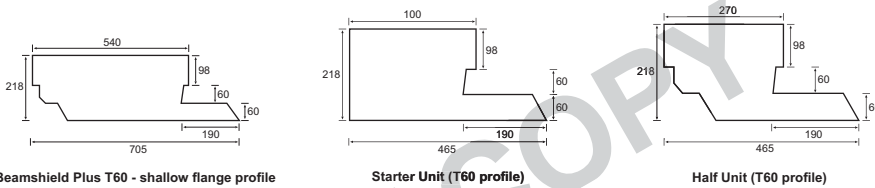


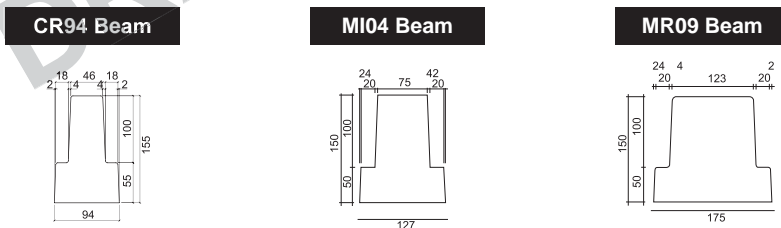


Suspended Insulated Floor System



Suitable Beam Profiles

The prestressed concrete beam profiles shown are by Charcon and for further information refer to the Beam and Block data sheet available from www.charconcs.com



U-Value

P/A	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90
Beamshield Plus U Values for 150mm deep beams									
228mm White	0.14	0.18	0.20	0.21	0.22	0.23	0.23	0.23	0.24
244mm White	0.13	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.21
244mm Platinum	0.12	0.14	0.16	0.16	0.17	0.17	0.18	0.18	0.18
282mm Platinum	0.10	0.12	0.13	0.14	0.14	0.14	0.14	0.15	0.15
331mm Platinum	0.09	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.12
378mm Platinum	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10

Calculated using required sized single beams at a ratio of 4 to 1 nominal 600mm centres and nominal 300mm centre beam spacings.

General notes

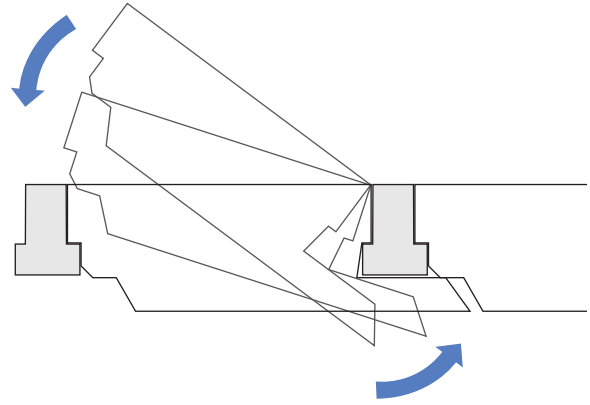
- Cost-effect compared to alternative thermal floor solutions.
- Quicker to install than standard beam and block floor with additional insulation.
- 'Just-in-time' local delivery.
- No additional materials required, finished with screed and cement topping.
- Reduced floor zone (up to three courses of brickwork.)
- Minimises thermal bridging.
- Technical Advisory Service available for thermal and structural performance.
- Delivers a constant thermal performance over the life of the building.
- CFC and HCFC free.
- Unaffected by damp and leaking water.
- Compatible with underfloor heating systems.
- Reduced manual handling required for infill blocks - fewer RSI problems.
- Suitable for brownfield developments incorporating methane and radon barriers.
- Shorter build time due to power floated structural concrete topping
- Suitable for use with timber frame construction.
- Lightweight.
- British Board of Agrément certified.



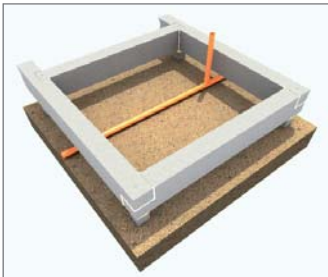
For T-Beam Span Loads please refer to: **Beam and Block Datasheet**

Fitting

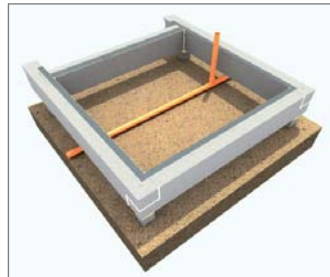
- Set the toe of the panel underneath the beam nearest the wall
- Slide the panel forward until its edge sits over the top of the beam flange
- Push the panel forward and down until both edges rest on the beam flanges and the toe locks under the beam.



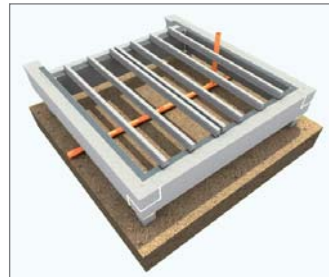
Installation Guide



1. Ensure bearings are level and clear of debris.



2. Lay DPC and set out first beam in accordance with previously approved and issued layout drawings.



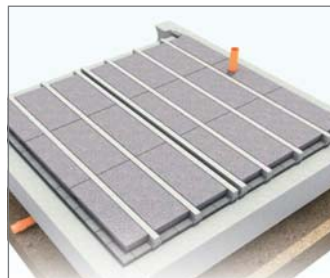
3. Position beams, when all beams are in place complete the fixing of the infill panels.



4. Fit the first Springvale Beamshield panels to the T Beam next to the side of the bay.



5. Fit panels along the rest of the rows. Cut the last panel to fit tightly against the wall.



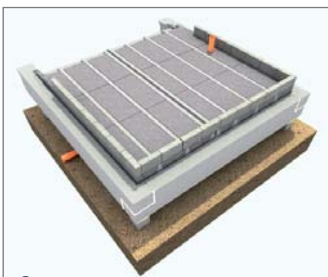
6. Repeat this procedure for each row, until Springvale Beamshield covers half the bay.



7. A concrete closer block should be used to fill void between beams where they are supported on the internal leaf.



8. Beamshield Plus Starter Units can be used where the floor beams run parallel with the internal wall.



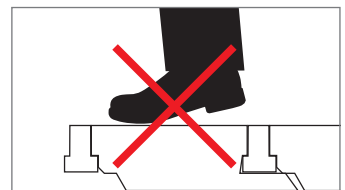
9. A Polystyrene edging strip must be used as a thermal barrier to the depth of the structural topping and is laid around the exposed edge.



10.



11. Lay concrete screed. Please ensure topping meets with the correct specification.



12. CARE SHOULD BE TAKEN NOT TO WALK DIRECTLY ON THE BEAMSHIELD UNIT - use the concrete beams or lay spreader boards across the beams for access before cement topping is added.

Handling Beamshield

- Store panels in original packaging, under cover and protected from direct sunlight.
- Keep boards above ground level and out of contact with solvents and materials containing volatile organic compounds such as coal tar, pitch or creosote.
- Do not expose to naked flame or other ignition sources during storage or installation.
- Do not use Beamshield Plus products in direct contact with PVC – sheathed electrical cables or hot water pipes.
- Electrical cables should be enclosed in suitable conduit.