specification SS-S 200E:1984

### Design Criteria

Talrakseal® HP has a movement accommodation factor of 30% in butt joints. The joints spacing and dimensions shall be designed, keeping in view the likely non-uniform movement of the pavement. The width of the joints should be designed in accordance with the recommendations of IRC-57-2006 to ensure that the sealant operates within its movement capacity of  $\pm 30\%$ . The depth of the joint should be designed such a way at no time during the anticipated operating cycle of the joint in the sealant protrude above the surface of the concrete pavement.

### Recommended joint dimensions

The joint dimensions are determined during the design of the structure. However, as a guideline the suggestive dimensions of the joints are recommended as follows:

The width to depth ratio of the joint should be 1:1 to 1½:1 subject to a minimum 10 mm depth of sealant contraction joint: 15 mm wide x 13 mm depth and for expansion joint: 25 mm wide x 20 mm depth. Notwithstanding the above, the above dimensions should be verified by the designer.

### Technical Properties

Mixed density	1.4 to 1.5 g /ml
Movement Accommodation Factor in butt joint - IRC-57-2006	30%
Tack free curing time	16 h @35°C
Full Cure	7 days
Shore A Hardness at 25° C	10 $\pm$ 3
Solid Content	94% to 98 %
Pot life	20 mins @30°C
Standard Colour	Grey

### Chemical Resistance

The cured sealant has exhibited resistance to the occasional spillage of most of the fossil fuels including aviation fuel, Hydraulic Oils, lubricants, mild acids and alkalis, when tested in laboratory conditions.

### Application Instructions

#### Joint Preparation

The sealing joint in the concrete shall be formed as per the design. The joint shall be blown off with a compressed air blower, to remove all the dust and muck that might have been deposited in the joint. The edges of the joints shall be sharp and parallel. The depth of the joint is maintained by caulking the filler board strip Talrak Denscell PB to the required depth. The bond breaking tape may be introduced and placed at the bottom of the joint. The sides of the joint slot shall not be polished or made smooth while preparing the joint with a grinding wheel.

#### Priming

The side surfaces of the sealing slot shall be primed with HP Primer using a clean dry brush. Talrakseal® HP must be applied between 30 minutes and 2 hours after priming, depending on ambient conditions. Talrakseal® HP must be applied when the primer has become tacky. If the surface has reached a stage of absolutely dry, the joints shall be re-primed with a small brush.

**If the substrate is contaminated with the traces of bitumen, the primer HP should not be used**

## Mixing

The product is supplied in two parts the agent in a tin and a can contain the base. Drain totally the contents of the tin containing the curing agent into the large base component tin. Using a hand held, slow speed drill (400 to 500 rpm) fitted with a paddle blade stirrer, mix for approximately one minute, stop the mixer and scrape around the top of the tin to remove any remaining curing agent. Continue mixing for a further 3 minutes until the material is thoroughly mixed.

## Application

The application can be done either pouring the mixed material directly from the tin into the joint slot. Alternatively, the sealant may be loaded into a Sealant Gun after removing the nozzle and cap and pulling back the plunger rod. The nozzle cap is then replaced ready for application. In wider joints of 25 mm and above, the mixed sealant may be poured directly from the tin by bending the side to form a pouring lip. Apply mixed sealant into the sealing slot so that the finished level of the seal is recessed below the trafficked surface as specified. It is necessary to recess the level of the sealant 5 to 8 mm below the pavement surface, dependent on the time of year and temperature prevailing at the time of sealing.

## Cleaning

All the tools and tackles shall be cleaned immediately after use with Talrasol GP. Remove the residues of the mixed Talrakseal® HP from the hands with industrial hand cleanser.

## Estimating

### Packaging

Talrakseal® HP is supplied in two part combo pack containing a viscous liquid Base in a tin and a liquid curing agent in a plastic can both weighing a total of 4.50 kg which will yield a mixed material of 3 litres.

Primer HP: 250 ml pack

Talrasol GP: 5 & 20 L containers.

## Coverage

### Talrakseal® HP

The following table provides the theoretical consumption figures of Talrakseal® HP for different sizes of the joint slot. These figures are excluding the wastage and variation in the sizes of the joints.

Joint size (W x D) (mm)	Consumption in litres per ml length of the joint	Coverage in meters per 3 kg pack
10 x 10	0.100	30.00
13 x 13	0.169	17.70
15 x 15	0.225	0.225
20 x 15	0.300	10.00
20 x 20	0.400	7.50
25 x 20	0.500	6.00
25 x 25	0.625	4.80
30 x 25	0.750	4.00

## Primer HP

1 litre of Primer HP will be sufficient for 20 litres of Talrakseal HP, independent of joint size.

## Storage

Talrakseal® HP has a storage life of 12 months and Primer HP has a storage life of 9 months when kept in original unopened containers and stored in dry conditions between 5°C and 27°C.

## Precautions

### Health and Safety Instructions

Talrakseal® HP should not come in contact with skin and eyes or be swallowed. Avoid breathing of vapour. Splashes must be washed off immediately. Wear impervious rubber or PVC gloves and eye protection. Hands should be thoroughly washed with soap and water before eating or smoking. In the case of eye contact seek medical attention immediately. Cured sealant should not be burned off due to the generation of toxic fumes. Empty containers must be collected for careful disposal and not left lying about.

### Fire

Primer HP and Talrasol GP are flammable. Do not expose to naked flames or other sources of ignition. No Smoking. Containers should be tightly sealed when not in use. In the event of fire, extinguish with CO2 or foam.

### Flash Point

Primer HP : 30° C

Talrasol GP : 33° C



**Talrak Construction Chemicals Pvt. Ltd.**

An ISO 9001:2015 Certified Company

#### Works:

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#### Important note :

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