



**BISON PRECAST**

a Forterra brand

# TECHNICAL GUIDANCE NOTE

Loading of beam & block with blocks during construction - 20 November 2017

## REQUIREMENTS FOR LOADING OUT BEAM & BLOCK FLOORS WITH BLOCKWORK DURING CONSTRUCTION

The following data sheet is intended to provide general advice where packs of blockwork are required to be supported off beam & block floors during construction.

When placing packs of blockwork the following conditions shall be met:

- Only single packs (no multiple stacking)
- Packs to have an edge distance from the wall of 0.5m
- Packs to have 1.5m edge distance between them

The following table identifies the capacity of Forterra beam & block units to support packs of blockwork for two load cases and incorporates data for 72No. Block packs (10kN), 90No. Block packs (12.8kN).

- Load case one is when packs of blockwork are required to be stacked on one end only of the unit.
- Load case two is when packs of blockwork are required to be stacked on both ends of the unit.

The load capacity table is based on the self-weight of the floor system plus the pack/s of blockwork and incorporates a construction load of 1.5kN/m<sup>2</sup>. No allowance has been made for any finishes or any other loads.

Please refer to figure 1 for clarification of the two load cases and conditions relating to the positioning of the packs.

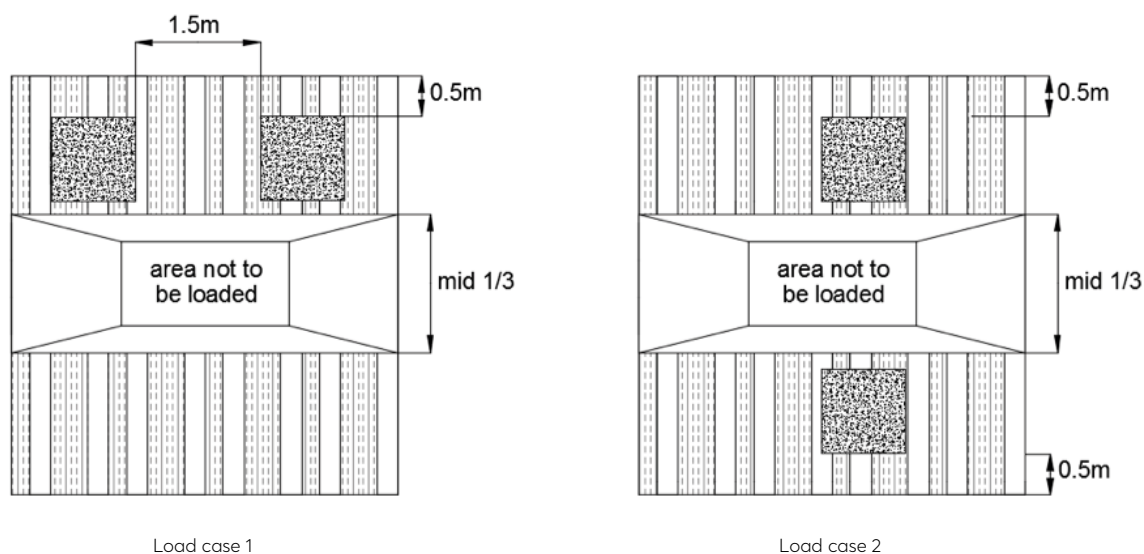


Figure 1 - Locations where packs of blockwork can be placed

If mortar tubs are to be used then these can replace a pack of blocks provided that the weight is equivalent or less.



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Table 1 – maximum spans for 72 pack size

Load case 1 - 72 blocks - medium dense - 1500kg/m <sup>3</sup>										
Beam	Centres (mm)	Span (m)								
		3	3.5	4	4.5	5	5.5	6	6.5	
BT02	525	█	█							
BT02	413	█	█	█	█					
BT03	300	█	█	█	█	█	█			
RD09	615	█	█	█	█	█	█	█		
RD09	503	█	█	█	█	█	█	█	█	
RD09	390	█	█	█	█	█	█	█	█	█
T008	535	█	█	█	█	█	█	█		7.0
T008	422	█	█	█	█	█	█	█		7.5
T008	310	█	█	█	█	█	█	█		7.5

Load case 2 - 72 blocks - medium dense - 1500kg/m <sup>3</sup>										
Beam	Centres (mm)	Span (m)								
		3	3.5	4	4.5	5	5.5	6	6.5	
BT02	525									
BT02	413	█								
BT02	300	█	█	█	█					
RD09	615	█	█	█	█					
RD09	503	█	█	█	█	█	█			
RD09	390	█	█	█	█	█	█	█	█	█
T008	535	█	█	█	█	█	█	█		
T008	422	█	█	█	█	█	█	█		7.5
T008	310	█	█	█	█	█	█	█		7.5

Table 2 – maximum spans for 90 pack size

Load case 1 - 90 blocks - medium dense - 1500kg/m <sup>3</sup>										
Beam	Centres (mm)	Span (m)								
		3	3.5	4	4.5	5	5.5	6	6.5	
BT02	525	█								
BT02	413	█	█	█						
BT02	300	█	█	█	█	█				
RD09	615	█	█	█	█					
RD09	503	█	█	█	█	█	█			
RD09	390	█	█	█	█	█	█	█	█	█
T008	535	█	█	█	█	█	█	█		7.0
T008	422	█	█	█	█	█	█	█		7.5
T008	310	█	█	█	█	█	█	█		7.5

Load case 2 - 90 blocks - medium dense - 1500kg/m <sup>3</sup>										
Beam	Centres (mm)	Span (m)								
		3	3.5	4	4.5	5	5.5	6	6.5	
BT02	525									
BT02	413									
BT02	300	█	█	█						
RD09	615	█	█	█						
RD09	503	█	█	█	█	█				
RD09	390	█	█	█	█	█	█	█	█	█
T008	535	█	█	█	█	█	█	█		
T008	422	█	█	█	█	█	█	█		7.0
T008	310	█	█	█	█	█	█	█		7.0