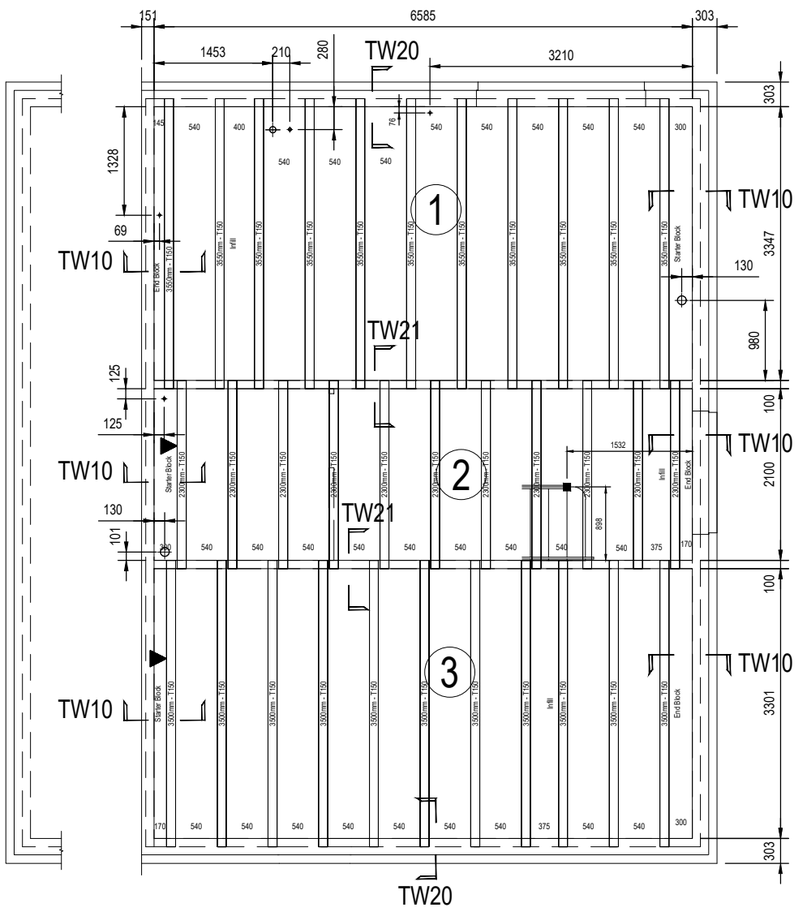
See drawing "EM_GF_300 Typical Section Details" for sections and notes



Bay Schedule

150 x 110 Normal HB EC2

Bay	Quantity	Length		Bay	Quantity	Length		Bay	Quantity	Length
1	11	3550		2	11	2300		3	11	3500

Floor Area	58.15 m²	Floor Length	102.85 m	Beam Weight	3.24 tonnes
Block Quantity	0 Nos.			Block+Poly Weight	0.60 tonnes

OverBoard System	
Infill Panels	
Insulation: Grey	
	270: 0 Nos.
	540: 66 Nos.
OverBoard - 80mm	
Insulation: Grey	
	2400x1200:21 Nos.
Closure Units 100mm	
	Large: 66 Nos.
	Small: 6 Nos.
Closure Units 140mm	
	Large: 0 Nos.
	Small: 0 Nos.
Start Panels	
	300: 8 Nos.
End Panels	
	300: 8 Nos.
Infill Panels (New)	
	440: 8 Nos.

⚠ Loading data
The loading data tabled below or noted on the layout should not be exceeded in the permanent or temporary condition. This includes the use of MEWPS + stacking of materials.

Design
PC beam design to BS EN 1992-1-1:2004 & BS EN 1992-1-2:2004.
Manufacture
Manufactured to BS EN 15037-1:2008.
Tolerance guidance based on BS EN 13369:2013 & BS EN 15037-1:2008.

Floor Fire Rating: 30 Mins

Loadings:kN/m²	General			
SUPERIMPOSED	1.50			
PARTITIONS	1.00			
SCREEDS & FINISHES				
STRUCTURAL TOPPING	1.68			

Finishes (dwellings)	70mm structural concrete topping
Finishes	refer to EPS supplier guidance for specification.
Finishes (garage/communal)	
Block Density kg/m³	17 (EPS)

T beam detail key

▶	Installation start point
540 ≤	Indicates block widths
3700mm - T150	Beam length & type
⊕	Service pipe
(10)	Bay number (ref only)
	Non-loadbearing wall
	Buttress wall 2.0 kN/m
■	Point loads 1.5 kN
WP	Wind post

FLOOR OVERBOARD SYSTEM

Concrete T Beam	150mm
EPS Infill block	150mm Grey
EPS Top sheet	80mm Grey
Structural concrete topping	70mm
Floor U Value	0.15 W/m²K
Embodied Carbon	2.591 T.CO2.e

Beam	Topping	Steel	EPS70	EPS120
0.676	1.64	0.031	0.098	0.147

Supply Only

Construction Issue

Notes :
The Construction (Design and Management) Regulations 2015
If you are unsure of your responsibilities please refer to the HSE website.
The notes and loading details shown should be read by all CDM dutyholders alongside the layout drawing, section details and additional notes. Whist we do not go in to specifics such as, working at heights, slips and trips etc, where ⚠ is shown in the notes and on the drawing some potential hazards/ risks are identified and should be assessed accordingly by the main contractor and his design team prior to any site works commencing.

