Infilling Openings in Nordic X-Lam Floor Slabs

This technical note provides guidelines for infilling openings in Nordic X-Lam floor slabs. The following steps are only applicable to non-structural repairs of openings with 450 mm (18 inches) maximum width. Structural repairs or infilling of larger openings must be approved by a qualified engineer. For other applications, please consult Nordic Structures.

**Step 1. Routing and infilling**
- Rout a 19 mm (3/4 inch) deep x 80 mm (3-1/4 inches) wide notch around the opening, on the topside of the panel;
- If fire resistance is required, apply fire caulking around the opening;
- Add a 19 mm (3/4 inch) plywood over the panel, spanning in the short direction, with an overlap of at least 75 mm (3 inches) on each side;
- Use nails or screws to fasten the plywood.

**Step 2. Fire resistance, as required**
- Apply fire caulking on all edges of opening;
- Fill the opening below the plywood with a piece of Nordic X-Lam or Nordic Lam, ensuring that gaps are filled with fire caulking;
- Use #8 x 51 mm (2 inches) wood screws or larger to attach the piece, minimum 10 screws / m² (1 screw / ft²).

**Step 3. Architectural finish, as required**
- Rout a 19 mm (3/4 inch) deep notch around the opening, on the underside of the panel;
- Add 19 x 89 mm (3/4 x 3-1/2 inches) Spruce-Pine-Fir planks (kiln-dried to a moisture content of 15%), following the pattern of the laminations;
- Use structural adhesive and finishing nails to attach the planks.