Technical Note No. 028

LP® SmartSide®38 Series Strand Substrate Vertical Siding for Board & Batten Applications

This Technical Note provides guidance for the application of LP® SmartSide® 38 Series Strand Substrate Vertical Siding for Board & Batten Applications. Additional application information may be found in LP® SmartSide® Strand Substrate Panel Siding Application Instructions and LP® SmartSide® Trim and Fascia Application Instructions.

LP SmartSide 38 Series Strand Substrate Vertical Siding for Board & Batten applications, according to the following requirements.

- Siding must be installed over a minimum 7/16 Category wood structural panels with an APA Trademark that contains the consensus Standard DOC PS 1 or PS 2.
  - Exception: LP® FlameBlock® Fire-Rated OSB Sheathing
- Vertical Siding or Batten may only span one plate-to-plate. Due to plate shrinkage, each vertical application is not to span beyond one floor to ceiling distance, or one floor to top of gable distance. *(See Figures 4 & 5)*
- Vertical Siding SHALL NOT be installed horizontally.
- Battens must be a minimum 0.5 x 2.5 inches actual size.
- **Must be installed over a non-compressible drainable housewrap to provide drainage behind siding.**
- Finish/Paint:
  - Prime and paint all field cuts and exposed ends following the paint manufacturer’s instructions
- Vertical Siding must be spaced a minimum of 3/16 *(See Figure 3)*
- Sealant is not required in any vertical joint covered by Batten and backed by a WRB.
- Minimum Fastener Type for Vertical Siding:
  - Corrosion Resistant – Hot-dipped galvanized (ASTM A153) or stainless steel
  - Ring Shank
  - Shank diameter = 0.091 inch
  - Head diameter = 0.221 inch
  - Length = fastener shall be long enough to fully penetrate structural panel sheathing. Ensure that the ring shanks of the nail fully engage the wood structural panel wall sheathing.
    - Caution: Choose a fastener length that will not damage wiring or other utilities in the exterior wall assembly
- Fastener Placement for Vertical Siding:
  - Maximum 3/8 inch from ends and edges *(See Figure 2)*
- Fastener Spacing for Vertical Siding:
  - Fastened a maximum of 6 o.c. along the perimeter *(See Figure 2)*
- Minimum Fastener Type for Battens:
  - Corrosion Resistant – Hot-dipped galvanized (ASTM A153) or stainless steel
  - Ring Shank
    - Ring Shank nails provide superior resistance to fastener pull-through. In Hurricane-Prone Regions or locations where negative wind loads are a concern, ring Shank nails should be used.
    - Trim nails may be used in other locations with the following cautions: Do not overdrive or counter sink the fastener, nail flush with the surface of batten. Batten nails shall be installed per the length, placement, spacing and quantity requirements listed in this document. Detachment of batten is not covered by the LP SmartSide limited warranty whether ring shank or trim nails are used.
  - Shank diameter = 0.091 inch
  - Head diameter = 0.221 inch
  - Length = fastener shall be long enough to fully penetrate Vertical Siding
    - Caution: Choose a fastener length that will not damage wiring or other utilities in the exterior wall assembly
- Fastener Placement for Battens:
  - Maximum 3/8 inch from ends and edges *(See Figure 1)*
- Fastener Spacing for Battens:
  - Fastened with two nails at both ends, with additional fasteners spaced a maximum of 12 inches o.c. along alternating edges the length of the batten *(See Figure 1)*
- Do not bridge floors with Vertical Siding or Battens. Create a horizontal joint between floors. *(See Figure 4)*
- Vertical Siding must be applied in a manner that will not allow moisture intrusion or water buildup.
- Refer to LP® SmartSide® Strand Substrate Panel Siding Application Instructions and LP® SmartSide® Trim and Fascia Application Instructions for additional application information.
**LP® SmartSide® Vertical Siding**

- 3/8" max. from ends and edges
- 6" o.c. max.

**Figure 1**

**LP® SmartSide® Trim/Batten**

- 12" o.c. max.
- 3/8" max. from ends and edges

**Figure 2**
Figure 3

Trim/Batten Attachment

LP® SmartSide® Trim/Batten

LP® SmartSide® Vertical Siding min. 3/16” space

Water-Resistive Barrier

Wall Sheathing

Fastener
Two Story
One Floor to Ceiling
Horizontal Joint between Floors

One Story
One Plate-to-Plate

LP® SmartSide®
Trim/Batten

LP® SmartSide®
Vertical Siding

4” Wide Adhesive Flashing

Sloped Metal Z-flashing

Floor Sheathing

Wall Sheathing

Water-Resistive Barrier

Floor Framing

LP® SmartSide®
Vertical Siding

LP® SmartSide®
Trim/Batten

Figure 4

Figure 5