

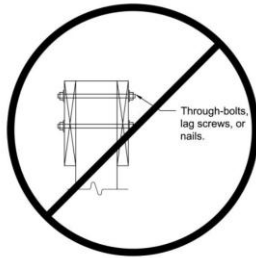
Beams Posts By Finn Home Inspections

Beam support must bear on the columns, not depend on nails or bolts to bear the load. With just fasteners, nails or bolts, all the load is on the fasteners which have much less capacity to transfer load. Also, with exterior applications like on decks, the wood is pressure treated and gets wet, so the fasteners corrode and become much weaker. Much of the corrosion is in areas that you cannot even see.

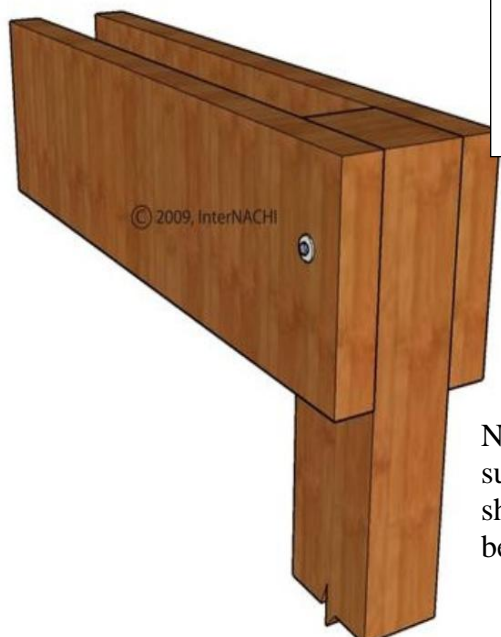
Below see figures on how to improperly and how to properly support a beam.

When the column is about same width as the beam metal brackets are recommended as seen in the lower diagrams below. For existing structures steel brackets are made to secure the beam to the posts, bottom right figure.

Figure 9. Prohibited Post-to-Beam Condition.



Through-bolts, lag screws, or nails.

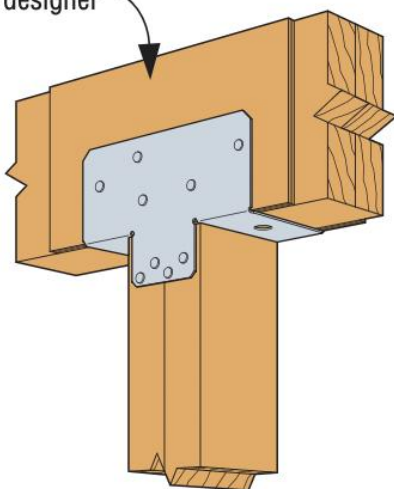


Not proper, fasteners supporting, and beam should not have space between members

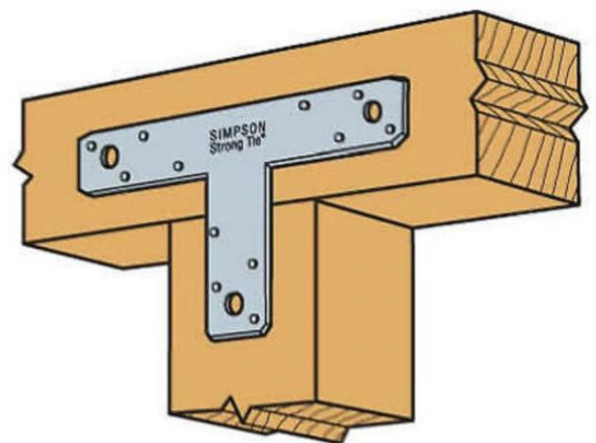


Proper practice, beam bears on column

Shim by designer



Bracket used for initial construction build



Bracket to secure existing structural connection