

Deck Inspection Report



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Date: 7/13/2019

Property Address: 8: osa

For: C os

The property was inspected on June 13, 2019 at 10:00 am. The purpose for the inspection was to address concerns with the recently built deck. The deck consists of composite decking on wood framing which rests on a storage room. The storage room was built at the same time as the deck. The storage room is considered a room addition as it is on a concrete foundation, attached to the house, is roofed, has exterior load bearing walls, is lit, and has electrical receptacles. It is not considered habitable space as there is no heat or air conditioning. This report will use chapters 3 - 9 of the 2015 International Residential Code, as utilizes and referenced by Bexar County, and the 2017 National Electrical Code as the minimum standards for construction and safety. The following conditions were observed:

1. Wiring from the entrance panel to the storeroom is #12 conductors that are not color keyed or marked to denote hot conductor, grounded conductor, or grounding conductor (NEC 200.7, 250.19, 210.5). (photo 1)
2. Electrical conduit feeding the storeroom is on the ground and needs to be buried 18" deep. If protected by a GFCI breaker, the depth can be reduced to 12" (NEC 300.5). (photo 2)
3. NM cable s needs to be stapled flat, not on edge (NEC 334.30). (photo 3)
4. Stucco veneer requires 4" clearance from grade. (photo 4)
5. Foundation is poured out of square allowing water to seep under the wall. Water staining is present at the base of the OSB wall sheathing. (photo 5, 6)
6. Foundation for the storeroom appears to be a patio slab and cannot be used to support a structure. (photo 7)
7. Cedar posts are embedded into the foundation. Wood should never be imbedded in a structural foundation. (photo 8)
8. Floor is below grade at the right side. Backfill has not been placed. No provision for waterproofing was observed.

- Required weep screed is not present at the base of the stucco. (photo 9, 10, 11)

2015 IRC R703.7.2.1 Weep screeds

A minimum 0.019 inch (0.5 mm) (No. 26 galvanized sheet gage), corrosion resistant weep screed or plastic weep screed, with a minimum vertical attachment flange of 3 1/2 inches (89 mm) shall be provided at or below the foundation plate line on exterior stud walls in accordance with ASTM C 926. The weep screed shall be placed a minimum of 4 inches (102 mm) above the earth or 2 inches (51 mm) above paved areas and shall be of a type that will allow trapped water to drain to the exterior of the building. The weather resistant barrier shall lap the attachment flange. The exterior lath shall cover and terminate on the attachment flange of the weep screed.

- Roll roofing needs to extend $\frac{1}{2}$ " to $\frac{3}{8}$ " beyond the drip edge flashing. The presence of edge strips could not be verified. (photo 12,13)
- Evidence of water entry is present at the top of the OSB wall sheathing. No head flashing is present at the fascia/trim board above the stucco veneer. (photo 14,15,16)

ASTM C996 A2.1.2

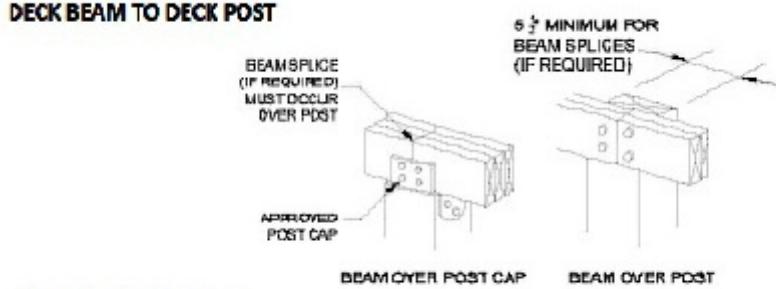
The construction specifier shall describe, in the appropriate section of the contract specifications, the requirements for furnishing and application of flashing. Flashing shall be specified at openings, perimeters, and terminations to prevent water from getting behind plaster. Flashing shall be corrosion-resistant material. Aluminum flashing shall not be used. Flashing supplemented with sealant shall be permitted.

- Evidence of water entry is present at the foundation wall. Proper flashing could not be verified where the roof meets the foundation wall. Caulking or roofing cement should not be relied on to prevent water entry. Refer to IRC 703.4.
- Ledger at the radiusued portion of the house foundation is OSB sheathing. Ledgers in contact must be treated or naturally decay resistant. (photo 17)
- Stair stringers and landing floor framing are not adequately supported. Framing needs to rest on top of the post to provide a continuous load path. (photo 18, 19, 20)

