

# Booth Concrete Limited

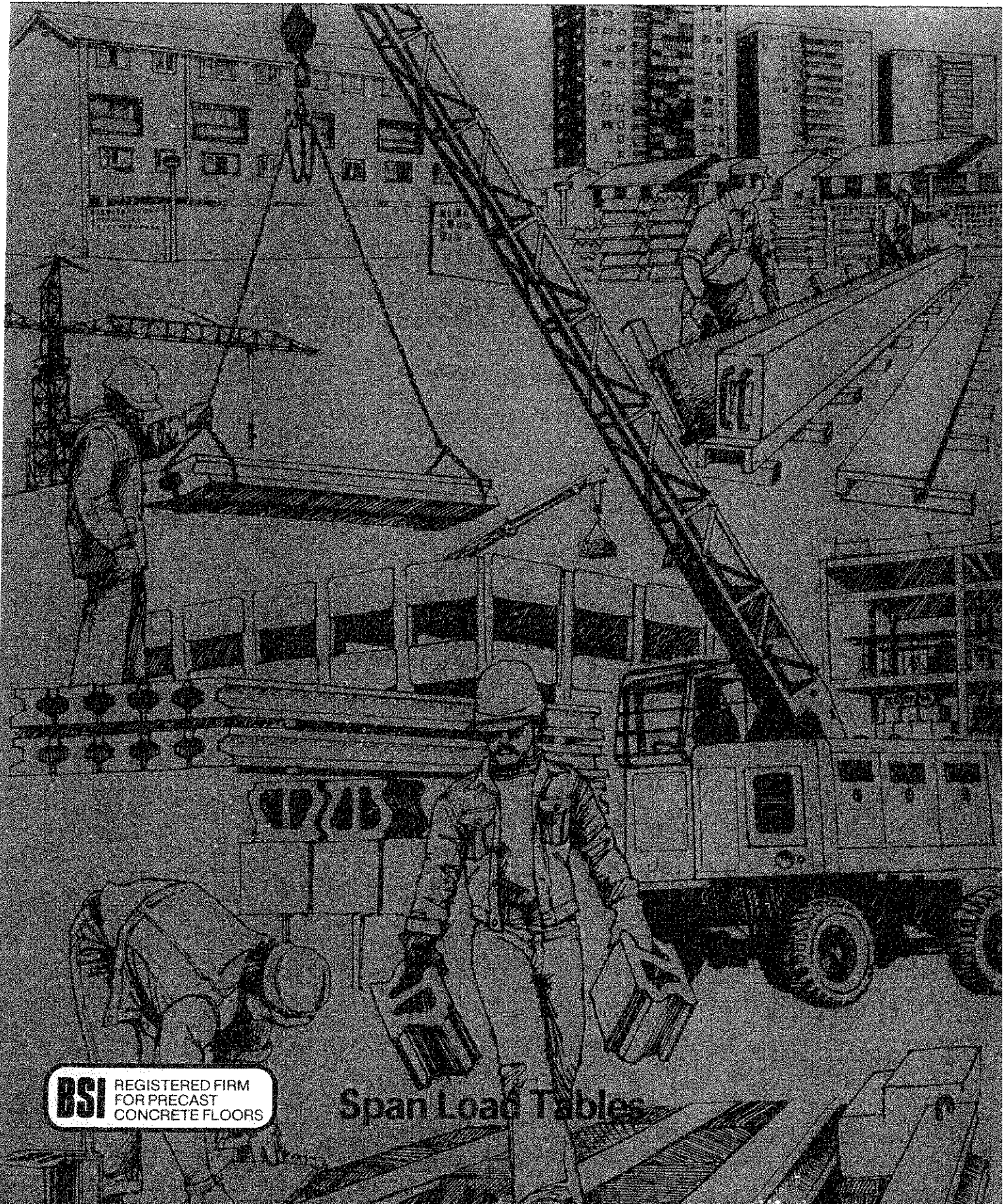
Hawkesden Road, St. Neots, Huntingdon. PE19 1NB Cambs.  
Telephone: Huntingdon 73421.

