

Standard Beam Load/Span Tables

Floor self-weights				Effective centres			
Centres	Blocks@650KG/m ³	Blocks@1350KG/m ³	Blocks@2000KG/m ³				
S 520	1.19KN/m ²	1.768KN/m ²	2.31KN/m ²				
S 407	1.35KN/m ²	1.893KN/m ²	2.41KN/m ²				
S 295	1.61KN/m ²	2.107KN/m ²	2.58KN/m ²				
D 640	1.69KN/m ²	2.160KN/m ²	2.60KN/m ²				
D 527	1.92KN/m ²	2.340KN/m ²	2.74KN/m ²				
D 415	2.26KN/m ²	2.613KN/m ²	2.95KN/m ²				
T 760	2.04KN/m ²	2.428KN/m ²	2.80KN/m ²				
T 647	2.28KN/m ²	2.621KN/m ²	2.95KN/m ²				
T 535	2.62KN/m ²	2.892KN/m ²	3.15KN/m ²				

INFILL BLOCK	440 x 215 (650 KG/m ³) <i>Thermal Block</i>			440 x 215 (1350 KG/m ³) <i>Medium Weight Aggregate</i>			440 x 215 (2000 KG/m ³) <i>Dense Concrete</i>			
LIVE LOAD	1.5KN/m ² DOMESTIC			1.5KN/m ² DOMESTIC			2.5KN/m ² 4.0KN/m ²			
EFFECTIVE BEAM CENTRES	FLOATING FLOOR	65mm SCREED	75mm SCREED	BEAM CENTRES	FLOATING FLOOR	65mm SCREED	75mm SCREED	BEAM CENTRES	65mm SCREED	65mm SCREED
<i>Figures below are MAXIMUM permissible CLEAR SPANS in millimetres (ie between supports)</i>										

CASE A NO PARTITIONS										
520	5650	4700	4550	520	5200	4400	4300	520	3600	2700
407	5800	5200	5100	407	5750	4950	4800	407	4300	3650
295	5800	5800	5800	295	5800	5700	5550	295	5000	4500
640	5800	5700	5550	640	5800	5450	5300	640	4800	4300
527	5800	5800	5800	527	5800	5800	5750	527	5250	4750
415	5800	5800	5800	415	5800	5800	5800	415	5800	5300
760	5800	5800	5800	760	5800	5800	5800	760	5300	4800
647	5800	5800	5800	647	5800	5800	5800	647	5700	5150
535	5800	5800	5800	535	5800	5800	5800	535	5800	5650

CASE B STUDWORK PARTITIONS @ 1.0KN/m ²										
520	4900	4200	4100	520	4550	4000	3700	520	3350	2550
407	5400	4700	4600	407	5100	4500	4400	407	4000	3450
295	5800	5400	5300	295	5800	5200	5100	295	4650	4250
640	5800	5150	5050	640	5600	4950	4850	640	4450	4050
527	5800	5600	5500	527	5800	5400	5300	527	4900	4450
415	5800	5800	5800	415	5800	5800	5800	415	5450	5000
760	5800	5650	5550	760	5800	5450	5350	760	4950	4550
647	5800	5800	5800	647	5800	5800	5750	647	5350	4900
535	5800	5800	5800	535	5800	5800	5800	535	5800	5350

CASE C 3.0KN/m RUN LIGHTWEIGHT BLOCK PARTITION AT 90 deg TO SPAN										
520	4750	4050	3700	520	4400	3600	3500	520	2600	2350
407	5350	4600	4500	407	5000	4350	4250	407	3650	2700
295	5800	5350	5250	295	5800	5150	5050	295	4550	4150
640	5800	5100	5000	640	5550	4900	4800	640	4350	3750
527	5800	5550	5450	527	5800	5350	5250	527	4800	4400
415	5800	5800	5800	415	5800	5800	5800	415	5400	4950
760	5800	5650	5500	760	5800	5450	5350	760	4900	4450
647	5800	5800	5800	647	5800	5800	5750	647	5300	4850
535	5800	5800	5800	535	5800	5800	5800	535	5800	5300

CASE D 3.0KN/m RUN LIGHTWEIGHT BLOCK PARTITION PARALLEL TO SPAN, FULL SPAN										
520	2600	2400	2350	520	2500	2350	2300	520	2100	1850
407	2650	2500	2500	407	2600	2450	2400	407	2300	2100
295	2750	2650	2600	295	2700	2600	2550	295	2450	2350
640	4300	4000	3750	640	4200	3700	3650	640	3450	2700
527	4450	4150	4100	527	4350	4050	4050	527	3650	3400
415	4550	4300	4300	415	4500	4250	4200	415	4050	3650
760	5000	4600	4550	760	4900	4500	4450	760	4200	3750
647	5100	4750	4700	647	5000	4700	4650	647	4400	4150
535	5250	4950	4900	535	5200	4850	4800	535	4600	4350

