LP NOVACORE® THERMAL INSULATED SHEATHING INSTALLATION INSTRUCTIONS

GENERAL:

- Prior to installation, ensure design compliance with all applicable state and local codes and other requirements, including, where applicable, those of your local building department.
- Install in accordance with the requirements of the IRC or the IBC and all state and local codes, as modified by these instructions.
- Refer to https://lpcorp.com/products/panels-sheathing/insulated-sheathing for additional product information.
- Exercise safe practices at all times while handling the product. Wear gloves and protective eye/face equipment and clothing. Wear respiratory protection to avoid breathing or ingesting dust, mist, or fumes. Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Cut, saw, or use this product in a well-ventilated space or outdoors. Dispose of this product responsibly. Do not burn this product.
- Refer to the LP NovaCore Safety Data Sheet (SDS) for important information on the safe handling and use of this product. These can be found at LPCorp.com.
- LP NovaCore Thermal Insulated Sheathing is available in three R-values. See Table A on the last page for product descriptions.
- LP NovaCore panels are approved **only** for installation on walls and have been evaluated for compliance with the 2021, 2018, 2015 and 2012 International Residential Code (IRC) and the International Building Code (IBC) as follows:
  - As an alternative to the wood structural panel (WSP) method for the intermittent braced wall provisions of Section R602.10 of the IRC and Section 2308.6 of the 2021, 2018 and 2015 IBC, and Section 2308.3 of the 2012 IBC. Refer to APA Product Report® PR-N139 for additional information.
  - As shear wall in accordance with the provisions of Section 2305 of the IBC. Refer to APA Product Report PR-N139 for shear wall design information.

  NOTE: Segments of a wall with openings **DO NOT** count as the length of braced wall or as shear wall.

  CAUTION: To account for the overall thickness of the panels, additional framing may be needed at corners where intersecting panels overlap. Wall stud spacing may also need to be adjusted to meet the minimum braced wall panel length requirements in Section R602.10.5 of the IRC or Section 2308.6.4 of the 2021, 2018 and 2015 IBC, and Section 2308.3 of the 2012 IBC (typically at least 48″ in length). See Table A for nominal panel thickness.
- All mechanical strapping or connectors (e.g., to resist uplift) must be installed directly to the wall framing before installing the LP NovaCore panels.
- An approved thermal barrier, such as a minimum of 1/2 in. gypsum wallboard, must be installed on the interior side of the wall framing, opposite the LP NovaCore panels, in accordance with Section R316.4 of the IRC or Section 2603.4 of the IBC.
- **DO NOT allow foam insulation in contact with flame or heat sources over 165° F.**
- LP NovaCore panels must be covered by an approved water-resistive barrier.
- Use of an interior vapor retarder with LP NovaCore panels shall be in accordance with the continuous foam insulation provisions of Section R702.7 of the IRC or Section 1404.3 of the 2021 and 2018 IBC, and Section 1405.3 of the 2015 and 2012 IBC.
- The OSB substrate of LP NovaCore panels is **NOT** preservative-treated and must be installed in accordance with local code for untreated wood structural panel wall sheathing. The OSB must not be in direct contact with concrete or masonry foundations. In the absence of approved project specifications:
  - When the OSB is located above the foundation (wall framing set back from face of foundation), provide a minimum 1/2 in. gap between the bottom edge of the panel and the foundation.
  - When the OSB extends along the outside of the foundation, provide an air gap behind the OSB or protect it from direct contact with the foundation with flashing or other impervious material
  - Always maintain code-required clearance above grade.
- Termites: LP NovaCore panels are **NOT** treated for protection against termites. Follow all code requirements for protection of wood structural panels and foam insulation. Refer to Sections R316.7 and R318 of the IRC, and Sections 2304.12 and 2603.8 of the 2021, 2018 and 2015 IBC, and Sections 2304.11 and 2603.9 of the 2012 IBC.
- LP NovaCore panels can be cut with standard woodworking tools. Note: It can be easier to cut the panels from the OSB side.
- Exercise safe practices at all times while handling and using this product.

