

# Technical Bulletin

HardiePlank® Lap Siding and HardieTrim® Boards with Masonry Construction

January 2010



**Scope:** This document covers the application of HardiePlank® lap siding to masonry construction complying with local building codes, using Concrete Masonry Units (CMU) complying with ASTM C 90. This document is supplemental to the HardiePlank® lap siding installation requirements (all the general requirements prescribed in that document must be followed).

## Methods of Attachment of Siding

1. Attach over furring with adequate thickness to allow attachment with approved fastening methods according to local building codes and code compliance documentation. Furring must be attached to ensure it can transfer the wind loads on the siding back to the structure. Refer to Installation Supplement "Installation of HardiePlank® Over Furring" for more information.
2. Attach directly to masonry with approved fastening methods according to local building codes and code compliance documentation. Refer to Table 1.

Refer to and follow local building codes for water resistive barrier requirements.

## Methods of Attachment of HardieTrim® Boards

HardieTrim® Boards can be attached using hardened finish nails designed for masonry. For additional information, refer to HardieTrim® Board Installation Requirements.

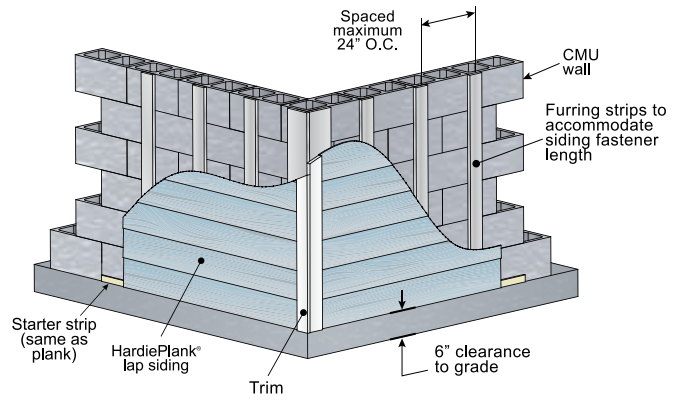


Figure 1: Installation with furring

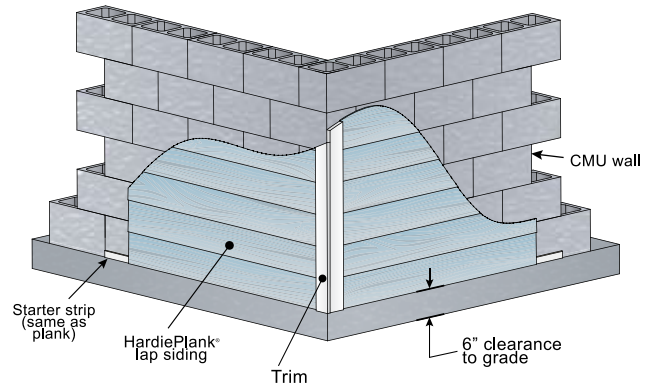


Figure 2: Direct to Installation

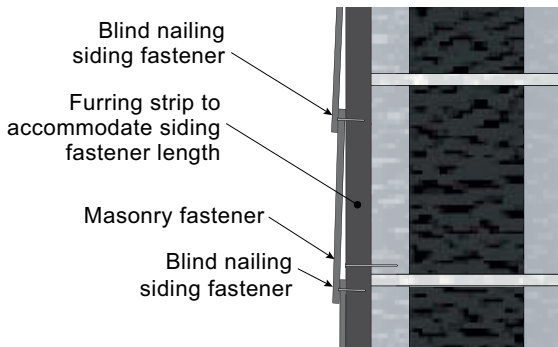


Figure 3: With Furring

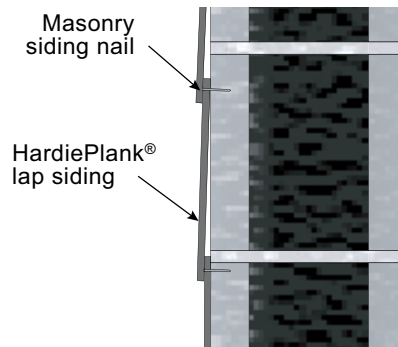


Figure 4: Direct to Block

**Allowable Fastener Spacing (in.)**

**HardiePlank® Lap Siding fastened to ASTM C 90 Concrete Wall**

| Basic Wind Speed | Building Height (feet) | <6 ½-inch wide Exposure |    |    | 7¼- & 7½- inch wide Exposure |    |    | 8- & 8¼- inch wide Exposure |    |    | 9¼- & 9½- inch wide Exposure |    |    |
|------------------|------------------------|-------------------------|----|----|------------------------------|----|----|-----------------------------|----|----|------------------------------|----|----|
|                  |                        | B                       | C  | D  | B                            | C  | D  | B                           | C  | D  | B                            | C  | D  |
| 100 mph          | 0-15                   | 24                      | 24 | 24 | 24                           | 24 | 24 | 24                          | 24 | 21 | 24                           | 23 | 19 |
|                  | 20                     | 24                      | 24 | 24 | 24                           | 24 | 23 | 24                          | 24 | 20 | 24                           | 21 | 18 |
|                  | 30                     | 24                      | 24 | 24 | 24                           | 24 | 21 | 24                          | 22 | 19 | 24                           | 20 | 17 |
|                  | 40                     | 24                      | 24 | 23 | 24                           | 24 | 20 | 24                          | 21 | 18 | 24                           | 19 | 16 |
|                  | 50                     | 24                      | 24 | 22 | 24                           | 22 | 19 | 24                          | 20 | 17 | 24                           | 18 | 15 |
|                  | 60                     | 24                      | 24 | 22 | 24                           | 22 | 19 | 24                          | 19 | 17 | 23                           | 17 | 15 |
| 110 mph          | 0-15                   | 24                      | 24 | 22 | 24                           | 24 | 19 | 24                          | 21 | 17 | 23                           | 19 | 15 |
|                  | 20                     | 24                      | 24 | 21 | 24                           | 22 | 18 | 24                          | 20 | 16 | 23                           | 18 | 15 |
|                  | 30                     | 24                      | 24 | 20 | 24                           | 20 | 17 | 24                          | 18 | 15 | 23                           | 16 | 14 |
|                  | 40                     | 24                      | 22 | 19 | 24                           | 19 | 16 | 23                          | 17 | 15 | 21                           | 15 | 13 |
|                  | 50                     | 24                      | 21 | 18 | 24                           | 18 | 16 | 22                          | 16 | 14 | 20                           | 14 | 12 |
|                  | 60                     | 24                      | 20 | 18 | 23                           | 18 | 15 | 21                          | 16 | 14 | 19                           | 14 | 12 |
