



Veranda beam fixings



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ASPECTS OF NZS 3604:2011 *TIMBER-FRAMED BUILDINGS* ARE CAUSING SOME CONFUSION. HERE, WE ANSWER SOME QUESTIONS ON VERANDA BEAM FIXINGS.

SEVERAL CALLERS to BRANZ have pointed out an apparent conflict between the requirements for veranda beam connections (NZS 3604:2011 Table 10.8) and the post top connection (Table 9.2).

Function to resist uplift

Before answering this question, it helps to remember the function of these posts – apart from the obvious one of supporting the roof beams.

During strong winds, the uplift on a veranda or carport roof can be considerable, with wind pressure on the underside and suction on the top. The beam connection, post and concrete foundation all provide resistance to this uplift. As always, the strength depends on the weakest link.

Apparent conflict

For simplicity, Table 10.8 *Veranda beams* provides fixings for all wind zones. It was developed using

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extra high, the most severe load, so fixings in other wind zones will be conservative.

Table 9.2 *Post connections* provides fixings for each wind zone. In many situations, the fixing – or its capacity – will be much lower than for the equivalent area in the more conservative Table 10.8.

This explains most of the discrepancies, but there is more to it. Section 9 *Posts* is intended to

cover attached carports of various configurations, and Table 10.8 *Veranda beams* applies to the more limited case of a comparatively long narrow open roof, so was developed using slightly different parameters for wind loading.

Continuous spans

Another question arises with the veranda beam table – what to do where Note (2) requires a fixing of double the capacity for continuous veranda beam spans over two or more posts?

It's a case of selecting another fixing of double the capacity required by the table. Where the available generic fixing is still insufficient – for example, in a very large veranda with very heavy beams – SED must be used, and this may include bigger bolts or more of them. A better solution may be to reduce the beam spans and add more posts. ◀