STORAGE & HANDLING:

- Store LP NovaCore panels indoors off the ground and well supported on a flat surface. **DO NOT** stack higher than three units. Space stacks a minimum of 6 in. on all sides.
- Use a minimum of 3 stickers spaced evenly under each unit. Stickers shall be a minimum 2-1/2 in. wide (i.e., a flat 2x3). Ensure stickers are aligned vertically when stacking units.
- If stored outside, the foam must be protected from extended UV exposure. Cover only with opaque white covers or the LP NovaCore Thermal Insulated Sheathing unit cover. **DO NOT** use non-white or non-opaque covers as these can build up excess heat or expose the foam to UV. Keep cover open and away from the sides and bottom of panels to allow for air circulation.
- Be careful not to drop on corners or crush the edges of the OSB or the foam insulation. Keep panels well-supported and neatly stacked to prevent warping. Use caution to avoid damage to the foam.
- Inspect panels prior to installation. **DO NOT** use damaged panels unless the undamaged portion can be salvaged for fill-in pieces.

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WALL INSTALLATION:

- In addition to the nailing requirements stated in these instructions for braced wall panels and shear wall design, the fastener type, size and spacing must meet all code requirements to resist out-of-plane wind loads and to support the weight of the finished wall cladding.
- LP NovaCore panels must be installed with the foam direct to the studs, with the OSB to the outside.
- Wall studs must be minimum 2x4 framing lumber, spaced no more than 24 in. oc.
- The panels may be installed vertically or horizontally. In horizontal installations, stagger joints a minimum of one stud space.
- **ALL PANEL EDGES MUST BE BACKED BY FRAMING OR 2X BLOCKING**
  - Exception: horizontal edges may be left unblocked when not used as a braced wall or shear wall panels.
- Provide 1/8 in. space between all panel ends and edges of the OSB substrate. Use a spacer tool (e.g., a 10d box nail) to ensure accurate and consistent spacing.
- Install nail heads flush to the OSB. **DO NOT** overdrive the nails. Reduce pressure if needed to avoid overdriving or breaking the corners of the OSB.
  - In case of a broken corner, add a nail 1 in. away from the break along both adjoining edges of the panel.
- Drive nails 3/8 in. from all supported ends and edges of the OSB substrate.
  - Exception: To ensure nailing to the studs at outside corners, the nails on one or both panels will be set back more than 3/8 in. from the panel edge to account for the thickness of the adjoining panel, depending on the overlap detail used (see Figure 1).
- Nails must be a minimum 0.131 in. diameter shank x 0.281 in. diameter full round head, framing nails.
  - Nails must penetrate at least 1-1/2 in. into the wall framing. See Table A for minimum nail length required based on LP NovaCore nominal panel thickness.
  - Offset round head nails of equivalent or larger size may be used provided the nails are included in ICC-ES Evaluation Report ESR-1539 and meet the Head Area Ratio (HAR) requirements of a nail having a shank diameter of at least 0.131 in.

  NOTE: There is a reduction to shear wall capacity when using offset round head nails. Refer to APA Product Report® PR-N139 for design information. There is no reduction for braced wall panels.
  - Galvanized nails of equivalent or larger size may be used
  - Stainless steel nails or other types of fasteners are outside the scope of these instructions.

  NOTE: When **NOT** used as braced wall panels or shear walls, nails with non-standard heads or other fasteners may be used as approved by the Authority Having Jurisdiction (AHJ).
- Nail spacing:
  - Panel edge nails must be spaced as follows:
    - Braced wall panels: No farther than 4 in. oc (see Table 1 of PR-N139).
    - Shear walls: 3 in. oc or 4 in. oc, depending on required shear wall capacity (see Table 2A and Table 2B of PR-N139 for full round head nails and for offset head nails, respectively).
    - When not used as braced wall panels or shear walls, panel edge nails must be spaced no farther than 6 in. oc.
  - Field nails must be spaced no farther than 12 in. oc along intermediate supports.
- Framing at corners:
  - Outside corners: Install the 1st panel to within 1/8 in. of the edge of the corner end stud. Install the 2nd panel to overlap so that the edge of the 2nd panel is flush with the outer face of the OSB from the 1st panel (See Figure 1). Alternatively, the foam of the 2nd panel may be trimmed and the 1st panel shifted to cover the foam of the 2nd panel, leave 1/8 in. gap between panels (See Figure 2). Note that nails will be approximately 2 in. from the corner depending on the detail.