| 120 mph          | 0-15                   | 24                      | 23 | 19 | 24                           | 20 | 17 | 21                          | 18 | 15 | 19                           | 16 | 13 |
|                  | 20                     | 24                      | 22 | 18 | 24                           | 19 | 16 | 21                          | 17 | 14 | 19                           | 15 | 12 |
|                  | 30                     | 24                      | 20 | 17 | 24                           | 17 | 15 | 21                          | 15 | 13 | 19                           | 14 | 12 |
|                  | 40                     | 24                      | 19 | 16 | 22                           | 16 | 14 | 20                          | 14 | 12 | 18                           | 13 | 11 |
|                  | 50                     | 24                      | 18 | 16 | 21                           | 16 | 13 | 18                          | 14 | 12 | 17                           | 12 | 11 |
|                  | 60                     | 23                      | 17 | 15 | 20                           | 15 | 13 | 18                          | 13 | 11 | 16                           | 12 | 10 |
| 130 mph          | 0-15                   | 24                      | 20 | 16 | 21                           | 17 | 14 | 18                          | 15 | 12 | 16                           | 14 | 11 |
|                  | 20                     | 24                      | 19 | 15 | 21                           | 16 | 13 | 18                          | 14 | 12 | 16                           | 13 | 11 |
|                  | 30                     | 24                      | 17 | 14 | 21                           | 15 | 12 | 18                          | 13 | 11 | 16                           | 12 | 10 |
|                  | 40                     | 22                      | 16 | 14 | 19                           | 14 | 12 | 17                          | 12 | 11 | 15                           | 11 | 9  |
|                  | 50                     | 21                      | 15 | 13 | 18                           | 13 | 11 | 16                          | 12 | 10 | 14                           | 11 | 9  |
|                  | 60                     | 20                      | 15 | 13 | 17                           | 13 | 11 | 15                          | 11 | 10 | 13                           | 10 | 9  |
| 140 mph          | 0-15                   | 21                      | 17 | 14 | 18                           | 15 | 12 | 16                          | 13 | 11 | 14                           | 12 | 10 |
|                  | 20                     | 21                      | 16 | 13 | 18                           | 14 | 12 | 16                          | 12 | 10 | 14                           | 11 | 9  |
|                  | 30                     | 21                      | 15 | 12 | 18                           | 13 | 11 | 16                          | 11 | 10 | 14                           | 10 | 9  |
|                  | 40                     | 19                      | 14 | 12 | 16                           | 12 | 10 | 15                          | 11 | 9  | 13                           | 9  | 8  |
|                  | 50                     | 18                      | 13 | 11 | 15                           | 11 | 10 | 14                          | 10 | 9  | 12                           | 9  | 8  |
|                  | 60                     | 17                      | 13 | 11 | 15                           | 11 | 10 | 13                          | 10 | 9  | 12                           | 9  | 8  |
| 150 mph          | 0-15                   | 18                      | 15 | 12 | 16                           | 13 | 11 | 14                          | 11 | 9  | 12                           | 10 | 8  |
|                  | 20                     | 18                      | 14 | 12 | 16                           | 12 | 10 | 14                          | 11 | 9  | 12                           | 10 | 8  |
|                  | 30                     | 18                      | 13 | 11 | 16                           | 11 | 9  | 14                          | 10 | 8  | 12                           | 9  | 7  |
|                  | 40                     | 16                      | 12 | 10 | 14                           | 10 | 9  | 13                          | 9  | 8  | 11                           | 8  | 7  |
|                  | 50                     | 15                      | 12 | 10 | 13                           | 10 | 9  | 12                          | 9  | 8  | 11                           | 8  | 7  |
|                  | 60                     | 15                      | 11 | 10 | 13                           | 10 | 8  | 11                          | 8  | 7  | 10                           | 8  | 7  |

