



METFORCE

Perth – 08 9302 3686 Sydney – 02 9524 2003

Sharecall: 1300 4 metforce

sales@metforce.com.au

www.metforce.com.au

Warehouses -

Perth: 86 Furniss Road, Landsdale, 6065, WA

Sydney: 56 Bay Road, Taren Point, 2229, NSW

Adelaide: 16 Hocking Street, Brompton, 5007, SA

Postal: PO Box 194, Joondalup DC, 6919, WA

ABN: 95 132 832 065

HORIZONTAL WIRE BALUSTRADE REGULATIONS – AUSTRALIAN BUILDING CODE

The following simple rules apply for horizontal wire balustrading:

Maximum height of any wire balustrade is 4 mtr. (deck to ground level)

Maximum spacing for wires is 100mm, but to be safe we prefer 80mm as it allows posts further apart with less tension.

When pulled apart, the maximum gap cannot be more than 125mm.

For stairs, that maximum gap is taken from the nosing line.

Table 3.9.2.1 WIRE BALUSTRADE CONSTRUCTION – REQUIRED TENSION FOR STAINLESS STEEL HORIZONTAL WIRES

			Clear distance between posts (mm)								
			600	800	900	1000	1200	1500	1800	2000	2500
Wire dia. (mm)	Lay	Wire spacing (mm)	Minimum required tension in Newtons (N)								
3.0	7×7	60	15	178	270	314	506	660	965	1168	1491
		80	250	413	500	741	818	1083	1370	1565	X
		100	865	1278	1390	1639	X	X	X	X	X
3.0	1×19	60	25	183	261	340	520	790	1025	1180	X
		80	325	555	670	785	1015	1330	1725	1980	X
		100	1090	1500	1705	1910	X	X	X	X	X
4.0	7×7	60	5	73	97	122	235	440	664	813	1178
		80	196	422	480	524	760	1100	1358	1530	2130
		100	835	1182	1360	1528	1837	2381	2811	3098	X
4.0	1×19	60	5	5	10	15	20	147	593	890	1280
		80	30	192	300	415	593	1105	1303	1435	1844
		100	853	1308	1487	1610	2048	2608	3094	3418	3849

Table 3.9.2.3 WIRE BALUSTRADE CONSTRUCTION – MAXIMUM PERMISSIBLE DEFLECTION FOR STAINLESS STEEL WIRES

		Clear distance between posts(mm)					
		600	900	1200	1500	1800	2000
Wire dia. (mm)	Wire spacing (mm)	Maximum permissible deflection of each wire in mm when a 2 kg mass is suspended at mid span					
3.0	60	19	13	8	7	7	7
	80	8	6	6	5	5	5
4.0	60	18	12	8	8	7	7
	80	8	6	4	4	4	4

Notes:

1. Where a change of direction is made in a run of wire the 2 kg mass must be placed at the middle of the longest span.
2. If a 3.2 mm wire is used the deflection figures for 3.0 mm wire are applied.