

HardieBacker® 500 Cement Board Interior Ceiling Installation

MARCH 2012



SCOPE:

This Technical Bulletin provides additional installation instruction for James Hardie's HardieBacker® 500 cement board used in a ceiling application as prescribed by ANSI 108.11

Referenced Documents: ANSI 118.9
 ANSI 108.11
 2010 TCNA (Tile Council of North America) Handbook: C315-09

FRAMING:

Framing shall meet requirements set forth in by ANSI 108.11, Section 4.0 for CBU's

ATTACHING TO WOOD FRAMING:

1. See applicable building codes regarding vapor barrier requirements
2. Framing shall be spaced a maximum of 16 in. OC
3. Install backer with the long dimension across framing and center end joints on framing (Figure 1)
4. Stagger joints in adjacent rows of backer leaving 1/8 in. space between edges of backer panels. (Figure 4)
5. Fasteners:
 - a. Minimum 1-½ in. long (11ga. x 3/8 in.HD) or corrosion resistant roofing nails
 - b. Minimum 1- 5/8 in. long (No. 8-18 x 3/8 in. HD ribbed wafer) corrosion resistant wood screwsNote: Fastener must provide a minimum 3/4 in. thread engagement or penetration
6. Keep fasteners 3/8 in. from board edges and 2 in. in from sheet corners (Figure 4)
7. Fasteners must not be installed greater than 6 in. OC
8. Set fastener heads flush with the surface without overdriving

Figure 1

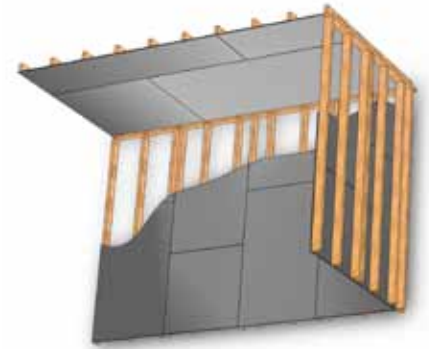
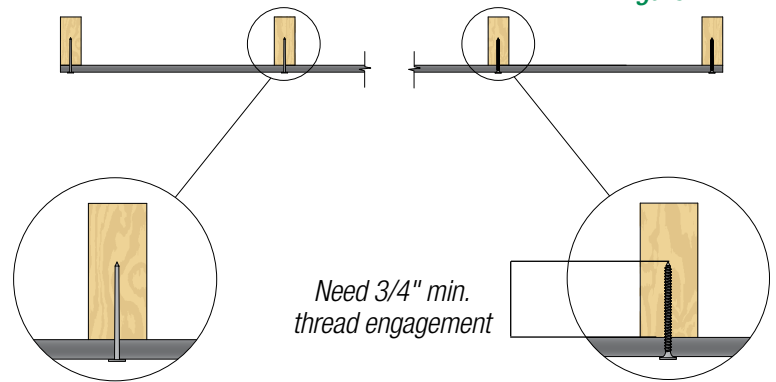


