

# MetFloor® 80

## Single span decking / single span concrete (Fire Engineering Method)

Props	Fire Period	Slab Depth (mm)	Mesh 0.2% min. req'd	Total Applied Load (kN/m <sup>2</sup> )											
				0.9mm				1.0mm				1.2mm			
				3.5	5	7.5	10	3.5	5	7.5	10	3.5	5	7.5	10
None	60 minutes	140	A142	3.96*	3.96*	3.96*	3.95*	4.14*	4.14*	4.13*	3.95*	4.29*	4.29*	4.29*	3.96*
		150	A142	3.86*	3.86*	3.86*	3.86*	4.06*	4.06*	4.06*	4.06*	4.21*	4.21*	4.21*	4.20*
		160	A193	3.76*	3.76*	3.76*	3.76*	3.98*	3.98*	3.98*	3.98*	4.13*	4.13*	4.13*	4.13*
		170	A193	3.67*	3.67*	3.67*	3.67*	3.91*	3.91*	3.91*	3.90*	4.06*	4.06*	4.06*	4.06*
		180	A252	3.59*	3.59*	3.59*	3.59*	3.83*	3.83*	3.83*	3.82*	4.00*	4.00*	4.00*	4.00*
		190	A252	3.51*	3.51*	3.51*	3.51*	3.75*	3.75*	3.75*	3.75*	3.93*	3.93*	3.93*	3.93*
200	A252	3.44*	3.44*	3.44*	3.44*	3.69*	3.69*	3.69*	3.69*	3.87*	3.87*	3.87*	3.86*		
None	90 minutes	150	A142	3.86*	3.86*	3.86*	3.85*	4.06*	4.06*	4.06*	4.05*	4.21*	4.21*	4.20*	4.20*
		160	A193	3.76*	3.76*	3.76*	3.75*	3.98*	3.98*	3.98*	3.97*	4.13*	4.13*	4.13*	4.12*
		170	A193	3.67*	3.67*	3.67*	3.67*	3.91*	3.91*	3.90*	3.89*	4.06*	4.06*	4.06*	4.05*
		180	A252	3.59*	3.59*	3.59*	3.59*	3.83*	3.83*	3.82*	3.82*	4.00*	4.00*	4.00*	3.99*
		190	A252	3.51*	3.51*	3.51*	3.51*	3.75*	3.75*	3.75*	3.75*	3.93*	3.93*	3.93*	3.93*
		200	A252	3.44*	3.44*	3.44*	3.44*	3.69*	3.69*	3.69*	3.68*	3.87*	3.87*	3.86*	3.86*
None	120 minutes	160	A193	3.76*	3.76*	3.75*	3.75*	3.98*	3.98*	3.97*	3.97*	4.13*	4.12*	4.12*	4.11*
		170	A193	3.67*	3.67*	3.66*	3.66*	3.91*	3.90*	3.89*	3.89*	4.06*	4.06*	4.05*	4.05*
		180	A252	3.59*	3.59*	3.58*	3.58*	3.83*	3.82*	3.81*	3.81*	4.00*	4.00*	3.99*	3.99*
		190	A252	3.51*	3.51*	3.51*	3.51*	3.75*	3.75*	3.74*	3.74*	3.93*	3.93*	3.92*	3.92*
		200	A252	3.44*	3.44*	3.44*	3.44*	3.69*	3.68*	3.68*	3.68*	3.87*	3.86*	3.86*	3.86*

