

## Quick Reference Guide

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### Chapter 2 - Installing I-joists & Sill Box

Preparation	<ol style="list-style-type: none"> <li>1. Check Manufacturer's Layout Plan             <ol style="list-style-type: none"> <li>a. Verify all materials are present and in stated dimensions</li> <li>b. Note areas where specific dimensions required</li> </ol> </li> <li>2. Measure thickness of rim boards (should be 1½")             <ol style="list-style-type: none"> <li>a. Mark thickness on all four corners of sill plates</li> <li>b. Snap chalk lines around outside perimeter of sill plates</li> <li>c. Check lines for straightness</li> </ol> </li> </ol>
Layout & Install I-Joists	<ol style="list-style-type: none"> <li>3. Starting at zero corner, hook tape on the exterior edge of sill plate and layout joist spacing on 19.2" centers (diamond mark on tape) on both long wall sill plates <u>and on lam-beam</u> <ol style="list-style-type: none"> <li>a. Use joist layout jig to mark the two sides of the I-joist and mark "X" between side marks</li> </ol> </li> <li>4. To install an I-joist             <ol style="list-style-type: none"> <li>a. Verify one end is square. If not, square up one end.</li> <li>b. Set the joist on a joist location mark with one end on the blue chalk line on the zero wall.</li> <li>c. Mark the opposite end at the chalk line.</li> <li>d. Cut the joist at that mark using joist-cutting template.</li> </ol> </li> <li>5. Check the joist for crown and install crown up with 3¼" Paslode nails.             <ol style="list-style-type: none"> <li>a. Nail 2" from end on each side of joist.</li> <li>b. Nail on each side into lam beam.                 <p><b>NOTE:</b> Do not hand nail with 16d nails which may split the flange.</p> </li> </ol> </li> <li>6. To allow concrete crew access to the basement             <ol style="list-style-type: none"> <li>a. Install I-joists at both ends of foundation, near each support post, and a few in the middle (especially if it supports rim board at porch locations).</li> <li>b. Cut, and stack remaining joists next to installed joists</li> </ol> </li> </ol>
Layout & Install End Blocking	<ol style="list-style-type: none"> <li>7. Beginning at zero corner, layout end block locations 32" o.c. on the short walls from <u>OUTSIDE</u> edge of <u>long wall</u> sill plate.</li> <li>8. At the opposite end:             <ol style="list-style-type: none"> <li>a. If the spacing places the last end block &lt; 32" from the outside edge of the <u>long wall</u> sill plate                 <ol style="list-style-type: none"> <li>i. Install the last end block half way between the next-to-last block and the outside edge of sill plate</li> <li>ii. Repeat this process on the other short wall plate.</li> </ol> </li> </ol> </li> <li>9. Measure distance from rim board chalk line to the first I-joist at several locations along the wall.             <ol style="list-style-type: none"> <li>a. Cut <u>scrap</u> pieces of I-joists to this length</li> <li>b. Set block on chalk line and nail to plate with one 3¼" Paslode nails on each side, 2" from end</li> <li>c. Square the block and nail thru rim board into flanges with 2¾" Paslode nails—one top, one bottom</li> <li>d. Flush top of blocking with top of I-joist, square and toenail through joist into block flange with 8d nails—one top and one bottom. Use long clamp to help if required.</li> </ol> </li> </ol>
Install Rim Boards	<ol style="list-style-type: none"> <li>10. Measure width of rim board and rip if higher than the I-joists. Must be = or +½" max</li> <li>11. Check rim boards for crown and set with crown up. Lay bead of caulk on sill plate and between rim boards, set rim board on the plate, nail to the I-joists' top and bottom flanges with 2¾" Paslode nails. Do NOT join two boards at an I-joist</li> <li>12. Toenail rim board to sill plate at 6" intervals with 2¾" Paslode nails.</li> <li>13. Mark the location of end blocking on the outside of the rim board with black marker to later aid nailing bottom wall plates to the blocking.</li> <li>14. Cover any rim board behind porch areas with house wrap and 1" foamboard 10½" wide, flush with top of rim board, and extending 6-12" beyond the edge of the porch.</li> <li>15. If foundation poly extends above the 2" foundation foamboard pull up and staple to rim board before covering with with foamboard</li> </ol>

## Quality Points

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- All I-joists are nailed to sill plates and beam
- All I-joists blocking are installed, squared to long I-joist both horizontally and vertically and secured to long I-joist and rim board
- Rim board:
  - is no more than  $\frac{1}{8}$ " higher than I-joists
  - is caulked at sill plate and at all joints
  - joints do not fall on an I-joist
  - is nailed to each I-joist at top and bottom flanges
  - is toe nailed every 6" into sill plates
  - along each wall is straight (adjust/shim as needed)
  - is covered with house wrap and foamboard behind each porch/stoop