

# Talrak® Tenseal XS

Preformed TPE Profiles for exterior / interior expansion joint gap widths ranging from 40mm to 500mm



The Construction Alchemists

## Description

Talrak® Tenseal XS is a flexible TPE based preformed profile for sealing expansion joints in concrete and steel structures of different widths.

The system comprises of:

- Pre-compressed/bellowed/plain preformed strip of different widths and lengths
- Adhesive: Epoxy based adhesive for bonding the preformed profiles to the substrate

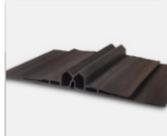
## Features & Benefits

- Easy to install
- Available in Pre-formed profiles
- Seals Thermal and cyclic load induced moving gaps of widths ranging from 40mm to 500mm
- Elongation upto 500%
- Excellent waterproofing property
- Efficiently seals joints moving in multiple planes and directions

## Primary Application

Essentially used for sealing expansion joints in concrete and steel structures for waterproofing of joints in bridges, roof slabs, joints between twin columns and beams, Metro rail station buildings etc.

## Technical Properties

Profile			
Suitable for Expansion gaps	≥ 50 mm to ≤ 75 mm	≥ 100 mm to ≤ 250 mm	Up to 500 mm
Thickness	~ 2.5 mm	~ 2.0 mm	1.5 mm
Ultimate tensile strength	10 MPa	7 MPa	4 MPa
Elongation at Break	450% min.	500% Min.	500% Min.
Service Temperature	-20° C to +110° C	-20° C to + 110° C	-20° C to + 110° C
Water resistance	8 bar	6 bar	6 bar
Puncture resistance	Very good	Very good	Very good
Resistance to Weathering	>3000 h	>3000 h	>3000 h

**Talrak® Tenseal EP**, a thixotropic glue is a 2 pack solvent free epoxy bonding adhesive, should be applied 24 hours over the primer for installation of **Talrak® Tenseal XS**. Apply masking tape such as ABRO tape or equivalent on both sides of the joint to avoid accidental of **Talrak® Tenseal EP** in the undesired area.

## Mixing

Mix the entire content of base and hardener containers together scrapping down the sides of the containers. Mix until a uniform grey colour is obtained.

## Application

It is recommended to carryout a dry run of the installation process on the given joint to mark the edges of the bottom and top flanks of **Talrak® Tenseal XS** on the concrete slab. This will help earmark the adhesive application

## Application Instruction

### Priming

A through inspection of the substrate should be done before the application of Tenseal XS system. Remove filler materials such as filler boards etc. from the joints if any and clean the concrete surface on either sides of the joints shall be evened out to a width of about 125 mm from the joint edge grinding any protrusions on the concrete surface

The substrate should be cleaned free from oil, grease and loose particles by means of wire brush. It should also be free from damages and cracks. The surface shall be made dry either by hot air blowing or by wiping completely dry. The clean and dry surface shall be provided with an sealer- cum- primer, Tenseal XS Primer. The primer is supplied in two components which shall be mixed together thoroughly in the base container with a slow speed paddle mixer. The mixed material shall be applied immediately using a roller or a soft nylon brush uniformly over the surface.

### Application

Bonding of **Talrak® Tenseal XS** to the concrete shall be done using the epoxy based bonding adhesive **Talrak® Tenseal EP**. The following steps are to be followed:

The mixed Adhesive shall be applied within 10 minutes, in two stages. In the first stage the mixed adhesive shall be applied on the substrate which is covered by the lower flank of **Talrak® Tenseal XS**.

In the second stage, the adhesive shall be applied on the concrete substrate in the area covered by the top flank (with perforations) of **Talrak® Tenseal XS**.

### Installation of the Joint seal

The flanks of **Talrak® Tenseal XS** that will be making contact with the adhesive shall be properly cleaned to remove all loose particles, dirt etc. if any. Measure the exact length of the tape required and align the same into the prepared joint. Apply pressure such that the lower flank properly bonds to the substrate by the adhesive already applied.

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In the second stage of application apply Talrak Tenseal® EP, adhesive evenly on the primed substrate of the area that will be covered by the top flank. The applied adhesive is finished smoothly with a flat trowel to a thickness of 2 mm. Avoid the adhesive getting into the joint. Press the upper flank gently into the adhesive, such that a part of it penetrates through the perforations. Allow the adhesive to air cure for about 30-35 minutes. Apply second layer of Talrak® Tenseal EP such that it completely covers the sides of the top flank of the profile. Smooth over the surface with the flat trowel.

The same procedure should be followed to bond the other side of the joint. It is recommended to do both the sides of the joint together by two teams

It may be necessary to keep some weight on the profile such that it makes proper contact with the concrete surfaces evenly during the process of the

## Cleaning of Application Equipment

Tools and equipment should be cleaned soon after the application using a **Talrasol GP**

## Estimating

### Packing

**1. Talrak® Tenseal XS** is available in the following variants suitable for different joint widths:

**Talrak® Tenseal XS50** and **Talrak® Tenseal XS75** are available in a special profile

**Talrak® Tenseal XS100** and **Talrak® Tenseal XS250** are available in 'Bellow Profile'

**Talrak® Tenseal XS500** is available in plain tape profile All are available in 20 m long rolls.

### 2. Talrak® Tenseal Primer

Supplied in 1 and 4ltr combo pack.

Coverage: 5.5 to 6.5 m<sup>2</sup>/ liter

### 3. Talrak® Tenseal EP

is supplied in 6 kg combo pack.

Coverage: 3.3kg/m<sup>2</sup> of mixed material at 2mm thickness

### 4. Talrasol GP

is supplied in 5 and 10 liter packs

(The above coverage rates are given for guidance only as actual quantities used will vary with surface conditions of the substrate)

## Storage

**Talrak® Tenseal XS** has no expiry of shelf life. It is recommended to store in protected stacks such that the profiles are not deformed due to its own weight on long term storage.

**Talrak® Tenseal primer** and **Talrak® Tenseal EP** has a shelf life of 12 months if kept in dry store in original, unopened containers.

## Health & Safety Instructions

Some people are sensitive to epoxy resins and solvents. So, gloves, barrier creams, protective clothing and eye goggles should be worn when handling the resin products. If accidental contact occurs, the resin should be removed before it hardens with resin removal cream followed by washing with soap and water. Solvent should not be used. Should eye contamination occur washing with plenty of clean water should be commenced and medical attention should be sought immediately. Good ventilation should be ensured. Smoking while handling/application is prohibited.

## Fire

**Talrak® Tenseal Primer** and **Talrasol GP** are flammable. Adequate ventilation should be ensured. Smoking or use in a naked flame is prohibited.

## Flash Point

**Talrak® Tenseal Primer** 25°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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