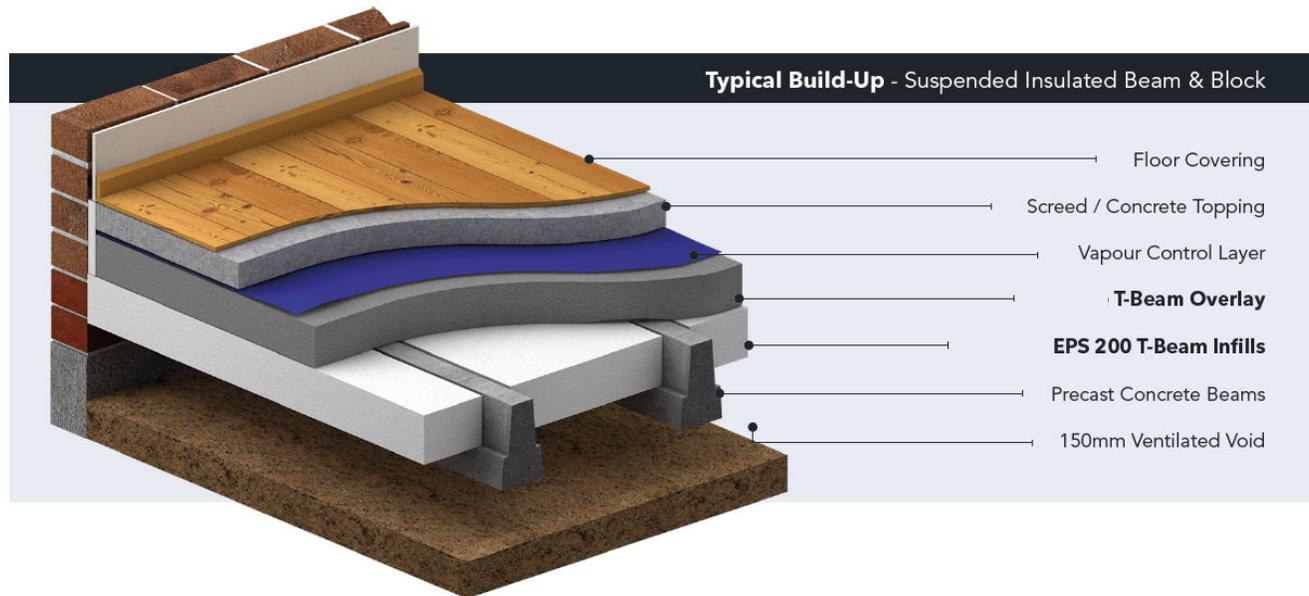


## T-Beam Suspended Floor EPS Infill

### Data Sheet



### Design Standards

*Eco Floor* uses 100% recyclable EPS Infill blocks with varying depth Top Sheet. The floor acts as a permanent form work as part of the overall finished floor strength.

### Product Overview

The *Eco Floor* T-Beam System uses Infills which are manufactured from high density Expanded Polystyrene and a Top Sheet. The *Eco Floor* System is designed to meet R2 requirements in accordance with NHBC guidelines and the EPS blocks act as a permanent formwork for the floor, as part of the overall finished floor strength.

The Infills and overlays are available in a range of EPS grades, both white and PlusTherm, to offer flexibility when designing for target U-Values.

