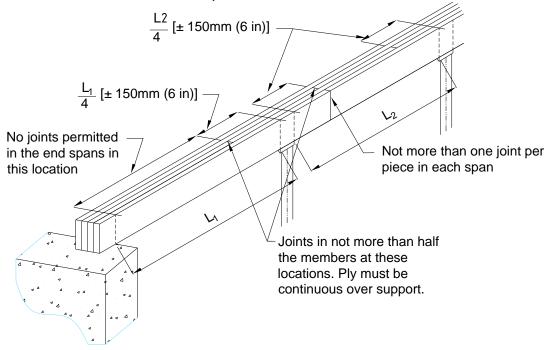


## **BUILT-UP WOOD BEAMS**

## 9.23.8. Built-up Wood Beams

- 1. Where a beam is made up of individual pieces of lumber that are nailed together, the individual members shall be 38 mm (1½ in) or greater in thickness and installed on edge.
- 2. Except as permitted in Sentence (3), where individual members of a built-up beam are butted together to form a joint, the joint shall occur over a support.
- 3. Where a beam is continuous over more than one span, individual members are permitted to be butted together to form a joint at or within 150 mm (6 in) of the end quarter points of the clear spans, provided the quarter points are not those closest to the ends of the beam.
- 4. Members joined at quarter points shall be continuous over adjacent supports.
- 5. Joints in individual members of a beam that are located at or near the end quarter points shall not occur in adjacent members at the same quarter point and shall not reduce the effective beam width by more than half.
- 6. Not more than one butt joint shall occur in any individual member of a built-up beam within any one span.
- 7. Except as provided in Sentence (8), where 38 mm (1½ in) members are laid on edge to form a built-up beam, individual members shall be nailed together with a double row of nails not less than 89 mm (3½ in) in length, spaced not more than 450 mm (18 in) apart in each row with the end nails located 100 mm (4 in) to 150 mm (6 in) from the end of each piece.
- 8. Where 38 mm (1½ in) members in built-up wood beams are not nailed together as provided in sentence (7), they shall be bolted together with not less than 12.7 mm (½ in) diameter bolts equipped with washers and spaced not more than 1.2 m (48 in) o.c., with the end bolts located not more than 600 mm (24 in) from the ends of the beam.

Figure 1 – Joint locations in built-up beams



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