R507.5.2 Deck beam connection to supports

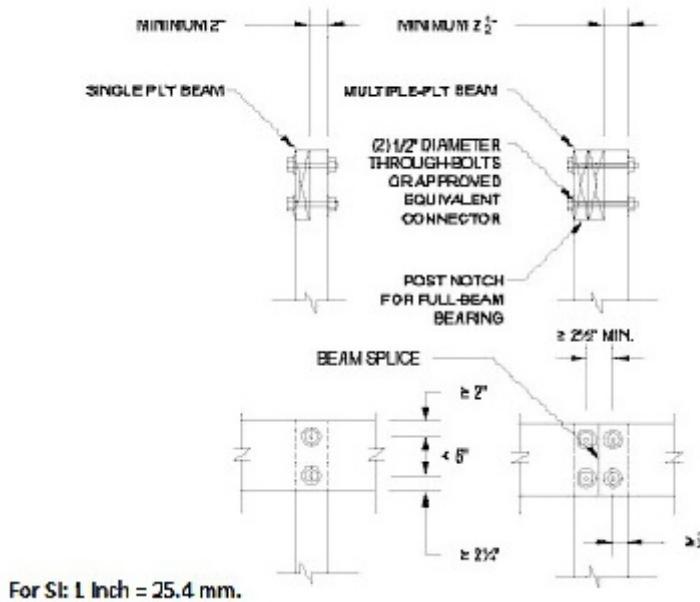
Deck beams shall be attached to supports in a manner capable of transferring vertical loads and resisting horizontal displacement. Deck beam connections to wood posts shall be in accordance with Figures R507.5.1(1) and R507.5.1(2). Manufactured post-to-beam connectors shall be sized for the post and beam sizes. Bolts shall have washers under the head and nut.

FIGURE R507.5.1(1)
DECK BEAM TO DECK POST



For SI: 1 Inch = 25.4 mm.

FIGURE R507.5.1(2)
NOTCHED POST-TO-BEAM CONNECTION



15. Stairs are lacking a graspable handrail. (photo 21)

2015 IRC R311.7.8.3 Grip-size

All required handrails shall be of one of the following types or provide equivalent graspability. (1) Type I. Handrails with a circular cross section shall have an outside diameter of at least 1-1/4 inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular, it shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6-1/4 inches (160 mm) with a maximum cross section of dimension of 2-1/4 inches (57 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm). (2) Type II. Handrails with a perimeter greater than 6-1/4 inches (160 mm) shall have a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the profile. This required depth shall continue for at least 3/8 inch (10 mm) to a level that is not less than 1-3/4 inches (45 mm) below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 1-1/4 inches (32 mm) to a maximum of 2-3/4 inches (70 mm). Edges shall have a minimum radius of 0.01 inch (0.25 mm).

16. Guard railing at the deck is 33.5" high. Minimum allowable height is 34".

17. Required stair lighting is not present.

2015 IRC R303.7 Interior stairway illumination.

Interior stairways shall be provided with an artificial light source to illuminate the landings and treads. The light source shall be capable of illuminating treads and landings to levels of not less than 1 foot-candle (11 lux) as measured at the center of treads and landings. There shall be a wall switch at each floor level to control the light source where the stairway has six or more risers.