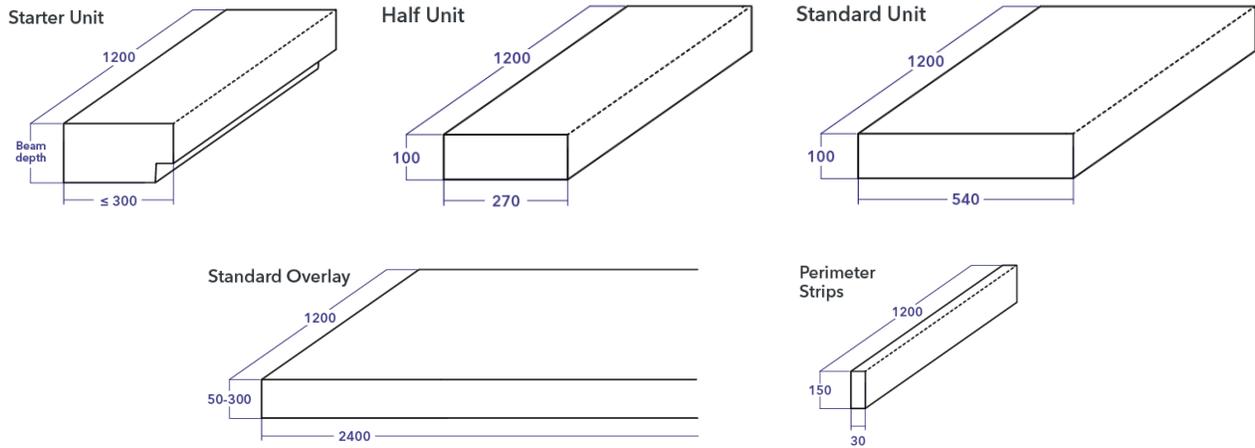
### Product Benefits

- Lightweight, quick & easy to install
- Approved for use with Micro Fibres & Plain Concrete / Screed toppings
- For use with any precast concrete beam profiles
- Ideal for use with residential, domestic & commercial buildings
- Highly competitive lead times
- No reduction in performance over time
- Minimal water absorption & permeability
- 100% recyclable

### Product Attributes

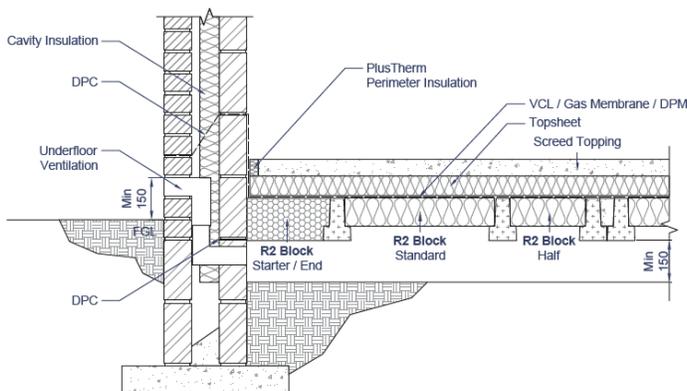
The finished floor can use 5 different EPS units in conjunction with concrete T-beams and end closure blocks. The infill blocks come in two widths 540mm or 270mm and length of 1200mm.

Top sheets vary in depth from 50-250mm depending on what U-Value is required and are one size of 1200 x 2400mm.



## Typical Application

Insulated Suspended Floor – Concrete / Screed Topping



## Typical U-Value

U-Values can be achieved from 0.22 to 0.08 depending on P/A ratio and ground thermal conductivity.

Please note: It is not suitable for garages or plant rooms.

## Durability

EPS is rot proof, not affected by bacteria, moulds or fungi, and will not provide nutrient value for insects or vermin.

EPS does not lose any performance over time and will remain an effective insulation for the life of the building.

Infill units and top sheet boards are available in both white and Plustherm (grey) EPS. This allows for a total of four different combinations. Contact Su-Fix Precast sales team to discuss the best, cost effective combination for your floor on 023 8086 7000

## Compatibility

EPS should be kept away from hydrocarbons, solvents and volatile substances; however, EPS is compatible with most chemicals and materials found in common construction environments.

EPS should not come into contact with any PVC cables. This is to avoid plasticizer migration which causes PVC cables to become brittle and fragile. Any PVC cables should be protected within a suitable conduit or with suitable air gap.

## Concrete / Screed Toppings

Type of Topping	Allowed
Steel reinforced Mesh	✓
Steel Fibers	✓
Macro Synthetic Fibers	✓
Polymer Micro Fibers	✓
Plain Concrete / Screed	✓

The *Eco Floor* T-Beam System has been independently assessed and certified to include the different options for concrete / screed toppings, including non-structural toppings.

**Fire Classification**

EPS will achieve reaction to fire Euroclass F. However, the classification achieved when installing in a building will be considerably better.

**Sustainability**

The EPS does not contain HFC's, CFC's or HCFC's. Expanded Polystyrene has a Global Warming Potential (GWP) of zero and a low O-Zone Depletion Potential (ODP).

Our Expanded Polystyrene is 100% recyclable. Please contact your local council for recycling of waste material.

**BRE Green Guide Rating**

Expanded Polystyrene achieves a green guide rating from A+

**Safety**

EPS is non-toxic, non-irritant and odorless, making it completely safe to handle. It can be cut on site using a fine tooth saw or a hot wire cutter.

