Technical Note No. 044

Installing LP® SmartSide® Lap Siding or Trim over Concrete or Masonry Walls

This Technical Note is an addendum to the LP® SmartSide® ExpertFinish®, LP® SmartSide® Strand Substrate Lap Siding Application Instructions and LP® SmartSide® Trim and Fascia Application Instructions. Refer to LP® SmartSide® Strand Substrate Lap Siding and LP® SmartSide® Trim and Fascia Application Instructions for all other product installation details.

Strand Substrate Trim and Lap siding installed over concrete or masonry walls:

- Non-Compressible Drainable Housewrap (NCDH) is required behind trim and lap siding installed over concrete or masonry walls.
    - Refer to Technical Bulletin #031 for definition of NCDH
    - Examples of available NCDH include, but not limited to:
        - Benjamin Obdyke HydroGap® Drainable Housewrap
        - TamlynWrap® Drainable Housewrap
    - Attach NCDH to concrete or masonry walls per manufacturer's instructions or minimum 3/8 inch long "stub nail"
    - Properly tape and/or seal wall penetrations in accordance with the NCDH manufacturer's instructions
- Concrete or masonry wall construction must comply with applicable national and local building codes.
- When installing trim or lap siding directly to concrete masonry units (CMU), the CMU's must comply with ASTM C 90.
- Refer to Technical Note #014 for installation of LP SmartSide trim and lap siding on concrete or masonry walls over furring strips.

Trim

- Trim Fastener Specifications:
    - Fasteners must be suitable for concrete or masonry applications as specified by the fastener manufacturer
    - Minimum shank diameter = 0.140 inch
    - Minimum length = 1.75 inches
    - Corrosion Resistant: capable of preventing rust, stain and deterioration of the fasteners under normal outdoor environmental conditions for a period of no less than 50 years

Date Created: 05/09/2018
Last Revision: 01/04/2021

ADDRESS: 414 Union Street
Nashville, TN
Suite 2000
PHONE: (615) 986-5600
WEB: www.lpcorp.com

    - A fastener with a minimum overall allowable withdrawal capacity and allowable fastener head pull-through capacity of 62 lbf/fastener or greater based on the load duration factor of 1.6
        - Commonly used concrete or masonry fasteners include, but not limited to:
            - Aerosmith® PowerPin™ 5454HPG PT2000 plating, head diameter 0.300 inch x shank diameter 0.145 inch x length 1.75 inches, smooth shank
- Trim Fastening:
    - Trim under 7 inches wide use a minimum of 2 nails per width, trim 7 to 12 inches wide use a minimum of 3 nails per width, trim over 12 inches wide use a minimum of 4 nails per width
    - Fasteners spaced a maximum of every 24 inches o.c. along the length of the trim
    - **Avoid overdriven fasteners** *(See Figure 2)*
    - Leave a 3/16 inch expansion joint at all end joints
        - Exception: trim ends may lightly touch around windows and doors

Lap Siding

- Lap Fastener Specifications:
    - Fasteners must be suitable for concrete or masonry applications as specified by the fastener manufacturer
    - Minimum shank diameter = 0.140 inch
    - Minimum length = 1.25 inches
    - Corrosion Resistant: capable of preventing rust, stain and deterioration of the fasteners under normal outdoor environmental conditions for a period of no less than 50 years
    - A fastener with a minimum overall allowable withdrawal capacity and allowable fastener head pull-through capacity of 62 lbf/fastener or greater based on the load duration factor of 1.6
        - Commonly used concrete or masonry fasteners include, but not limited to:
            - Aerosmith® PowerPin™ 5323HPG PT2000 plating, head diameter 0.300 inch x shank diameter 0.145 inch x length 1.25 inches, smooth shank
- Lap Fastening:
    - **Lap siding shall be installed with top (blind) nailing a maximum of 10 inches o.c. with the nails placed 3/8 inch from either end, a minimum of 3/4 inch from the top edge of the board**
        - Immediately below frieze boards and horizontal trim fasteners will be exposed every 10 inches o.c. on lap siding
        - Fasteners below windowsill shall be spaced a maximum of 8 inches o.c. *(See Figure 1)*

ADDRESS: 414 Union Street
Nashville, TN
Suite 2000
PHONE: (615) 986-5600
WEB: www.lpcorp.com