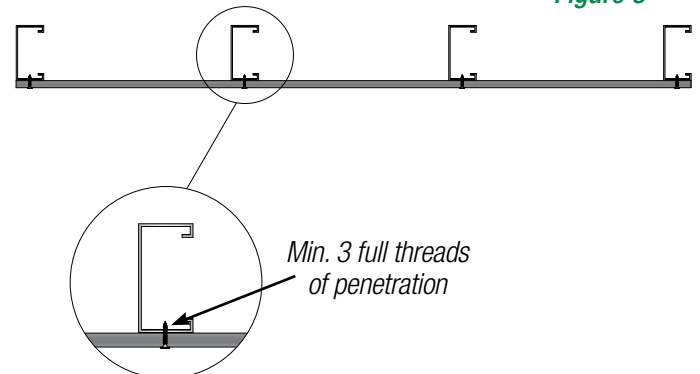
Figure 2

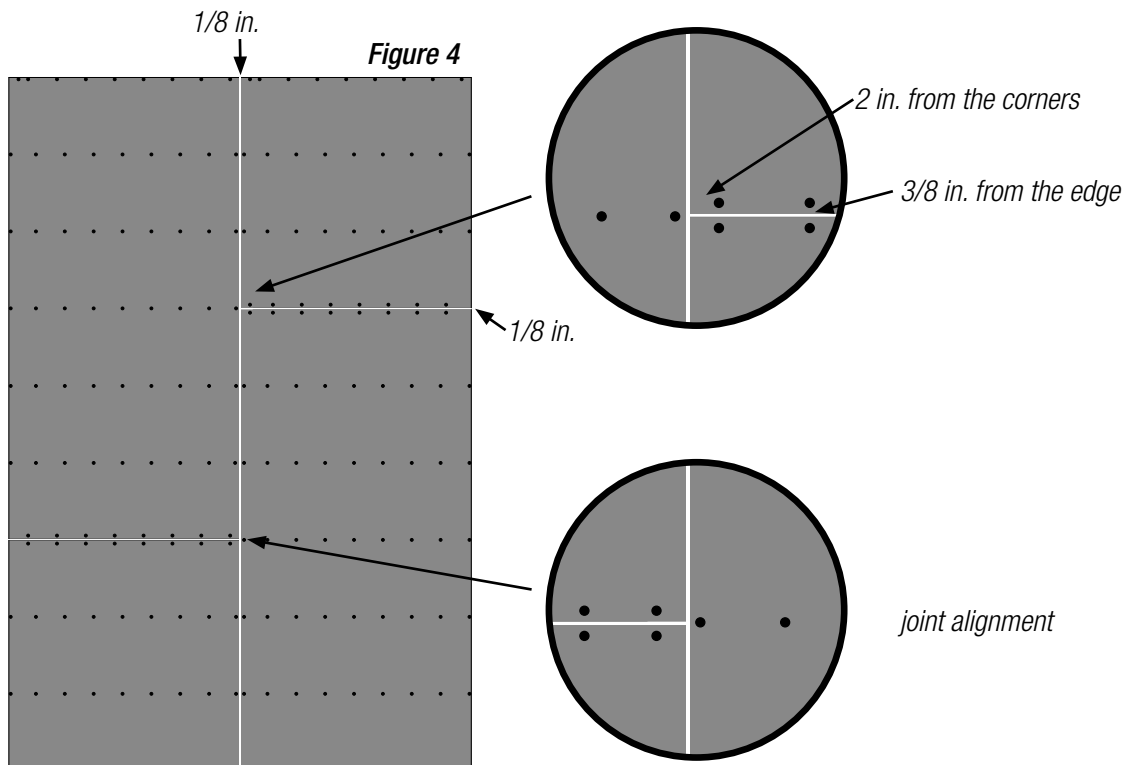


ATTACHING TO STEEL FRAMING:

1. See applicable building codes regarding vapor barrier requirements
2. Framing shall be spaced a maximum of 16 in. OC
3. Install backer with the long dimension across framing and center end joints on framing (Figure 1)
4. Stagger joints in adjacent rows of backer leaving 1/8 in. space between edges of backer panels. (Figure 4)
5. Fasteners:
 - a. Minimum 1- ¼ in. long (No 8-18 x 3/8 in. HD ribbed wafer) Corrosion resistant screwsNote: Fastener must penetrate the stud 3 full threads
6. Keep fasteners 3/8 in. from board edges and 2 in. in from sheet corners (Figure 4)
7. Fasteners must not be installed greater than 6 in. OC
8. Set fastener heads flush with the surface without overdriving.

Figure 3





JOINT TREATMENT:

1. Fill all joints with ANSI A136.1 mastic or A118.4 latex or acrylic modified thinset
2. Embed 2 in. wide high-strength alkali-resistant glass fiber tape in the mastic or thinset and level.

FINISHING:

3. Refer to ANSI A108, TCNA Handbook, the mortar, and tile manufacturers' published application guidelines for complete tiling instructions.
4. Wipe the surface of HardieBacker® cement board clean with a damp sponge just prior to adding mastic or mortar.
5. Spread the ANSI A136.1 mastic or ANSI A118.4 latex or acrylic modified thinset per mortar / tile manufacturers' instructions.
6. Twist or press and beat in tiles complying with ANSI A137.1.
7. Allow a minimum of 24 hours curing set time before grouting.


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 Warning are available at JamesHardie.com



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