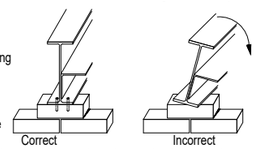
All installation work should be carried out in accordance with the Precast Flooring Federations Code of Practice which is available as a free PDF download from www.precastfloors.info
The FP McCann GA's should be read in conjunction with all other relevant drawings from the contract design team e.g Architects, engineers, Steel fabricator etc. Under no circumstances should the FP McCann drawing be used to set out and construct the supporting structure.

⚠ Lifting, handling and site stacking of concrete beams to be in accordance with F P McCann T Beam Handling guidance note.

⚠ Bearing
All bearings for FP McCann beams are to be provided true to line and level by the General Contractor unless stated otherwise. Generally a minimum 100mm on blockwork and 75mm on steel. The project Engineer/ Architect is responsible for the design of all supporting structural elements, e.g. Steel beams, blockwork and brick walls etc in both the permanent and temporary condition. Consideration should be given to the stability of the structural elements and temporary loads during the erection of the FP McCann beams.

It is a requirement that all non-load bearing walls be left one course down to aid fixing and be completed afterwards.

⚠ Isolated Load Bearing Steel Beams
Isolated steels must be fixed and temporary propping should also be incorporated where the 'fixed' steel beams are likely to torsionally deflect during the installation of the precast. Fixings should not hinder the installation and the design should be checked for temporary loading to avoid torsional collapse during the construction phase. Consideration should be made to the passive fall protection where temporary works such as props are specified.



⚠ Temporary Works
FP McCann will not be responsible for the design, supply, erect, maintain and dismantle of any temporary works. This is to be carried out by / in accordance with the main contractors temporary works engineer.

⚠ Infill blocks to comply with BS EN 15037-2 for use in beam and block floors and must not exceed mass specified in the loads tabled. Where blocks are built into load bearing walls the compressive strength must be equal to or greater than that of the blocks used in the wall construction.

⚠ Infill blocks may be left out where service pipes are located. Any resultant infill around the service pipe remains the responsibility of the main contractor.

⚠ This floor must be grouted with a 6:1 sand/cement grout, brushed into all joints prior to commencement of following trades. Where 2 or more beams are positioned side by side, the joint between them must be filled with grade C25/C30 concrete by others.

⚠ Garages and beam and concrete block areas with a live load in excess of 3.0kN/m2 to have a concrete screed applied with minimum A98 mesh reinforcement. The project Engineer must consider block strengths for non domestic loadings.

⚠ We have not included in our design for our units to support any upper floor or roof loads.

Any blockwork partitions built off our floor must have additional beams provided to support them and only those indicated on this layout have been allowed for (where applicable).

⚠ Where beams bear onto splayed walls, the ends may project into the cavity and need cutting back, on site, by others.

⚠ Prestressed units have an inherent upward camber which varies with load/ span criteria. Allowances should be made for this when determining bearing levels, screed or structural topping depths. Designed screed or structural topping depths should be taken from the mid point of the unit. Differential cambers or level differences can occur particularly where neighboring units are of differing lengths and neighboring bays span perpendicular. Where a directly applied rigid finish is intended, leveling screeds or similar may be necessary before application by the general contractor. For further guidance on upward cambers please consult FPMcCann design.

EPS floor systems consisting of concrete beams, EPS blocks, EPS top sheets + structural toppings:
⚠ Concrete beams must be laid in the positions shown on the above layout. (with a DPC beneath.)

⚠ This floor is not suitable for use as a working platform until screeded. Pedestrian access should be avoided to prevent damage to exposed polystyrene and suitably protected where this is unavoidable. To prevent damage and overloading of polystyrene infill whilst laying the concrete topping, do not drop concrete from height and limit heaps to 300mm.

⚠ Polystyrene Infills to be butted tightly between beams and against supporting walls but never built into them. (concrete closure blocks must be built in.) Starter and end infill panels must be a maximum width of 300mm from the adjacent wall with the flat face of the panel achieving a tight friction fit against it. Starter / End panels may be cut with a hand saw to the size identified on the layout. Surplus offcuts from each run of infills to be used to start the next. Avoid waste by utilizing any panel greater than 300mm. Gaps in non standard beam spacings may be filled using make up panels to a maximum of 440mm, these can be cut on site to the dimension shown on the layout.

⚠ EPS top sheets are laid over the floor and cut with a hand saw to accommodate service pop ups and part width sheets where necessary. Sheets should be closely butt jointed and joints should not be located over beams. Where a membrane is not in place joints should be taped.

⚠ Structural concrete toppings must be in line with the EPS suppliers specification. Membranes under the topping (if required by the building designer) must be fold / ripple free. Creases can act as crack inducers. Reference should be made to the EPS suppliers data sheets not only for suitable toppings but also other general good practices when adopting this floor system.

Revision	Revision Notes	Rev. Date	Initial
C2	Partition load updated. Issued for construction	20.11.25	DR
C1	Issued for Construction	27/08/2025	MBS
P1	Preliminary issue for comments	30/07/2025	SSP

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DATE:	DRAWN BY:	CHECKED BY:	SCALE @ A3:
30/07/2025	SSP	MBS	1:75

CONTRACT NUMBER: | DRAWING NUMBER: | REVISION: C2

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