Question
What are the recommended methods for bracing attic trusses?

Considerations
- NHBC Standards Appendix 7.2-D refers only to the pattern of bracing for standard roof trusses.
- Standard bracing when applied to attic trusses can interrupt the fixing of thermal insulation and ceiling boards.

Answer
Longitudinal bracing
Longitudinal bracing is required, as shown in diagram A overleaf, at the seven number node points formed at the junction of:

a) The floor tie with the two vertical members.
b) The rafters with the two vertical members.
c) The top ceiling cord with the rafters.
d) The ridge node point.

Diagonal bracing
Diagonal bracing is also required at each gable end at approximately 45° on plan and at intervals along the roof to ensure each truss is braced. It is fixed to the underside of the rafters in the usual manner, as shown in diagram B overleaf.

Where diagonal bracing passes through the room space, ceiling boards can be fixed over the diagonal bracing onto battens fixed to the rafters on each side of the bracing.

Where the diagonal bracing passes through the room space and needs to be interrupted to allow boarding to be fixed without battening out the rafters, alternative bracing should be provided in accordance with the manufacturer’s instructions.

In the absence of manufacturer’s instructions either of the following solutions may be used:
- Continuous internal 9 mm plywood sheathing minimum 900 mm width, as shown in diagram A overleaf, face fixed to underside of rafters for the full length of the roof, or
- Diaphragm bracing closely fitted between the rafters as shown in diagrams B & C overleaf. The bracing should be 9 mm plywood, at least 1200 mm long.
Continuous 9mm plywood sheathing fixed to underside of rafters

Diagram A

Diagram B

Diagram C

Diaphragm bracing – 9mm plywood nailed to 50 x 50mm frame

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