CASE G DOMESTIC GARAGE IMPOSED LOAD 2.5KN/m ² OR 9.0KN CONCENTRATED LOAD				BEAM CENTRES	BLOCK 650KG/m ³	BLOCK 1350KG/m ³	BLOCK 2000KG/m ³
<p>Where clear spans for floating floors are shown, no allowance for the weight of a screed has been incorporated.</p> <p>The clear spans shown for the domestic garage loading condition rely on a reinforced screed directly applied to the top of the beams & blocks.</p> <p>The screed should have a compressive strength of 21N/mm² with light steel mesh reinforcement.</p> <p>Table to the right gives maximum clear spans for garage load case applying up to a 75mm thick reinforced screed with the differing density infill blocks shown.</p>				520	3750	3500	3350
				407	4300	4050	3600
				295	4650	4450	4300
				640	4950	4700	4550
				527	5200	5000	4800
				415	5450	5300	5200
				760	5550	5350	5250
				647	5800	5750	5600
				535	5800	5800	5800

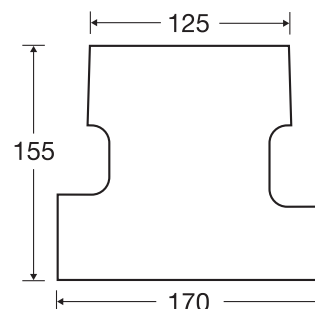
Wide Beam Load/Span Tables

LOAD / SPAN TABLE - DOMESTIC APPLICATION WITH MEDIUM WEIGHT AGGREGATE INFILL BLOCKS					
Note: Figures below are MAXIMUM permissible CLEAR SPANS in millimeters (ie between supports)					
Centres	Open Areas with 65mm Screeded Finished	Centres	Allowance of 1.0KN/m ² For Timber Stud Partitions with 65mm Screeded Finish	Centres	Domestic Garage Application with 75mm Thick Reinforced Screed
570	5450	570	4950	570	4850
458	6000	458	5500	458	5350
345	6550	345	6200	345	5900
740	6500	740	5950	740	5850
628	6550	628	6400	628	6300
515	6550	515	6550	515	6550
910	6550	910	6450	910	6350
798	6550	798	6550	798	6550
685	6550	685	6550	685	6550

The clear spans show for the domestic garage loading condition rely on a reinforced screed directly applied to the top of the beams and blocks. The screed should have a compressive strength of 21N/mm² with light steel mesh reinforcement.

LOAD / SPAN TABLE - NON-DOMESTIC APPLICATION WITH DENSE CONCRETE INFILL BLOCKS					
2.5KN/m ² Imposed load with 65mm Screed			4.0KN/m ² Imposed load with 65mm Screed		
Centres	Open Areas	Allowance of 1.0KN/m ² For Timber Stud Partitions	Centres	Open Areas	Allowance of 1.0KN/m ² For Timber Stud Partitions
570	4750	4400	570	4250	4000
458	5300	4900	458	4750	4500
345	6000	5600	345	5450	5100
740	5800	5400	740	5250	4950
628	6250	5850	628	5650	5350
515	6550	6350	515	6150	5850
910	6300	5900	910	5750	5400
798	6550	6250	798	6100	5750
685	6550	6550	685	6500	6150

FLOOR SELF WEIGHTS		
Centres	Blocks @ 1350KG/m ³	Blocks @ 2000KG/m ³
S 570	1.92KN/m ²	2.41KN/m ²
S 458	2.06KN/m ²	2.52KN/m ²
S 345	2.30KN/m ²	2.70KN/m ²
S 740	2.33KN/m ²	2.71KN/m ²
S 628	2.52KN/m ²	2.85KN/m ²
S 515	2.78KN/m ²	3.04KN/m ²
S 910	2.60KN/m ²	2.90KN/m ²
S 798	2.78KN/m ²	3.04KN/m ²
S 685	3.02KN/m ²	3.22KN/m ²



Our Prestressed floor Beams are now available in a wide 170mm.

The wider beam has the same depth (155mm) as our standard 120mm beam.

The new beam also has the same edge detail and "T" profile that has become so popular.

In our design process the wider beam can be fully interchangeable with the standard beam in the same floor.

The wider beam provides a superior design for larger span floors replacing the need for double or triple beams.

Wider beams means faster installation due to:

- Fewer units to lift
- Simpler layouts
- Less grouting

Only one formula to remember
Wider beams = Cheaper Floors!