



## Design Table MB100 MB100 Series Single Disc Balustrade System

Jul-11

Barriers - Design limits for occupancy A/B/E/C3.

t	Maximum		Fixing Dimensions (mm)	
	Cantilever Height H (mm)		Max x	
10mm	500		400	
	600		350	
	700		SPECIFIC DESIGN	
12mm	950		450	
	1050		400	
	1150		400	
	1250		SPECIFIC DESIGN	
15mm Glass	950		400	
	1050		450	
	1150		450	
	1250		400	

See note 15

Design loads to deck structure			
M* (kNm)	T* (kN)	SLS Wind (kPa)	ULS Wind (kPa)
0.6	5.0	3.1	3.1
0.7	5.1	3.1	3.1
SPECIFIC DESIGN			
1.2	11.7	1.9	2.6
1.2	11.4	1.4	2.1
1.2	12.9	1.3	2.0
SPECIFIC DESIGN			
1.4	12.4	1.6	3.1
1.1	10.8	1.4	2.4
1.4	13.6	1.3	2.1
1.4	12.2	1.1	1.8

Pool Fence - Design limits based on occupancy A line load only.

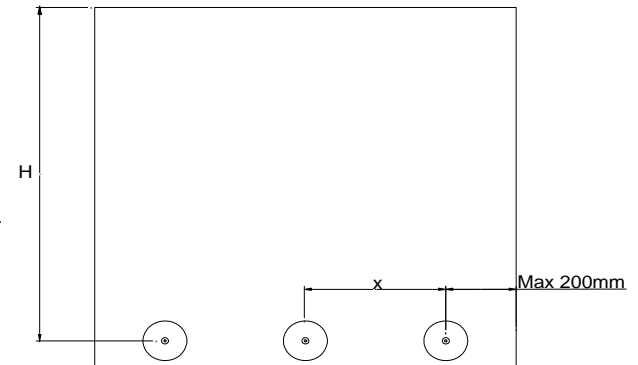
t	Maximum		Fixing Dimensions (mm)	
	Cantilever Height H (mm)		Max x	
12mm	1250		400	
15mm	1250		400	

Design loads to deck structure			
M* (kNm)	T* (kN)	SLS Wind (kPa)	ULS Wind (kPa)
1.2	10.1	1.5	1.5
1.4	12.2	1.8	1.8

### NOTES

- 1 Glass is to be TempaFloat grade A toughened safety glass by Metro GlassTech.
- 2 Glass panels are at least 1000mm wide unless connected by an interlinking handrail.
- 3 Glass thicknesses shown are nominal thickness. Table is based on minimum tolerance as per NZS 4223.1:2008.
- 4 Heights (H) are measured from glass fixing centre to top of glass, as shown on the diagram.
- 5 SLS Deflection in the glass is restricted to 30mm excluding rotation in the supporting structure, unless otherwise stated.
- 6 Design loads are in accordance with AS/NZS 1170.1:2002 table 3.3 and NZBC B1/VM1.
- 7 Loadings are in accordance with DBH Practice Advisory 10 (Nov 2009).
- 8 For ULS wind pressures exceeding those shown, specific design is required.
- 9 Table only valid for use with MB100 (100mm diameter) stainless steel discs or equivalent. Minimum 10mm thick front disc.
- 10 M\* denotes bending moment (kNm) around upper glass fixing to be taken by the supporting structure.
- 11 T\* denotes maximum pull out load (kN) of fixings to be taken by the supporting structure.
- 12 This table does not take into consideration the structural integrity of the supporting structure.  
Loads stated should be used as a guide only.
- 13 This table corresponds to fixing detail drawings MB100/C/RA, MB100/S/RN, MB100/T/RN.
- 14 For designs outside the scope of this table specific design is required.

15 RESIDENTIAL APPLICATION ONLY (see note 7) - SLS Deflection in this instance is above usual limit of 30mm excluding rotation in the supporting structure.