**Delivery and Storage**

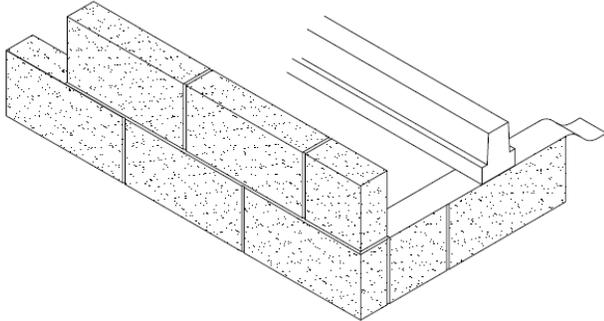
The EPS units and boards are delivered to site in packs and wrapped in polythene. They must be protected from prolonged exposure to sunlight and UV rays. They should be stored undercover or protected from the elements with suitable cover.

The packs must be fully supported and on a flat, firm level surface to prevent bowing. The product must not be exposed to open flame and care should be taken to ensure the product doesn't come into contact with any source of ignition.

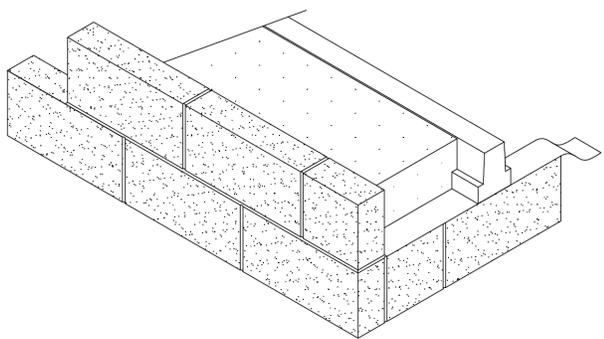
**Please Note:** The information given within this data sheet is true and accurate at the date of issuance and is subject to change without prior notice. It is for guidance only and proper use and application of this product is the responsibility of the user.

# Installation Guide

1. The perimeter blockwork that runs parallel to the precast concrete T-beams should be brought up by an additional course, above DPC level to allow the Starter block to rest against the inside of the blockwork and first T-beam.

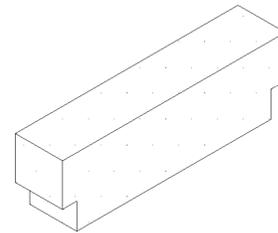


2. Lay all precast concrete T-beams in accordance with beam layout drawing supplied by Su-Fix Precast.
3. Where two or more concrete T-beams are placed side by side, the spaces between the beam webs should be in-filled with an appropriate ballast concrete mix.
4. Install a full Starter block up to a perimeter wall.
5. The first concrete T-beam should then be pushed tight against the Starter Block to ensure lateral tightening.



6. Standard infill & half infill blocks are installed between the concrete T-beams as required. If the blocks need to be cut, this can be carried out using a fine tooth hand saw or hot wire cutter. The minimum length of infill block that should be used is 300mm.
7. Infill blocks can also be cut to accommodate any service penetrations.

8. Installation continues until the last concrete T-beam, where an end block is installed ensuring a tight fit against the inside of the blockwork.
9. Care should be taken not to walk unnecessarily over the EPS infill blocks. If a temporary working platform is required, spreader boards should be used.
10. Trimming of the End block may be necessary and can be done using a fine tooth hand saw or hot wire cutter.
11. At no point should the Starter/End blocks have a width of greater than 300mm from the beam to the perimeter blockwork.
12. End closure blocks or bricks are to be used where walls continue down to the foundations.



13. Gas barrier or vapor control layers can be installed directly over the blocks and concrete T-beams if required.
14. Installation of the required grade/thickness of top sheet insulation should be installed in a break bond pattern over the precast concrete beams and blocks. Top sheet insulation can be cut to accommodate any service penetrations.
15. It is important that top sheets are NOT installed with joints directly over and parallel to the precast concrete T-beams.
16. It may be necessary to seal around the service penetrations with expanding foam to prevent gross loss of the concrete topping and maintain thermal performance.
17. Perimeter edge strips should be installed prior to installation of concrete topping.
18. The specified concrete topping must be poured carefully and not dropped from a height greater than 500mm, and ensuring heaping is no higher than 300mm.
19. The concrete topping is finished as required. Temporary weather protection may be required from inclement weather.