MONASH University

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Wilmaplex Pty Ltd.
57 Lathams Road,
Carrum Downs, Vic 3201
Mr Graham storey

RE/ Wilmaplex Hoop Iron Bracing Capacity

This is to confirm that Wilmaplex commissioned Monash University to undertake the task of evaluating the bracing capacity, by testing and computations, of G300 Z275 Hoop iron (3086M, 30815M, 30830M and 30850M) for the 0.8mm thickness; and (3016M, 30115M, 30130M and 30150M) for the 1.0mm thickness, the design capacities are given in Tables 1 and 2. The values are for wall frames comprising 90x45mm MGP10 frames with studs spaced at 450mm centres.

Table 1 Bracing capacity (kN) for Bracing length for 0.8mm thickness

Wall height	Bracing capacity (kN) for bracing length (m)									
(m)	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7
2.7	2.7	2.9	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1

Table 2 Bracing capacity (kN) for Bracing length for 1.0mm thickness

Wall height	Bracing capacity (kN) for bracing length (m)									
(m)	1.8	1.9	2	2.1	2.2	2.3	2.4	2.5	2.6	2.7
2.7	4.0	4.2	4.4	4.6	4.8	5.1	5.3	5.5	5.7	5.9

The minimum recommended Wilmaplex bracing size is 30x0.8mm, and 30x1.0mm of G300 Z275 steel, Hoop Iron, which complies with AS1684. Design Capacity is 1.5kN/m and 2.2 kN/m for the 0.8 and 1.0mm consecutively for wall heights up to 2.7m.

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