**Notes to Table:**  
 1. Fasteners shall be ET & F Fastening Systems, Inc. ET&F block Nail (ET & F No. ASM-144-125, head dia. = 0.30 in., shank dia. = 0.14 in., length = 1.25-in. long) or Max System block Nail (CP-C 832 W7-ICC, head dia. = 0.30 in., shank dia. = 0.15 in., length = 1.3 in.) or Aerosmith® block nail (5323HP, head dia. = 0.30 in., shank dia. = 0.1444 in., length, 1.25 in.).  
 2. Maximum basic wind speed shall be 150 mph.  
 3. Interpolation to address building height and other plank widths is permitted.  
 4. The lap conceals the fasteners of the previous course (Blind Nailed).  
 5. 1 inch = 25.4 mm, 1 foot = 305 mm, 1 mph = 0.44 m/s

**IMPORTANT:** Failure to install and finish this product in accordance with applicable building codes and James Hardie written application instructions may affect system performance, violate local building codes, void the product-only warranty and lead to personal injury.

**DESIGN ADVICE:** Any information or assistance provided by James Hardie in relation to specific projects must be approved by the relevant specialists engaged for the project eg. builder, architect or engineer. James Hardie will not be responsible in connection with any such information or assistance.



Additional Installation Information, Warranties, and Warnings are available at [www.jameshardie.com](http://www.jameshardie.com)  
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