



Verandah/Carport Attachment Fact Sheet

OVERVIEW

The attachment of verandahs/carports particularly large span gable type structures to existing houses can create serious structural damage as a result of over loading existing structural members.

To assist with the design and assessment of such verandahs/carports a “benchmark” has been set on the maximum span of attached verandahs/carports before engineering may become a requirement.

BENCHMARK AND ENGINEERING

This benchmark is a maximum attached verandah/carport span of 4.2 metres. This benchmark has considered the design loads that can be catered for by local plating, bolting and stiffening of existing roof members. Any attached structure exceeding this span may require engineering designs to be undertaken for the attachment method. This engineering will need to confirm the suitability of the design method of attachment and the ability of the existing structure to support the proposed structure.

ASSESSMENT CRITERIA

In assessing these types of structures Council’s Building Surveyor will need to consider the following matters

- Details of the structure in the existing roof (timber trusses, steel trusses or conventional timber construction) whether it is a sheet of tiled roof, the size of the existing eaves overhang and the location of valleys and hips. (Hips and valleys restrict the location of Rafter Strengthening Brackets (RSB’s)).
- Details of the location and width of each opening in the wall over which the RSBs will be located and details of the exact location of RSB’s in relation to openings in the wall and existing roof members. If any RSBs are proposed to be installed above any existing openings it will be necessary for the size and details of the lintels to be provided to determine if the lintel can support the additional roof loads imposed by the attached verandah/carport. It is usually necessary for a structural pitching plate beam to be used to transfer loads from the verandah/carport to the existing structure in suitable locations.
- Existing rafters will require strengthening with a local stiffener being a minimum of 90x45 MGP10, fixed with M12 bolts at 300mm centres from the fascia up to past the first web/top chord intersection to strengthen the existing rafter or truss, plus a steel bracket to support the fascia at 1200mm max centres. Stiffeners are required to be doubled, either side of openings greater than 1200mm in span. Steel frame manufacturers may also have a similar stiffening system using channels.
- If there are openings (doors and windows) greater than 2.7m in a wall to be used to support an attached verandah/carport structure an independent engineer’s assessment may be required.
- A verandah/carport pitching beam may be required along the existing fascia side which must be a continuous beam and if timber be a minimum of 190x35. This beam will transfer loads from the attached frame structure via the beam to the RSB’s. A pitching beam is important to spread load

between stiffeners, and helps transfer loads around lintels, and may help with hip and valley connections due to ability to cantilever approximately 1200mm (up to 4.2 spans).

- Details of any additional tie downs to be placed to resist wind uplift.
- Details of the additional stormwater drainage proposed for the existing gutter required to drain the new roof.
- It may be necessary to provide additional support posts to support the structure.
- Collar ties for timber structures must be bolted with a minimum of 2/M12 bolts at each connection.

Engineers design details confirming that the verandah/carport attachment will not overload the existing roof and wall frame will be required where it is not clearly shown that the existing roof and design attachment will not overload the existing structure.

When lodging a development application, providing all of the above information clearly showing the structural support provided as well as standard information for verandahs/carports (refer verandah and carport checklists) will greatly assist with the assessment process and reduce delays.

PLEASE NOTE

The information provided in this Fact Sheet is only intended to be a summary. All applications are considered on their individual merits and therefore situations may vary.

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Further information

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