Date Created: 05/09/2018
Last Revision: 01/04/2021

- **Avoid overdriven fasteners** *(See Figure 2)*
- Overlap siding a minimum of 1 inch
- Leave 3/16 inch expansion joint at all end joints and field (butt) joints

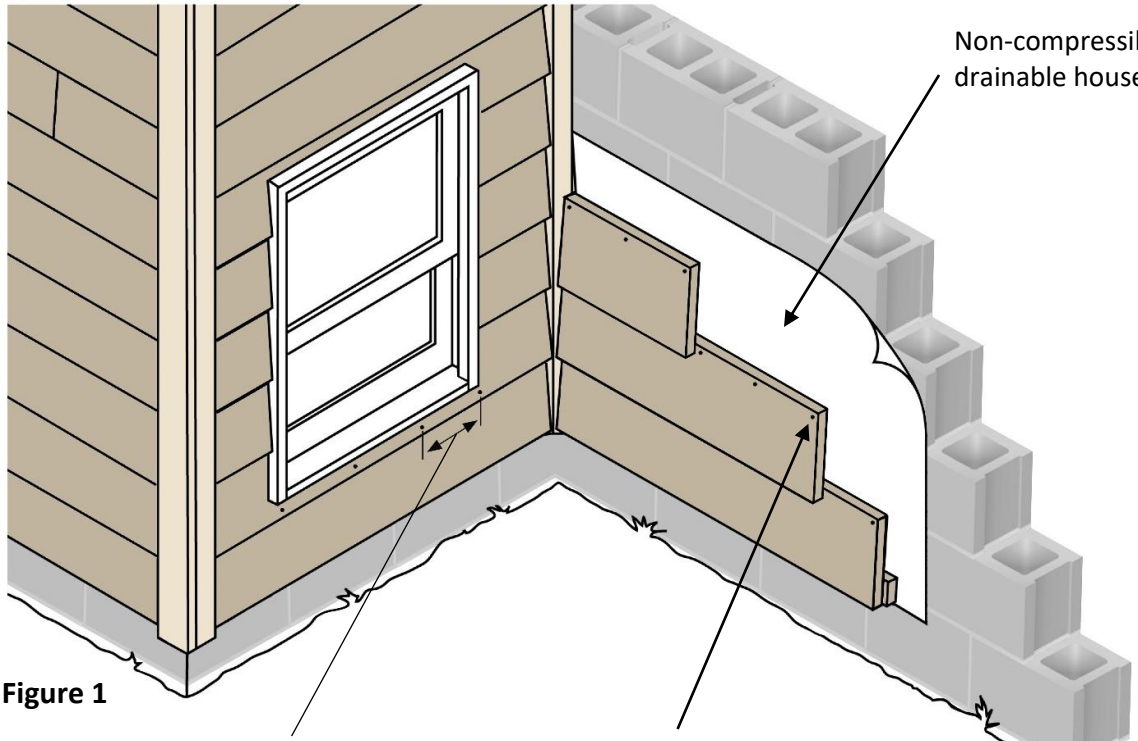

Figure 1

Nailing Schedule

- **Fasteners:** Apply and correct overdriven fasteners as shown in Figure 2.
- **Sealant:** Use an exterior-quality, non-hardening, paintable sealant.
  - Class 25 or higher exterior sealant meeting the ASTM C920 Standard Specification for Elastomeric Joint Sealants.
  - Follow the sealant manufacturer's instructions for application.

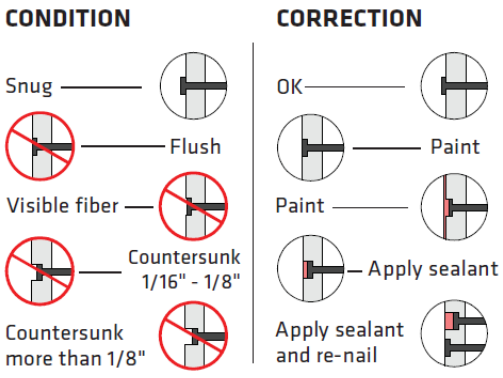

Figure 2

ADDRESS: 414 Union Street
Nashville, TN
Suite 2000
PHONE: (615) 986-5600
WEB: www.lpcorp.com

Date Created: 05/09/2018
Last Revision: 01/04/2021