

MILBANK | GDECK
INSULATED EPS FLOORING

Component Summary & Breakdown



**Included with
Milbank GDeck**



Optional



**Not included with
Milbank GDeck**

1

EPS Insulation Module (Infill Panels) – The EPS panels are available in both 275mm and 545mm sizes and are designed to replace your standard concrete infill block.

2

EPS Insulation Module (Load-bearing Rail) – The EPS load-bearing rails are designed to sit on top of the prestressed concrete beams. They are interlocked to an infill panel and come as one unit. Separate load-bearing rails are required when you have multiple beams tight together.

3

Prestressed Concrete Beam – Milbank Concrete Products manufacture both 155mm and 225mm deep lightweight prestressed concrete beams, suitable for spans up to 6.5m.

4

Closure Blocks – Closure blocks are used to finish the row of EPS insulation infill panels.

5

Damp Proof Membrane – The damp proof membrane illustrated is for guidance only. It shall be specified from an external source and installed in accordance with the manufacturer's instructions.

6

Damp Proof Course – The damp proof course is rolled into place onto the base of the bearing wall, before the concrete beams are laid, to prevent the spreading of moisture from the ground.

7

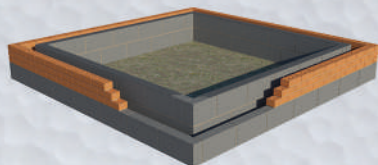
Perimeter Strips – The perimeter strips are installed to line the edge of the floor solution, preventing any thermal bridging between the interior wall and the concrete topping.

8

Concrete Topping – The concrete topping provides the essential structural capacity, load distribution, and a suitable finished surface for the Milbank GDeck system.

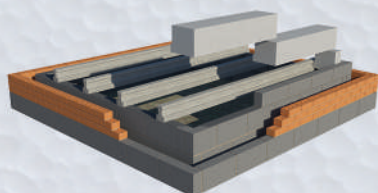


1



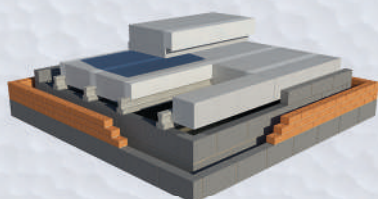
Bearing Wall Construction – The bearing wall is constructed to act as the structural base for the floor. The end walls will need to be erected, equal to or greater than, the top of the beams. This will provide enough friction/anchorage to support the EPS end panel. The damp proof course is rolled into place to prevent the spreading of moisture from the ground.

2



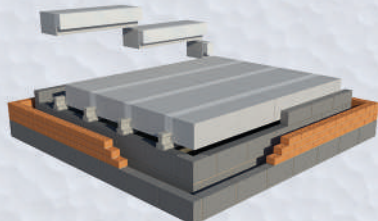
Laying the Beams – The beams are laid in accordance with the Milbank GDeck design drawings. The starter and end rows are both cut from one singular 545mm wide panel. The starter block will be the half, without the load-bearing rail attached. The first half is laid firmly into place, ensuring it sits onto the lip of the beam and vertically flush against the end wall. This is continued until the end row. To reduce chance of creep, it is advised to slide the beam inwards towards the EPS end panel to achieve a snug fit.

3



Laying the Infill Panels/Load-bearing Rails – Each wide and narrow panel will come attached with a load-bearing rail. The remaining EPS infill panels are laid between and on top of the concrete beams. Any penetrations, such as plumbing, should be cut circular and tight to the piping, any gaps shall be filled with foam insulation. Install separate load-bearing rails over the multiple beams where required.

4



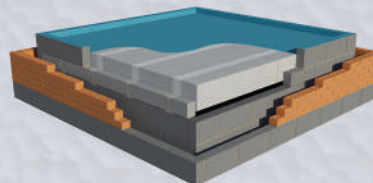
Laying the End Panels – Lay the final row of EPS panels as per the Milbank GDeck design drawings. Some creep may occur, so the remaining half from the starter row might differ from the layout drawing. Cut the end panel with a handsaw (or similar) to achieve the correct width and continue installing end panels to complete the row. The last panel will have the final load-bearing rail attached. Once all panels and rails are in place, the surface is safe for foot traffic. Three scaffold boards placed perpendicular to the beams will support a pallet of 90 medium-density blocks (1.2 tonnes), allowing trades to proceed. Place the pallet as close to the supports as possible.

5



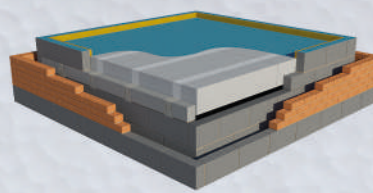
Laying the Closure Blocks – The (optional) concrete closure blocks are designed to correspond with the width of the EPS infill and end panels. A bed of mortar is placed onto the wall between the area where the beams and the blocks are placed, ensuring the top of the block matches that of the beam level. This stage represents the last of the components supplied with the Milbank GDeck solution.

6



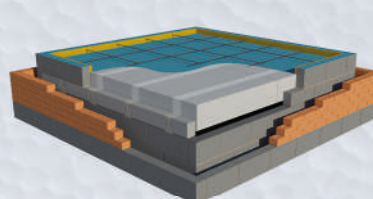
Screed Rail & Laying the Damp Proof Membrane – Brick or block courses are laid to bring the internal wall up to finished floor level. This wall is to be used as a screed rail to ensure the concrete topping is laid to the required depth. The membrane is pulled tight to ensure that it lies flat over the EPS panels and load-bearing rails, ripples or creases are removed. To maintain the full depth of the topping at the edges of the floor, care is taken to ensure the membrane sits flush where the floor meets the wall. It is then pulled over the screed rail to complete installation.

7



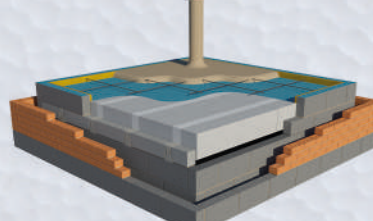
Laying the Perimeter Strips – EPS perimeter strips are installed throughout the screed rail and to any internal walls of the development to eliminate thermal bridging between the walls and the concrete topping.

8



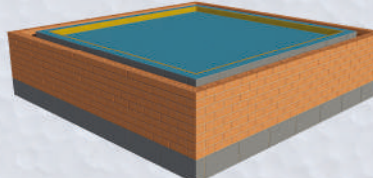
Laying the Structural Mesh/Fibre – A mesh/fibre is laid in accordance with the concrete topping specification. Please note, image is for illustration purposes only and must be carried out by a professional.

9



Laying the Concrete Topping – The specified structural concrete topping is poured to the required depth, ensuring the EPS infill panels and top sheet are not disturbed during the flow of the concrete. Please note, image is for illustration purposes only and must be carried out by a professional. The concrete shall not be poured on the panels or the load-bearing rails from heights greater than 500mm.

10



Milbank GDeck is Complete – The insulated thermal flooring solution from Milbank is successfully installed and complete. Once the concrete topping has cured, the floor is ready for follow on trades to continue with required building works.