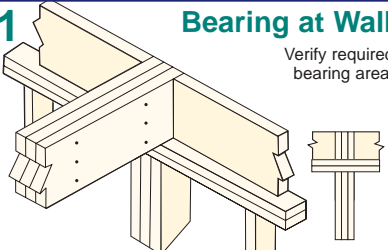


Bearing Information

1 **Bearing at Wall**
Verify required bearing area.

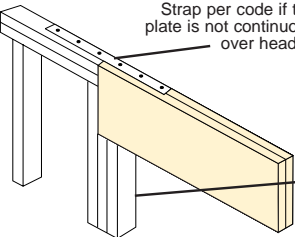


The diagram shows a wooden beam resting on a wall. A cross-section inset shows the beam's profile and the wall's surface.

2 **Bearing for Door or Window Header**

Strap per code if top plate is not continuous over header.

Trimmers. See page 10 item #5, and following tables for minimum number of trimmers.



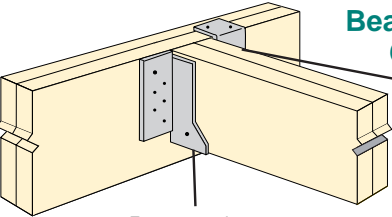
The diagram illustrates a header supported by trimmers. A strap is shown running over the top of the header.



3 **Beam to Beam Connection**

Top flange hanger

Face mount hanger

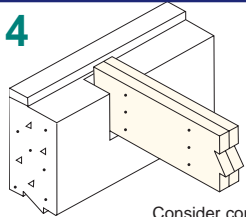


The diagram shows two wooden beams connected using a top flange hanger and a face mount hanger.

4 **Bearing at Concrete Wall**

Protect wood from direct contact with concrete per code requirements.

Consider concrete and masonry connectors for this type of application.



The diagram shows a wooden beam resting on a concrete wall, with a connector used to secure the beam.

Bearing Information Continued

5 **Bearing at Wood or Steel Column**
Verify required bearing area.

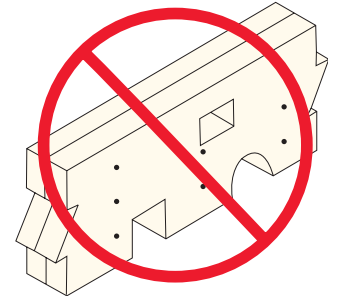
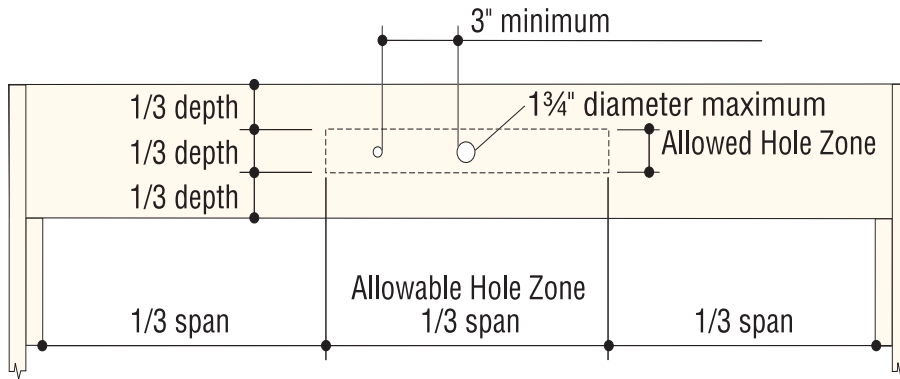
6 **Connection of Multiple Pieces of Top-Loaded Beams**

- * Minimum of 2 rows 16d (3 1/2") nail 12" o.c.
- * Minimum of 3 rows 16d (3 1/2") nails at 12" o.c. for 14", 16" and 18" beams.
- * Multiple pieces of Master Plank can be nailed or bolted together to form a header or beam of the required size, up to a maximum width of 7".

For side-loaded multiple member beams, see table below.