Figure 1: Installing LP NovaCore panels at outside

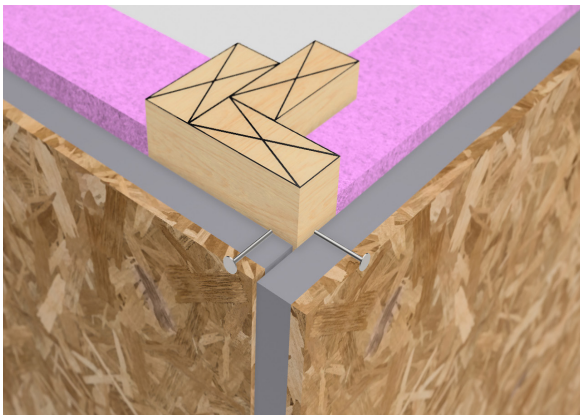
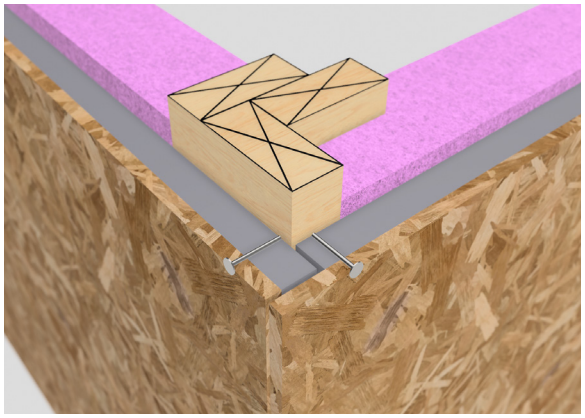


Figure 2: Installing LP NovaCore panels at outside corners alternative option.



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- Inside corners (see Figure 3): Install the 1st panel into the flat stud of the connecting wall (leave 1/8 in. gap). Install the 2nd panel from the other side to leave 1/8 in. gap with the 1st panel. Two options are shown. The details shown assume 2x4 wall framing for up to R-5 panels. Adjust as needed for 2x6 or larger wall framing, which may require a 2x8 or wider flat stud.

Figure 3: Installing LP NovaCore panels at inside corners.

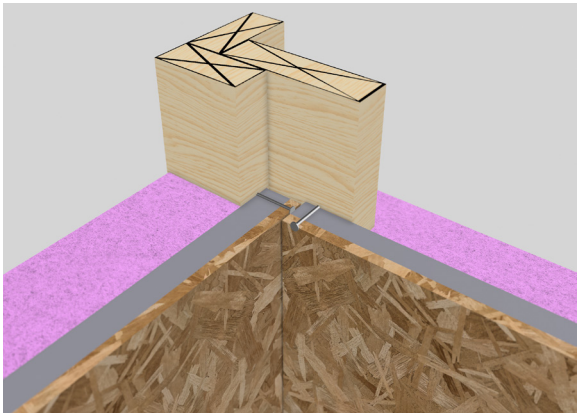

Table A: LP NovaCore Panel Descriptions

LP NovaCore Panel R-Value	XPS Foam Thickness (in.)	Nominal Panel Thickness (in.)	Minimum Nail Length (in.)
R-3	1/2	15/16	2-1/2
R-5	1	1-7/16	3
R-7.5	1-1/2	1-15/16	3-1/2

SCAN HERE FOR INSTALL INSTRUCTIONS AND PRODUCT DETAILS

SUSTAINABLE FORESTRY INITIATIVE SFI-00003

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⚠ WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.