

Operational Instructions

OI - 5.5 | Block & Beam Floors

Revision:

B

Section:

5.0 - Plot Groundworks Stage 1

Visual Aids



All prestressed concrete beams and slabs have camber which is formed as an upwards curve due to the compressive force near the bottom of the unit. The amount of camber within a unit depends on many factors with the biggest being the span and the number of prestressed tendons used in the product. As a guide the camber is predicted at span / 300 and is presented in table 1.

Table 1 – predicted camber of prestressed product

Span (mm)	Predicted Camber (mm)
3000	10
4000	13
5000	17
6000	20
7000	23
8000	27



This guidance note is aimed at giving advice to hauliers when offloading beams and to site if stacks of beams have to be moved. To avoid deflection issues with beams it is important for the timber bearers to line through and for them to be positioned 300mm from the end as shown in figure 1. Failure to comply with these requirements will result in excessive camber of the beams which may render them unusable and will result in rejections / claims. Figure 2 and 3 show examples of poorly stacked beams and the consequence.

In addition, when handling beams there is a maximum lift of two stacks at any one time to mitigate over stressing the bottom lift. Failure to comply with this requirement can result in stress cracks along the top surface of the beam and excessive camber with possible rejections.

Operatives should take into account the terrain when handling beams and adjust their speed accordingly. Transiting across rough ground should be avoided.

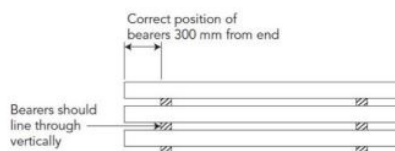


Figure 1 – Correct stacking method

Information

Task Specific Safety Checks & Notes	Operational Checks
● In the first instance, please ensure you have referred to your site-specific Risk Assessments & Method Statements (RAMS) ● Working areas are to be segregated in accordance with MIDA Operational Standard - 2.4 - Segregation - General Working and /or MIDA Operational Standard - 2.5 - Segregation - Groundworker Only Area	● Brickwork levels to be checked before beams are placed ● Before commencing works, have we checked the block & beam layout drawings? Does everything line up with the sub-structure designs? ● Store the floor beam and associate blocks or infill panels neatly and on timber bearings – as per manufacturer's specification ● Beams should not overhang the cavities – ensure they are cut down if necessary. Cut beams must be black jacked. ● End blocks and slip bricks are to be mucked in and neatly pointed ● Ensure that all SVP and service entries are neatly cut using a core-drill of the appropriate size – do not rough cut. As per MIDA Operational Standard - 5.4 - Incoming Service Floor Detail ● Upon completion of the block & beam floor, fully grout the area using a sand and cement screed
QA Checks & Actions	Operational Standard - References
● Form QMF 27 – Oversight Handover Sheet ● Ensure any sub-contractor works are checked before being signed off ● Photograph the completed area and include in your photographic daily diary	● MIDA Operational Standard - 2.4 - Segregation - General Working Area ● MIDA Operational Standard - 2.5 - Segregation - Groundworker Only Area ● MIDA Operational Standard - 5.4 - Incoming Service Floor Detail