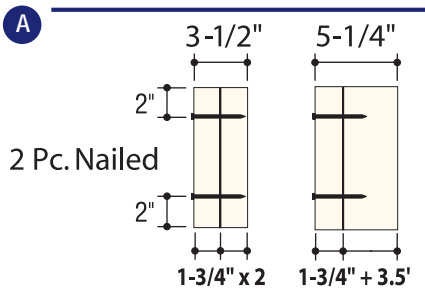
Allowable Holes for Uniformly Loaded Beams



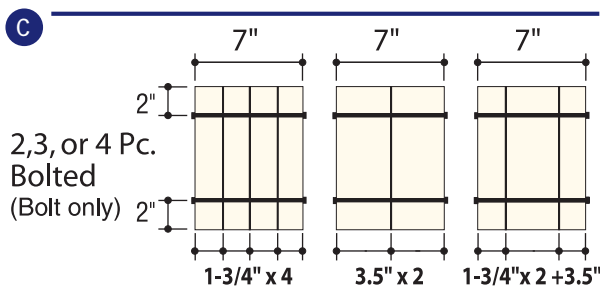
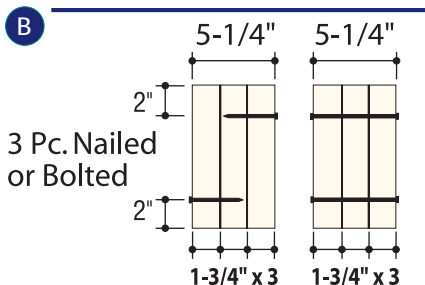
Cutting, notching or drilling holes are NOT allowed, except as noted.

1. This hole chart is for typical beam applications only, and covers uniform loads and span conditions provided in this brochure.
2. **NO** square holes are allowed.
3. For other hole configurations, contact your design professional or supplier for assistance.

Multiple Member Connections for Side-Loaded Beams



MULTIPLE MEMBER ASSEMBLY (See diagram)	MAXIMUM UNIFORM LOAD APPLIED TO EITHER OUTSIDE MEMBER (LBS. PER LINEAL FT.)					
	2-rows 16-d (3-1/2") Common Wire @ 12" o.c. or equivalent screws	3-rows 16-d (3-1/2") Common Wire @ 12" o.c. or equivalent screws	2-rows gun nails .131 dia. x 3-1/4" @ 12" o.c.	3-rows gun nails .131 dia. x 3-1/4" @ 12" o.c.	2-rows 1/2" bolts @ 24" o.c. or equivalent screws	2-rows 1/2" bolts @ 12" o.c. or equivalent screws
A	360	540	285	425	400	750
B	360	540	285	425	400	750
C					400	750



1. Specific gravity for nail and bolt design is 0.44.
2. For 2 rows - 16-d nails @ 8" o.c. use 540 plf, 6" o.c. use 720 plf and 4" o.c. use 1080 plf. For 3 rows - 16-d nails @ 8" o.c. use 810 plf, 6" o.c. use 1080 plf and 4" o.c. use 1620 plf.
3. For 2 rows - .131" dia. gun nails @ 8" o.c. use 428 plf, 6" o.c. use 570 plf and 4" o.c. use 855 plf. For 3-rows .131" dia. gun nails @ 8" o.c. use 638 plf, 6" o.c. use 850 plf and 4" o.c. use 1275 plf.
4. For 1/2" bolts spaced 8" o.c. use 1125 plf, 6" o.c. use 1500 plf and for 4" o.c. use 2250 plf.
5. The beam must be sized to carry the applied load, the connection can then be checked for adequacy.
6. For 3 piece members, nailing is specified for both sides.
7. Values listed are for 100% duration. Increase 15% for snow loaded roof conditions and 25% for non-snow loaded roof conditions.
8. All nail and bolting requirements use the 2001 edition of the NDS® as a guideline. NDS® does not purely apply to this connection problem. Bolt design assumes a worst case "mode I" single or double shear failure. Nail design assumes a worst case "mode III" failure.
9. For beams greater than 7" wide see a design professional for the bolting and loading requirements.
10. Screws can be used in place of bolts as long as the screw capacity is identical or greater than the 1/2" bolt capacity. See screw manufacture literature.