## Double span decking / continuous concrete

Props	Fire Period	Slab Depth (mm)	Mesh 0.2% min. req'd	Total Applied Load (kN/m <sup>2</sup> )											
				0.9mm				1.0mm				1.2mm			
				3.5	5	7.5	10	3.5	5	7.5	10	3.5	5	7.5	10
None	60 minutes	140	A142	4.44*	4.43*	4.43*	4.08*	4.74*	4.72*	4.50*	4.07*	5.15*	5.16*	4.63*	4.07*
		150	A142	4.32	4.32*	4.31*	4.30*	4.58*	4.56*	4.57*	4.31*	5.07*	5.05*	4.93*	4.41*
		160	A193	4.19	4.19	4.17*	4.17*	4.44	4.43*	4.42*	4.42*	4.97	4.96*	4.96*	4.61*
		170	A193	4.11	4.11	4.09*	4.09*	4.30	4.30	4.28*	4.28*	4.89	4.88*	4.88*	4.87*
		180	A252	4.08	4.08	4.08*	4.08*	4.22	4.22	4.21*	4.21*	4.81	4.81	4.79*	4.79*
		190	A252	3.96	3.96	3.95*	3.95*	4.20	4.20	4.20*	4.20*	4.68	4.68	4.67*	4.67*
200	A252	3.84	3.84	3.84	3.83*	4.09	4.09	4.08*	4.08*	4.57	4.57	4.55*	4.55*		
None	90 minutes	150	A142	4.32*	4.31*	4.30*	4.30*	4.56*	4.57*	4.55*	4.31*	5.05*	5.06*	4.93*	4.41*
		160	A193	4.19	4.17*	4.17*	4.15*	4.43*	4.42*	4.40*	4.40*	4.96*	4.96*	4.95*	4.61*
		170	A193	4.11	4.10*	4.09*	4.09*	4.30	4.28*	4.28*	4.27*	4.88*	4.88*	4.87*	4.87*
		180	A252	4.08	4.08	4.08*	4.07*	4.22	4.22	4.21*	4.20*	4.81	4.79*	4.78*	4.78*
		190	A252	3.96	3.96	3.95*	3.95*	4.20	4.20	4.20*	4.19*	4.68	4.67*	4.67*	4.65*
		200	A252	3.84	3.84	3.83*	3.83*	4.09	4.09	4.08*	4.08*	4.57	4.57	4.55*	4.54*
None	120 minutes	160	A193	4.18*	4.17*	4.15*	4.14*	4.42*	4.40*	4.40*	4.38*	4.95*	4.95*	4.94*	4.60*
		170	A193	4.11	4.09*	4.09*	4.09*	4.29*	4.28*	4.27*	4.25*	4.88*	4.87*	4.86*	4.86*
		180	A252	4.08	4.08*	4.06*	4.06*	4.22	4.21*	4.20*	4.20*	4.80	4.78*	4.78*	4.76*
		190	A252	3.96	3.96	3.95*	3.93*	4.20	4.20*	4.19*	4.19*	4.68	4.67*	4.65*	4.64*
		200	A252	3.84	3.84	3.83*	3.81*	4.09	4.09	4.08*	4.06*	4.57	4.55*	4.54*	4.54*

# MetFloor® 80 – Propped

## Single span decking / single span concrete (Fire Engineering Method)

Props	Fire Period	Slab Depth (mm)	Mesh 0.2% min. req'd	Total Applied Load (kN/m <sup>2</sup> )											
				0.9mm				1.0mm				1.2mm			
				3.5	5	7.5	10	3.5	5	7.5	10	3.5	5	7.5	10
One	60 minutes	140	A142	5.02*	4.77*	4.44*	4.07*	5.04*	4.80*	4.47*	4.07*	5.10*	4.87*	4.53*	4.07*
		150	A142	5.22*	5.03*	4.70*	4.36*	5.25*	5.05*	4.73*	4.38*	5.30*	5.10*	4.79*	4.40*
		160	A193	5.42*	5.23*	4.96*	4.68*	5.44*	5.25*	4.99*	4.68*	5.49*	5.30*	5.04*	4.70*
		170	A193	5.61*	5.42*	5.16*	4.95*	5.63*	5.44*	5.19*	4.97*	5.68*	5.49*	5.23*	4.99*
		180	A252	5.79*	5.61*	5.35*	5.14*	5.82*	5.63*	5.37*	5.16*	5.87*	5.67*	5.41*	5.20*
		190	A252	5.95*	5.79*	5.53*	5.32*	6.00*	5.81*	5.55*	5.34*	6.05*	5.86*	5.59*	5.38*
200	A252	5.88*	5.82*	5.70*	5.49*	6.17*	5.99*	5.73*	5.52*	6.22*	6.03*	5.77*	5.56*		
One	90 minutes	150	A142	5.22*	5.03*	4.70*	4.36*	5.25*	5.05*	4.73*	4.38*	5.30*	5.10*	4.79*	4.40*
		160	A193	5.42*	5.23*	4.96*	4.68*	5.44*	5.25*	4.99*	4.68*	5.49*	5.30*	5.04*	4.70*
		170	A193	5.61*	5.42*	5.16*	4.95*	5.63*	5.44*	5.19*	4.97*	5.68*	5.49*	5.23*	4.99*
		180	A252	5.79*	5.61*	5.35*	5.14*	5.82*	5.63*	5.37*	5.16*	5.87*	5.67*	5.41*	5.20*
		190	A252	5.95*	5.79*	5.53*	5.32*	6.00*	5.81*	5.55*	5.34*	6.05*	5.86*	5.59*	5.38*
		200	A252	5.88*	5.82*	5.70*	5.49*	6.17*	5.99*	5.73*	5.52*	6.22*	6.03*	5.77*	5.56*
One	120 minutes	160	A193	5.42*	5.23*	4.96*	4.68*	5.44*	5.25*	4.99*	4.68*	5.49*	5.30*	5.04*	4.70*
		170	A193	5.61*	5.42*	5.16*	4.95*	5.63*	5.44*	5.19*	4.97*	5.68*	5.49*	5.23*	4.99*
		180	A252	5.79*	5.61*	5.35*	5.14*	5.82*	5.63*	5.37*	5.16*	5.87*	5.67*	5.41*	5.20*
		190	A252	5.95*	5.79*	5.53*	5.32*	6.00*	5.81*	5.55*	5.34*	6.05*	5.86*	5.59*	5.38*
		200	A252	5.88*	5.82*	5.70*	5.49*	6.17*	5.99*	5.73*	5.52*	6.22*	6.03*	5.77*	5.56*