0490

CI/SIB reference by RIBA SIB Agency

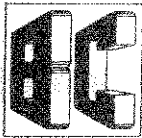
(23.4), Gf

December 1978



**BSI** REGISTERED FIRM  
FOR PRECAST  
CONCRETE FLOORS

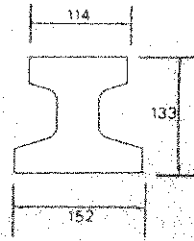
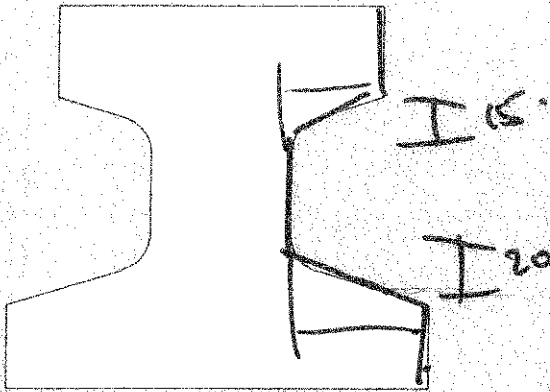
## Span Load Tables



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## BC 133 Floor



For simply supported designs the maximum values for this unit are:-

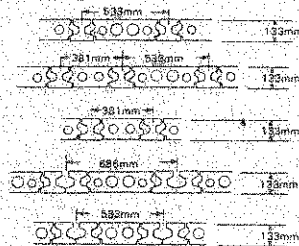
Ultimate moment of resistance  $M_u = 11.42 \text{ kNm}$

Moment of resistance at serviceability limit (Class 2)  
 $= 7.31 \text{ kNm}$

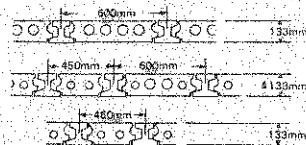
Ultimate shear resistance  $V_{co}$  for uniformly distributed loads assuming 100mm bearings  $= 18.54 \text{ kN}$

Reduced ultimate shear resistance may apply where bearings are less than 100mm or where heavy concentrated loads are to be carried which are greater than  $0.5 V_{co}$ .

Flooring system to provide a minimum mass requirement of  $220 \text{ Kg/m}^2$

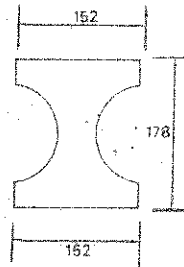
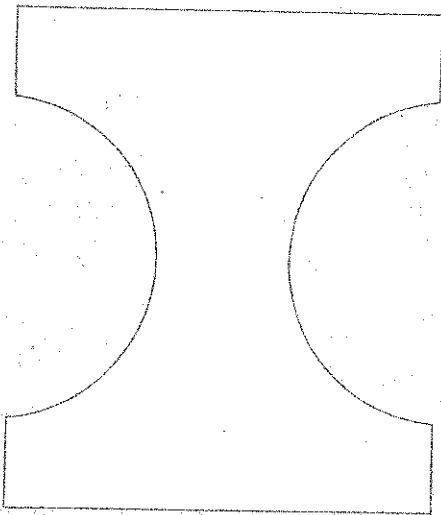


Floor Weight $\text{kN/m}^2$	Clear spans (metres) for imposed loads ( $\text{kN/m}^2$ )								
	0.75	1.5	2.0	2.5	3.0	4.0	5.0	7.5	10.0
2.16	5.26	4.80	4.55	4.34	4.15	3.84	3.59	3.12	2.55
2.16	5.32	5.19	4.92	4.69	4.49	4.15	3.88	3.38	3.03
2.16	5.32	5.32	5.32	5.15	4.93	4.56	4.26	3.71	3.32
2.34	5.32	5.32	5.32	5.32	5.12	4.75	4.44	3.88	3.48
2.34	5.32	5.32	5.32	5.32	5.32	5.32	5.05	4.41	3.96



Floor Weight $\text{kN/m}^2$	Clear spans (metres)				Domestic Loading ie. Ground Floors etc.  Lightweight floor system (where mass requirement unspecified.)
	0.75	1.5	2.0	2.5	
1.86	5.16	4.68	4.42	4.20	
1.95	5.32	4.96	4.69	4.46	
2.06	5.32	5.29	5.01	4.77	

# BC 178 Floor



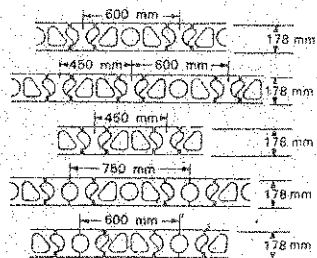
For simply supported designs the maximum values for this unit are:-

Ultimate moment of resistance  $M_u = 22.96 \text{ kNm}$

Moment of resistance at serviceability limit (Class 2)  
=  $14.18 \text{ kNm}$

Ultimate shear resistance  $V_{co}$  for uniformly distributed loads assuming 100mm bearings =  $26.67 \text{ kN}$

Reduced ultimate shear resistance may apply where bearings are less than 100mm or where heavy concentrated loads are to be carried which are greater than  $0.5 V_{co}$ .



