

Quick Reference Guide

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Chapter 1 - Installing Laminate Beam

Beam Preparation	<ol style="list-style-type: none">1. Refer to House Plan and mark beam location on concrete foundation wall2. Remove any protective cover on beam and check for "UP" designation3. Determine required length of beam<ol style="list-style-type: none">a. Measure from back edge of beam pockets – TWICE!b. Subtract 1" from measured lengthc. Mark beam at that length and score both faces of beam ¼" deep with circular saw
Move Beam to Pockets	<ol style="list-style-type: none">4. Attach a temporary 2x4 (long enough to extend at least 6" past outside edge of foundation) to middle of beam with 16d duplex nails5. Carefully move beam to the pockets<ol style="list-style-type: none">a. Assign person to hold end of 2x4 and stabilize beam during beam setb. Position beam along a long wall so both ends of the beam rest on the short wall foundations (or sill plates, if present)c. Carefully jockey the ends of the beam to slide the beam toward the pocketsd. Slowly position the scored end over its pockete. Carefully move beam until unscored end drops into its pocket6. Cut beam to length<ol style="list-style-type: none">a. Elevate scored end of beam 6-12" with pieces of scrap 2x4 on ladder on floorb. Trim beam with reciprocating saw using score marks as guidec. Carefully remove pieces of 2x4 scrap, one piece at a time, to lower beam into pocket
Complete Beam Installation	<ol style="list-style-type: none">7. Position beam with ½" gap between end of beam and back of pocket8. Align beam with marks on concrete wall9. Stabilize beam by nailing the long 2x4 from Step 4 to sill plate (or drill hole and attach to foundation bolt)10. Raise beam to be flush with top of sill plates using steel shims11. Cut scrap treated lumber, wedge between beam and concrete side of pocket. Secure permanently12. Refer to House Plan and attach support posts to underside of beam with 1½" lag bolts and washers<ol style="list-style-type: none">a. Position plate to be flush with <u>finished side</u> of basementb. Set bottom of posts on concrete pad and roughly plumb.<ol style="list-style-type: none">i. Do not anchor at this timeii. REQUIREMENT: Threaded adjustment screw/plate must be on the concrete pad
Straighten and Secure Beam	<ol style="list-style-type: none">13. Cut a piece of 2x4 into three pieces; nail one to underside of beam on each end.14. Stretch a string line from ends of beam, under blocks, directly <u>under one edge of beam</u>15. If beam is bowed, nail additional 2x4 braces—between joist locations, 2" from outside edge of sill plate. Adjust until beam is straight16. Using gauge block between string and beam, adjust posts until beam is straight17. Plumb posts, check for straight/level, anchor to concrete w/Remington—4 short nails per post18. As supporting I-joists are installed check for crown and adjust beam as needed until each I-joist is straight along the top edge19. Remove adjustment pins from support posts20. Leave string from Step 14 in place to confirm beam location during I-joist installation

Quality Points

Chapter 1 – Installing One-Piece Laminate Beam

- Verify Beam is in correct location (according to house plan) and correct orientation (top edge is up)
- Top of beam is even with top of sill plates at each end
- Beam is perpendicular to top of foundation and tightly, permanently wedged in place
- All required support posts:
 - are installed threaded side down, in proper location (according to House Plan) and flush to finished side of beam
 - Are secured to underside of beam with 1½” Lag bolts and washers
 - Are secured to support pad with a minimum of 4 concrete nails
 - Are plumbed in 2 directions and all posts are in alignment
- Beam has been straightened side to side and along top edge (using string and any supporting I-joists installed)
- Each supporting I-joist is nailed to sill plates at both ends and to beam, one nail on each side of I-joist at each location