

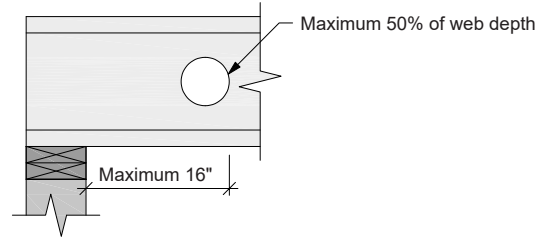
Nordic Joist Repair Detail for Web Holes Close to Bearing

This technical note provides a repair detail for non-conforming web holes close to bearings in Nordic I-joists.

This repair shall be used for an occasional damaged I-joist in a floor or roof system. Where multiple adjacent I-joists are damaged, suitability of this detail must be validated by a professional.

This technical note only applies if the following assumptions are met:

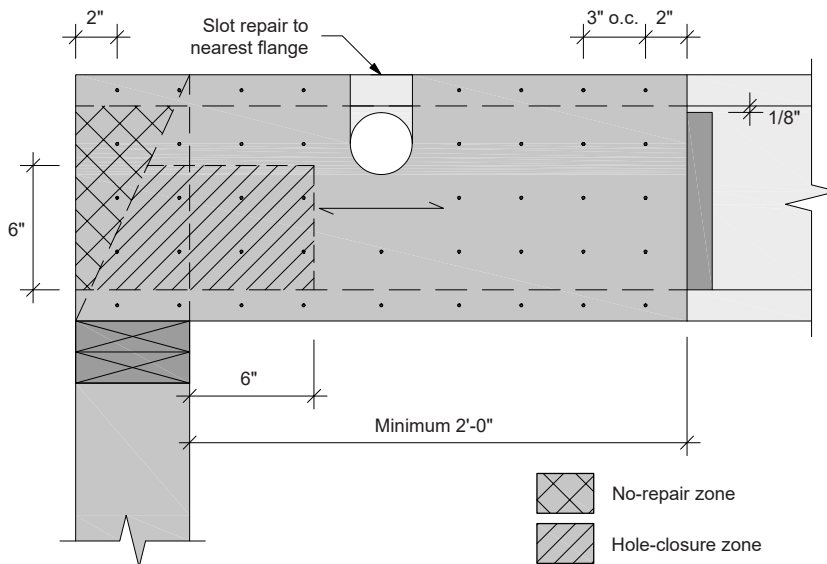
1. The I-joist supports uniform loads only.
2. The I-joist top and bottom flanges are not damaged.
3. The web hole diameter does not exceed 50% of the I-joist web depth.
4. The web hole is contained within 16 inches from the inside face of the support.



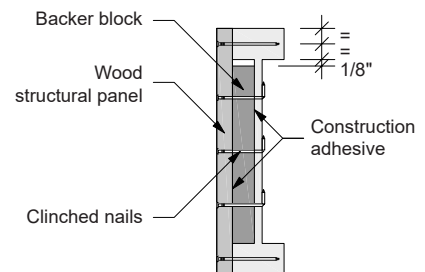
Repair detail requirements:

- Conditions:
 - No-repair zone: web holes contained within the no-repair zone illustrated below can be ignored.
 - Hole-closure zone: web holes intersecting the hole-closure zone illustrated below must be relocated outside the repair area.
 - Other: web holes located elsewhere in the repair area can remain in place with the condition that the reinforcement is cut tight around them.
- Reinforcement:
 - Reinforcement shall extend a minimum of 2 feet from the inside face of the support and be installed on one side of the joist. Install with face grain horizontal, matching the joist depth.
 - Use a wood structural panel with a minimum thickness of 23/32 inch (for OSB, panel mark 48/24).
- Backer block:
 - Install leaving a 1/8-inch gap between the top of the backer block and the bottom of the top flange.
 - Use a wood structural panel or solid sawn lumber S-P-F No. 2 or better.
- Fasteners:
 - For 2x3 flanges, use 5 horizontal rows of 3-inch common nails at 3 inches o.c. (clinched when possible).
 - For 2x4 flanges, use 5 horizontal rows of 3-1/2-inch common nails at 3 inches o.c. (clinched when possible).
 - One horizontal row of nails shall be centred on each flange; evenly space the remaining rows.
- Construction adhesive must be applied to all surfaces in contact.

For configurations beyond the scope of this technical note, refer to Construction Details ([NS-DC3](#)) or contact our technical support (tech@nordic.ca).



Elevation view of a repaired I-joist



Section view of a repaired I-joist