

## Technical Bulletin 33

## Glazing Safeguarding a Fall of 1 metre or more

## **Fully Framed Glazing**

Fully framed glass protecting a difference in level of 1 metre or more or is not covered in NZS 4223: Part 3:1999, Clause 310 and Table 3.7 since 31st Jan 2012.

This is because the NZBC Acceptable Solution B1/AS1 Amendment 11 has deleted this clause 310.1 and table 3.7, due to the fact that it does not comply with AS/NZS 1170. The amendment 11 is dated August 2011 and become mandatory 31st Jan 2012.

GANZ have prepared 3 new tables in August 2013 and renamed them, as follows Glazing Safeguarding a Fall of 1 Metre or More

The tables are

FF1-A Occupancy Type A

FF1-B Occupancy Type B, E, C3

FF1-C Occupancy Type C1/C2, D and C5

These tables supersede the old FF1 which was also included in the DBH Guidance on Barrier Design November 2011 as Figure 4.2

## **Full Height Partly Framed Glazing**

Full height partly framed glazing with silicone butt joints, was always outside the scope of the standard and required specific design.

GANZ have prepared a design table FH-1 in June 2010 for full height, partly framed glazing protecting a level of 1m or more based on the AS/NZS 1170 occupancy barrier loading requirements. However during the development of the DBH Barriers Design Guide some clarity was provided on the application of the AS/NZS 1170 loads and as a result the FH-1 has been modified and new table FH-2 added for applications without the line loads.

It was generally accepted that external curtain wall facades could have glass that complies with NZS 4223:Part 3:1999, Table 3.7, or thicker due to high wind loading, to provide adequate protection. However, this table was established before the new AS/NZS 1170 and B1/VM1 barrier requirements. So the new FH-2 can be used in these situations.

In some internal situations such as mezzanine floors, designers and glaziers have used the internal partition Table 3.4, due to lack of guidance and yet this is inadequate as it is only based on a 0.45 kPa ULS design pressure. The shop front Table 3.5 is more adequate as it uses 1.1 kPa ULS as a design pressure, but this is still below the requirements of AS/NZS 1170 for some situations and does not deal with the line load or point loads. Therefore table FH-1 was developed for these situations, but in some cases if the line loads are not required FH-2 can be used.

These tables are also included in the DBH Guidance on Barrier Design November 2011 as Figure 4.1A and 4.1B.