Floor Weight kN/m <sup>2</sup>	Clear spans (metres) for imposed loads (kN/m <sup>2</sup> )								
	0.75	1.5	2.0	2.5	3.0	4.0	5.0	7.5	10.0
2.16	6.94	6.33	6.01	5.73	5.48	5.07	4.74	4.13	3.70
2.16	7.12	6.78	6.43	6.13	5.87	5.43	5.07	4.42	3.96
2.20	7.12	7.12	6.93	6.60	6.32	5.85	5.47	4.77	4.28
2.30	7.12	7.12	7.12	7.12	6.88	6.38	5.97	5.21	4.68
2.44	7.12	7.12	7.12	7.12	7.12	7.12	6.63	5.80	5.22

**Note:**

Floor systems requiring a mass of 220Kg/m<sup>2</sup> will be satisfied using a floor weight of 2.16 kN/m<sup>2</sup> and above.

Clear spans are based on 100 mm seating to joists. Imposed loads are to CP3 chapter V, Part 1, 1967, Metric Units, and are in addition to an allowance of 0.9 kN/m<sup>2</sup> for floor finishes, and the stated floor weight, which includes a plastered soffit.

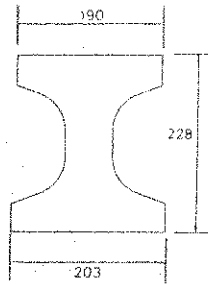
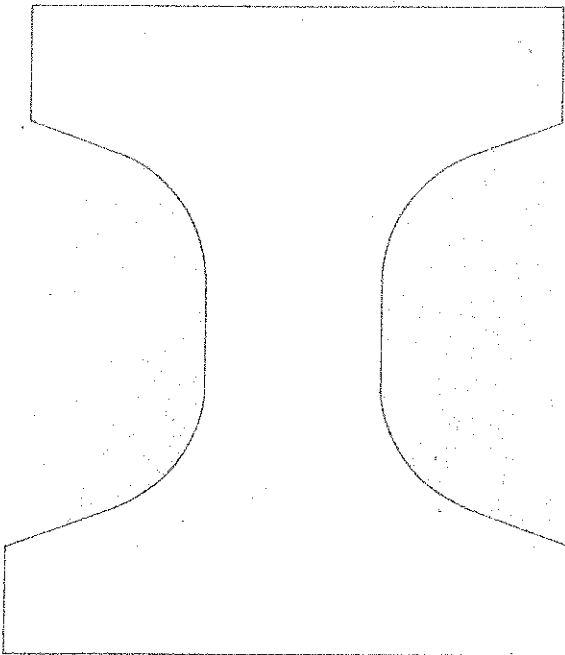
Spans in colour have been restricted to 40D but in certain circumstances this ratio need not apply.

Span load capacity can be increased further when the unit is designed in composite action with a structural topping.

Similar span load capabilities apply to designs based on CP 116.

For further information on any of the above check with our Engineers.

# BC 228 Floor



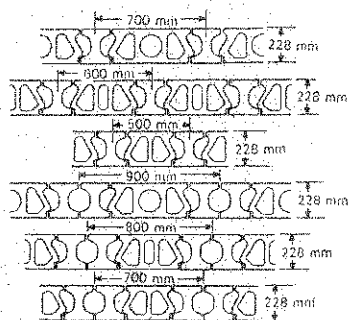
For simply supported designs the maximum values for this unit are:-

Ultimate moment of resistance  $M_u = 44.21 \text{ kNm}$

Moment of resistance at serviceability limit (Class 2) = 29.22 kNm

Ultimate shear resistance  $V_{co}$  for uniformly distributed loads assuming 100mm bearings = 45.67 kN

Reduced ultimate shear resistance may apply where bearings are less than 100mm or where heavy concentrated loads are to be carried which are greater than  $0.5 V_{co}$ .



Floor Weight $\text{kN/m}^2$	Clear spans (metres) for imposed loads ( $\text{kN/m}^2$ )								
	0.75	1.5	2.0	2.5	3.0	4.0	5.0	7.5	10.0
2.62	8.74	8.01	7.67	7.34	7.05	6.56	6.16	5.40	4.86
2.67	9.12	8.66	8.26	7.91	7.60	7.07	6.64	5.83	5.25
2.73	9.12	9.12	9.01	8.63	8.29	7.72	7.26	6.38	5.75
2.86	9.12	9.12	9.12	9.00	8.66	8.08	7.60	6.69	6.04
2.92	9.12	9.12	9.12	9.12	9.12	8.54	8.03	7.08	6.40
3.00	9.12	9.12	9.12	9.12	9.12	9.09	8.56	7.55	6.83