

Talrak® Denscell PB

Resilient high density Non Bituminous closed cell Polymer Board



The Construction Alchemists

Description

Talrak® Denscell PB is a bitumen free, cross linked closed cell resilient polymer board. It has flexibility coupled with good compression-recovery. Suitable as an interface medium to minimize deformation across the interface. Suitable filler board for the gaps between old and new buildings to avoid transfer of movements. It is bitumen and taint free and does not spoil the aesthetics of the surfaces.

Features & Benefits

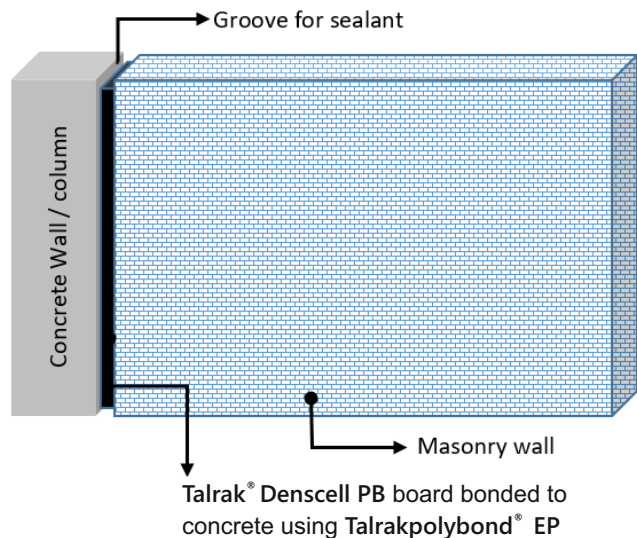
- Light weight and available in sizes convenient to handle at site
- Closed cells - Very low water absorption
- Alkali resistant - does not deteriorate due to long term contact with cementitious surfaces
- Resistant to bacteria - does not rot and durable for long time
- Can be bonded to concrete substrates using epoxy adhesives

Primary Application

Talrak® Denscell PB is used as an interfacial non-load bearing medium between infilled masonry walls of aerocon blocks, concrete blocks, clay bricks, porotherm blocks and concrete members such as columns, beams slabs etc. It is aimed at avoiding transfer or thermal / deformation stresses from the concrete members to the infill walls to avoid cracking. It can also be used as a filler board in expansion joints.

Technical properties

Properties	Ref. Standard	Results
Density, kg/m ³	ASTM D3575	38-45
Shore A Hardness	ASTM D 5672	20-25
Compression Creep @50% deflection T ₅₀ mm, max. (%)	ASTM D3575	15
Compression Creep @25% deflection T ₂₅ mm	ASTM D3575	1.3
Compressive strength,@ T ₅₀ mm, MPa	ASTM D3575	0.196
Tensile strength, MPa	ASTM D 368	0.78
Water absorption max. kg/m ²	ASTM D 3575	0.1



Specification Clause

Interfacial non-loadbearing board

The interface between the concrete member and the masonry wall shall be interspaced with Talrak® Denscell PB a non-bituminous closed cell, flexible board of specified thickness.

Application Instructions

Concrete - Masonry

The concrete surface to be bonded with Talrak® Denscell PB should be clean and dry. Any protrusions, pop-ups on the concrete surface should be removed by grinding to achieve a perfectly flat surface. Any materials stuck to the surface tenaciously, may be removed by scrubbing. Dust or dirt accumulated on the surface of the concrete should be blown off with a hand blower or compressed air.

The edges of the concrete member that will come in contact with the masonry, shall be provided with a masking tape to create an inch of about 20 mm wide from all the edges of the concrete member. The cleaned surface to be bonded with Talrak® Denscell PB should be provided with a coat of **Talrakpolybond® EP** uniformly with a nylon brush. Care shall be taken to ensure that no pockets of uncoated areas are left behind. Refer product datasheet for application details.

Installation of Talrak® Denscell PB

Talrak® Denscell PB board of specified thickness is selected for application. The board should be cut to match the exact size and shape of the board to match that of the area of the concrete member within the boundary created by application of the masking tape. This should be kept ready prior to the application of Talrakpolybond® EP.