## Double span decking / continuous concrete

Props	Fire Period	Slab Depth (mm)	Mesh 0.4% min. req'd	Total Applied Load (kN/m <sup>2</sup> )											
				0.9mm				1.0mm				1.2mm			
				3.5	5	7.5	10	3.5	5	7.5	10	3.5	5	7.5	10
One	60 minutes	140	A252	5.55*	5.24*	4.73*	4.07*	5.58*	5.27*	4.76*	4.07*	5.63*	5.32*	4.82*	4.06*
		150	A393	5.81*	5.48*	5.07*	4.39*	5.82*	5.51*	5.10*	4.40*	5.88*	5.56*	5.16*	4.39*
		160	A393	6.04*	5.72*	5.34*	4.71*	6.07*	5.75*	5.36*	4.71*	6.12*	5.80*	5.41*	4.72*
		170	A393	6.28*	5.96*	5.57*	5.02*	6.30*	5.98*	5.59*	5.03*	6.36*	6.03*	5.64*	5.03*
		180	2x A252	6.35*	6.18*	5.78*	5.31*	6.52*	6.21*	5.81*	5.31*	6.58*	6.26*	5.85*	5.33*
		190	2x A252	6.20*	6.20*	5.99*	5.57*	6.62*	6.43*	6.02*	5.60*	6.77*	6.48*	6.07*	5.59*
200	2x A252	6.05*	6.05*	6.00*	5.79*	6.47*	6.47*	6.23*	5.85*	6.93*	6.70*	6.28*	5.86*		
One	90 minutes	150	A393	5.80*	5.48*	5.07*	4.39*	5.82*	5.51*	5.10*	4.40*	5.88*	5.56*	5.16*	4.39*
		160	A393	6.04*	5.72*	5.34*	4.71*	6.07*	5.75*	5.36*	4.71*	6.12*	5.80*	5.41*	4.71*
		170	A393	6.28*	5.96*	5.57*	5.02*	6.30*	5.98*	5.59*	5.03*	6.36*	6.03*	5.64*	5.02*
		180	2x A252	6.35*	6.18*	5.78*	5.31*	6.52*	6.21*	5.81*	5.31*	6.58*	6.26*	5.85*	5.32*
		190	2x A252	6.20*	6.20*	5.99*	5.57*	6.62*	6.43*	6.02*	5.60*	6.77*	6.48*	6.07*	5.59*
		200	2x A252	6.05*	6.05*	6.00*	5.79*	6.47*	6.47*	6.23*	5.85*	6.93*	6.70*	6.28*	5.86*
One	120 minutes	160	A393	6.04*	5.72*	5.34*	4.70*	6.07*	5.75*	5.36*	4.70*	6.12*	5.80*	5.41*	4.69*
		170	A393	6.28*	5.96*	5.57*	5.02*	6.30*	5.98*	5.59*	5.01*	6.36*	6.03*	5.64*	5.01*
		180	2x A252	6.35*	6.18*	5.78*	5.31*	6.52*	6.21*	5.81*	5.31*	6.58*	6.26*	5.85*	5.30*
		190	2x A252	6.20*	6.20*	5.99*	5.57*	6.62*	6.43*	6.02*	5.60*	6.77*	6.48*	6.07*	5.59*
		200	2x A252	6.05*	6.03*	6.00*	5.79*	6.47*	6.47*	6.23*	5.85*	6.93*	6.70*	6.28*	5.86*