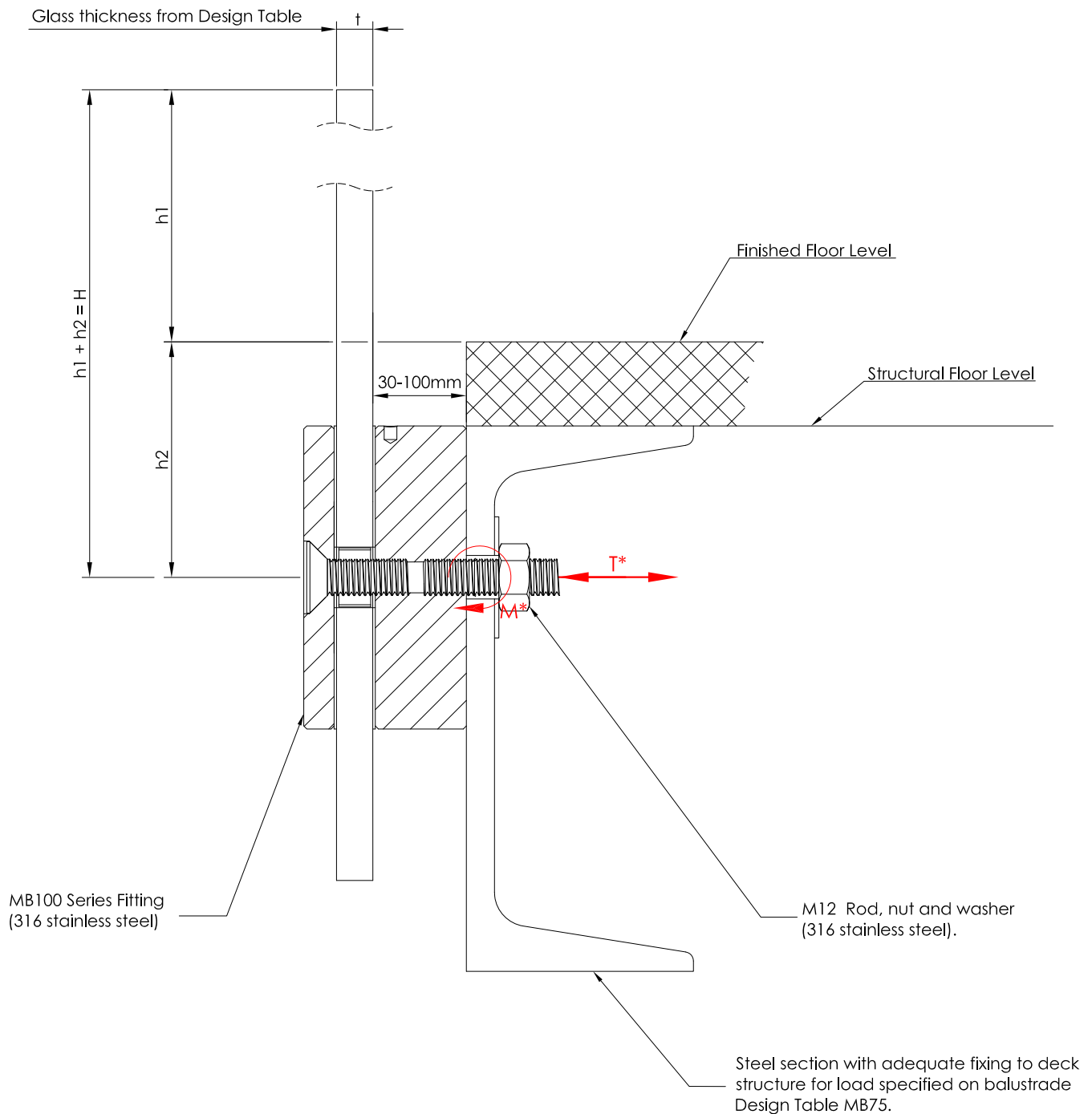




# MB100 Series Single Disc Balustrade System STEEL Fixing Detail

Drawing No.: MB100/S/RN  
Fixing Type: MB100 with rod and nut  
Occupancy: A, B, E, C3

Refer to Design Table MB100 for required glass thickness, fitting spacings and fixing loads according to AS/NZS 1170.1:2002 Occupancy Loads.



**Note:** Capacity of deck structure is to be of sufficient strength to support loads  $M^*$  and  $T^*$  specified on Design Table MB100. Deck capacity to be verified prior to fixing balustrade.

Max loading to comply with AS/NZS 1170.1:2002 Minimum Imposed Actions for Barriers Occupancy, shown at top of drawing, for design in accordance with Design Table MB100.

Website [www.metroframeless.co.nz](http://www.metroframeless.co.nz)