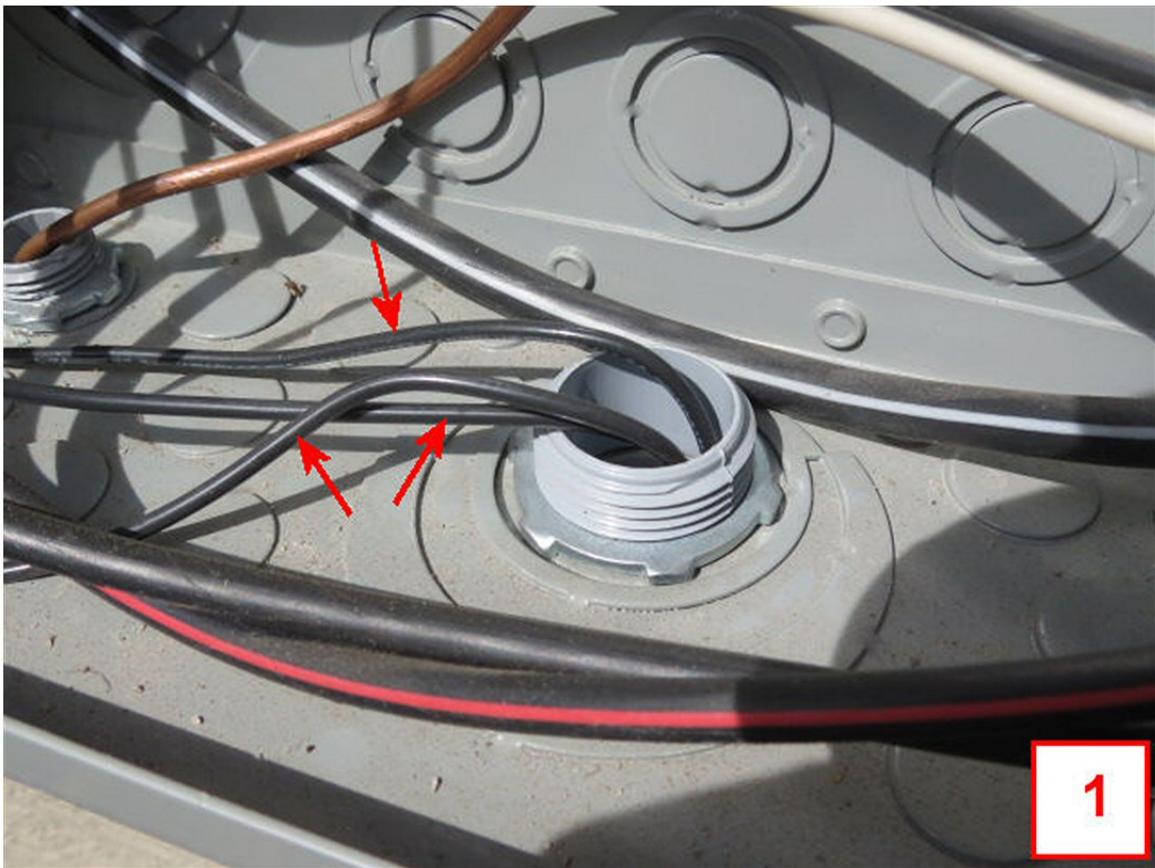
Other

1. Required bonding bushing is not present between the service entrance panel and the meter can (NEC 250.92). (photo 22, 26)

2. Required intersystem grounding bridge is not present at the service entrance (NEC 250.94). (photo 23, 24, 25)
3. Required clear working space is not present at the service entrance panel. (NEC 110.26)

Due to the failure to follow proper building techniques and applicable codes, I recommend that the deck, storeroom, and concrete slab be removed and replaced by a qualified contractor. I further recommend that an engineer be retained to prepare proper design documents to be followed by the contractor.

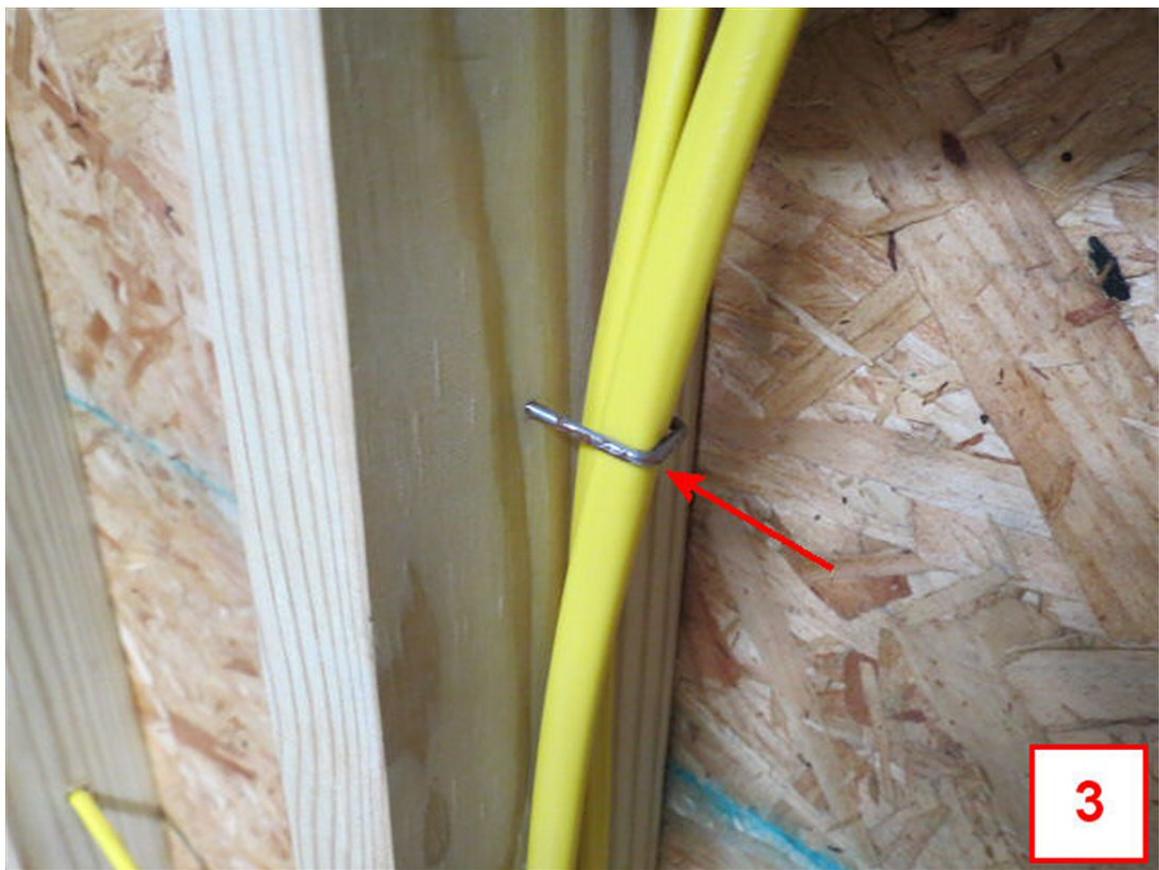
**This report is not meant to be a replacement for any punchlist the builder may have.
Compliance with current building codes and engineered plans is the responsibility of
the builder.**