Talrak® Denscell PB board shall be bonded to the concrete surface when Talrakpolybond® EP is still in the tacky state. The board is placed on the applied bonding agent, aligning it properly on the surface and gently pressed on the applied bonding agent. It is a good idea to tape down the edges of the board on to the concrete member with a brown tape to hold it in position till the epoxy develops bond with the board. The installed board may have to be protected by a plastic sheet or a non absorbing paper till the masonry work starts.

Construction of masonry

The protective cover on Talrak® Denscell PB board shall be removed before the beginning of the masonry work. The masonry is constructed as per sound engineering practice and specifications. The edge of the masonry units (without mortar) should be abutting the pre-installed Talrak® Denscell PB board. Care should be taken not to damage or de-bond the board from the concrete surface while building the masonry.

Joint Treatment - Application of sealant

Once the masonry is completely cured the niche between the masonry and the concrete member at the interface over Talrak® Denscell PB board shall be sealed using polyurethane sealant **Talrakseal® PU** / polysulphide sealant **Talrakseal® PS** (ref. product datasheet).

Expansion joints

When forming expansion joint with Talrak® Denscell PB boards in cast-in-situ concrete, joint sealing slots are to be formed as follows:

For cast-in-situ concrete work in respect of concrete pavements as well as structures, Talrak® Denscell PB board is used in expansion joint as one side shuttering for the entire depth of concrete. To enable application of sealant in the expansion joint groove Talrak® Denscell PB board is provided for the entire depth, is cut up-to sealant depth for the entire length before concreting of the adjoining panel. This cut top strip is pinned back on to the bottom strip using thin nails at a spacing of 50 mm after ensuring that the slot is clean and dry. The joint shall be closed to be in flush with the finished surface using self-adhesive tape. This shall remain in this position till completion of concreting and curing in adjoining panel, before application of sealants in the joint groove. This top strip shall however be removed at the time application of sealants in the expansion joint groove. The groove is sealed with the expansion joint sealant.

Estimating Packaging

Talrak® Denscell PB is supplied in the form of sheets. Depending on the thickness the number of sheets per pack varies.

Talrak® Denscell PB Boards are available in standard thickness range from 5mm to 100mm.

The sheet sizes are available in: 1200mm x 1800mm, 1500mm x 1600mm, 1000mm x 2000mm sizes.

Talrakpolybond® EP is supplied in 1kg combo pack
Coverage: $\approx 2.1\text{m}^2/\text{kg}$.

Talrakseal® PU

Available in 600 ml sausage to be used with gun. Consumption depends on the joint sizes. Please refer product datasheet of Talrakseal® PU.

Talrakseal® PS

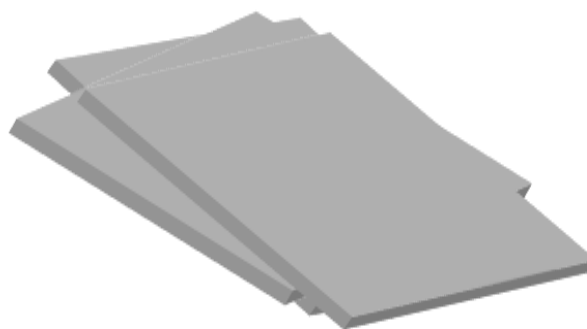
Talrakseal® PS is supplied in 4kg combo pack. Consumption depends on the joint sizes. Please refer product datasheet of Talrakseal® PS.

Storage

Talrak® Denscell PB has indefinite shelf life stored kept in standard warehouse conditions. Do not stack heavy objects over the package of Talrak sealants and bonding agents. Talrak sealants and bonding agents must be stored in their original containers away from sunlight and extreme temperatures.

Health & Safety Instructions

Talrakpolybond® EP, Talrakseal® PU and Talrakseal® PS being resin based products. They should not come in contact with skin and eyes or never 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.



Talrak® Denscell PB Sheets



Talrak Construction Chemicals Pvt. Ltd.

An ISO 9001:2015 Certified Company

Works:

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Ref : TCC/TDS/SL08 - R I