

SPEEDFLOOR WITH 90mm CONCRETE SLAB
TABLE 3: SECTION PROPERTIES

Joist series(mm)	Non-composite			Composite			
	Ist (x10 ⁶ mm ⁴)	Zt (x10 ³ mm ³)	Zb (x10 ³ mm ³)	Icomp (x10 ⁶ mm ⁴)	Zt (x10 ³ mm ³)	Zb (x10 ³ mm ³)	I effective for deflection (x10 ⁶ mm ⁴)
200	8.14	65.00	72.00	35.20	633.00	150.70	31.20
250	14.00	92.90	101.90	43.30	798.20	155.70	39.70
300	20.40	108.00	136.00	67.70	1130.00	205.00	60.40
350	28.70	129.00	173.00	96.30	1488.40	256.60	86.00
400	38.10	160.60	189.70	99.00	1578.90	231.60	89.90

TABLE 4: SECTION CAPACITIES

Joist series (mm)	Non-composite		Composite			
	Shear capacity with holes $\emptyset V_v$ (kN)	Shear capacity without holes $\emptyset V_v$ (kN)	$\emptyset M_{sx}$ (kN.m)	Shear capacity with holes $\emptyset V_{rc}$ (kN)	Shear capacity without holes $\emptyset V_{rc}$ (kN)	$\emptyset M_{rc}$ (kN.m)
200	/	71.00	20.50	/	73.00	47.80
250	30.20	100.00	29.30	32.60	102.20	43.30
300	42.00	85.00	34.00	44.00	87.00	64.00
350	60.00	72.00	40.60	62.00	74.00	86.00
400	30.20	62.00	50.50	32.60	64.40	74.70

