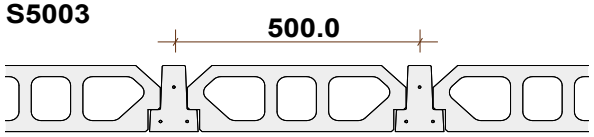
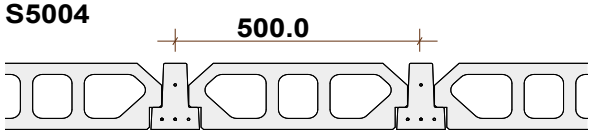
LEGEND

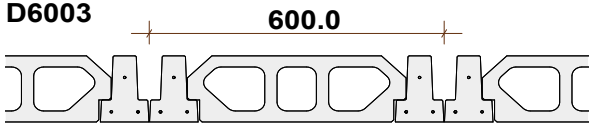
S5003



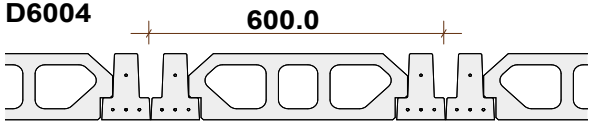
S5004



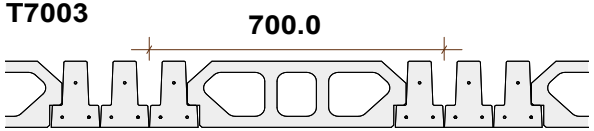
D6003



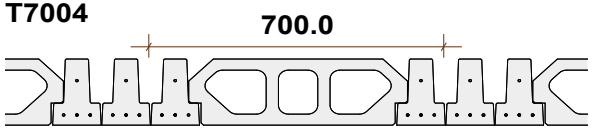
D6004



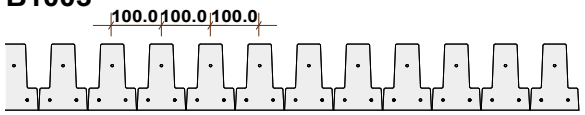
T7003



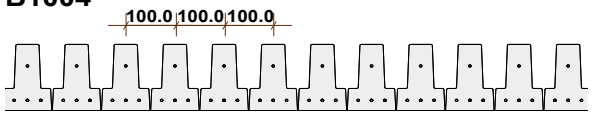
T7004



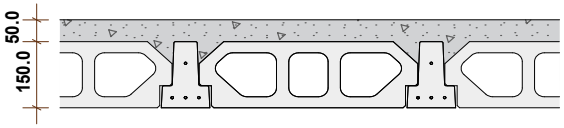
B1003



B1004



50mm concrete topping Class 20, reinforced with 12mm fibre mesh.

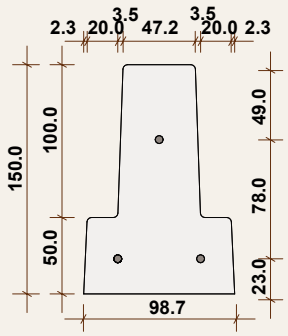


SIL KN/M2	S5003	S5004	D6003	D6004	T7003	T7004	B1003	B1004
0.75	4.17	4.34	5.25	5.46	5.68	6.07	8.05	8.33
1.5	3.79	3.97	4.78	5.02	5.41	5.60	7.54	7.81
2	3.57	3.77	4.53	4.77	5.15	5.33	7.24	7.50
2.5	3.39	3.59	4.31	4.56	4.93	5.11	6.98	7.23
3	3.23	3.43	4.12	4.38	4.74	4.91	6.75	6.99
4	2.98	3.18	3.81	4.06	4.41	4.56	6.33	6.57
5	2.77	2.97	3.56	3.81	4.14	4.28	5.99	6.21
7.5	2.40	2.59	3.09	3.33	3.62	3.76	5.33	5.52
10	2.14	2.32	2.77	2.99	3.27	3.38	4.84	5.02

BBF Beam To Beam Flooring

FLOOR DECOR KENYA

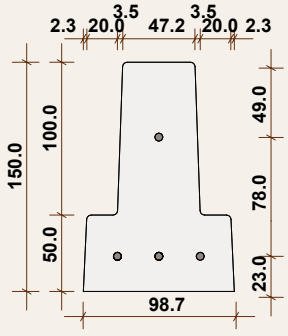
3 WIRE BEAM



Weight of unit = $\frac{24 \times 9895}{10^6}$ = 0.237 kN/m

3 wires: MRserv = 4.484 kN/m
MRult = 6.390 kN/m
√co = 13.715 kN

4 WIRE BEAM



Weight of unit = $\frac{24 \times 9895}{10^6}$ = 0.237 kN/m

4 wires: MRserv = 4.804 kN/m
MRult = 8.616 kN/m
√co = 14.727 kN

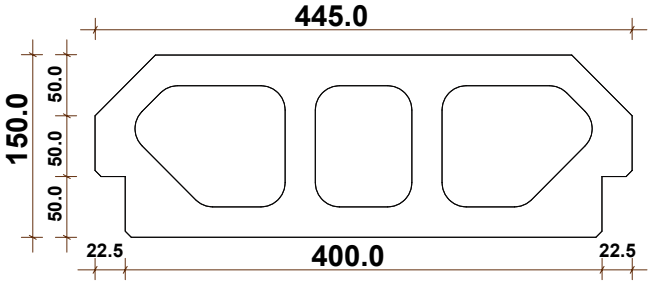
$$M = \frac{w\, l^2}{8}$$

$$l = \sqrt{\frac{8 \times M}{w}}$$

STEEL

Characteristic strength of steel = 1,770 N/mm^2
Youngs Modulus for Steel = Es = 200 kN/mm^2
Coefficient for transmission length = Kt = 600
Nominal Tendon Diameter = 5.00 mm

BLOCK



Weight of unit = $\frac{75 \times 9895}{10^6}$ = 0.742 kN/m

Density 1800kg/m^3
Flexure 7N/mm^2

CONCRETE

Depth = 150.00 mm;
Effective Shear width = bv = 47.20 mm;
Area = A = 9,895 mm^2;
Structural Width = b = 54.20 mm;
Depth of Top = hf = 127.00 mm

Moment of Inertia = I = 19.485019^6× 10 mm^4
NAb = 64.115 mm;
Bearing Length = 100mm
Concrete Grade = fcu = 60 kN/mm^2;
Concrete Strength at transfer = fci = 40 N/mm^2