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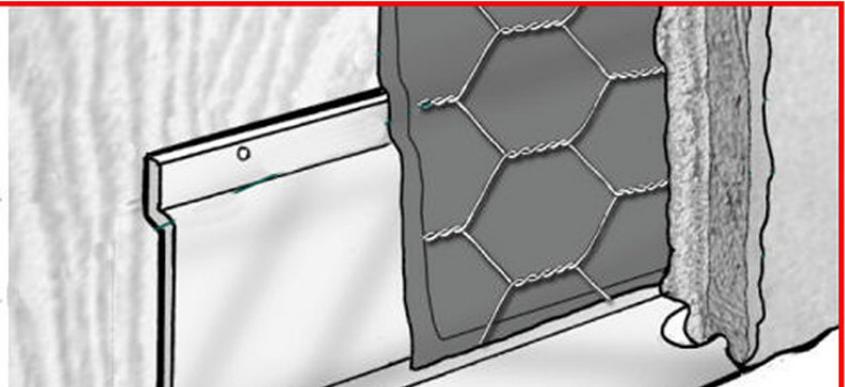


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Weep Screed

Weep
screed

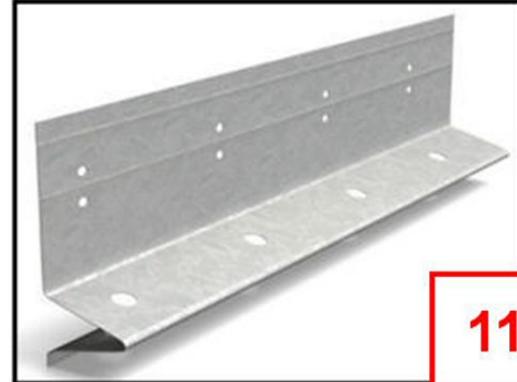


4in. min. to ground,
2in. min. to pavement

10

#7 Foundation Screed

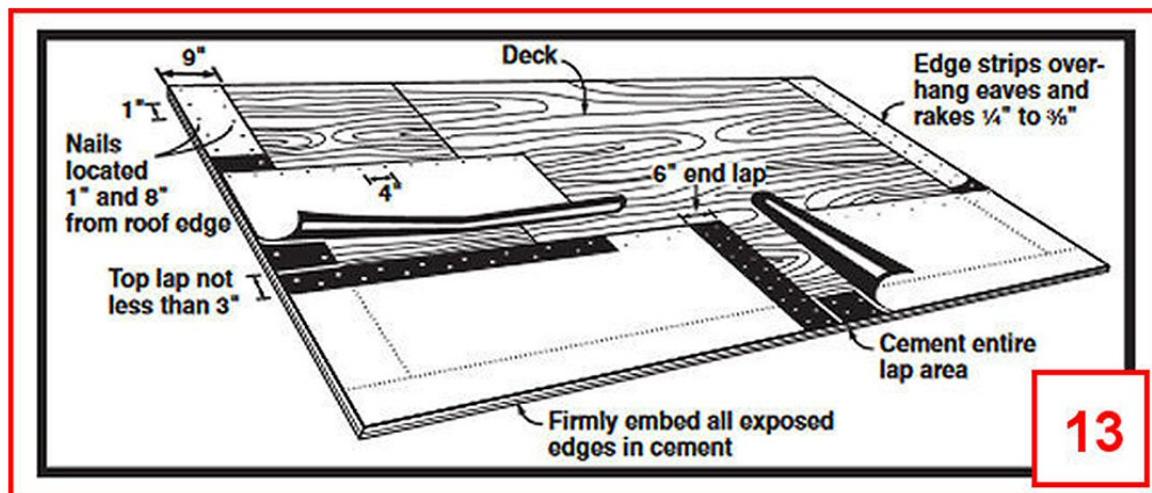
This part is often referred to as F.H.A. Screed because it meets all pertinent requirements. The screed provides an angular, straight-edge stop at the sill plate line and can be attached by nail or staple. The product is manufactured from 26 gauge material and is available in ground heights of 7/8" and 1-3/8". It has a 3-1/2" nailing flange and weep holes are provided to eliminate condensation problems.



11



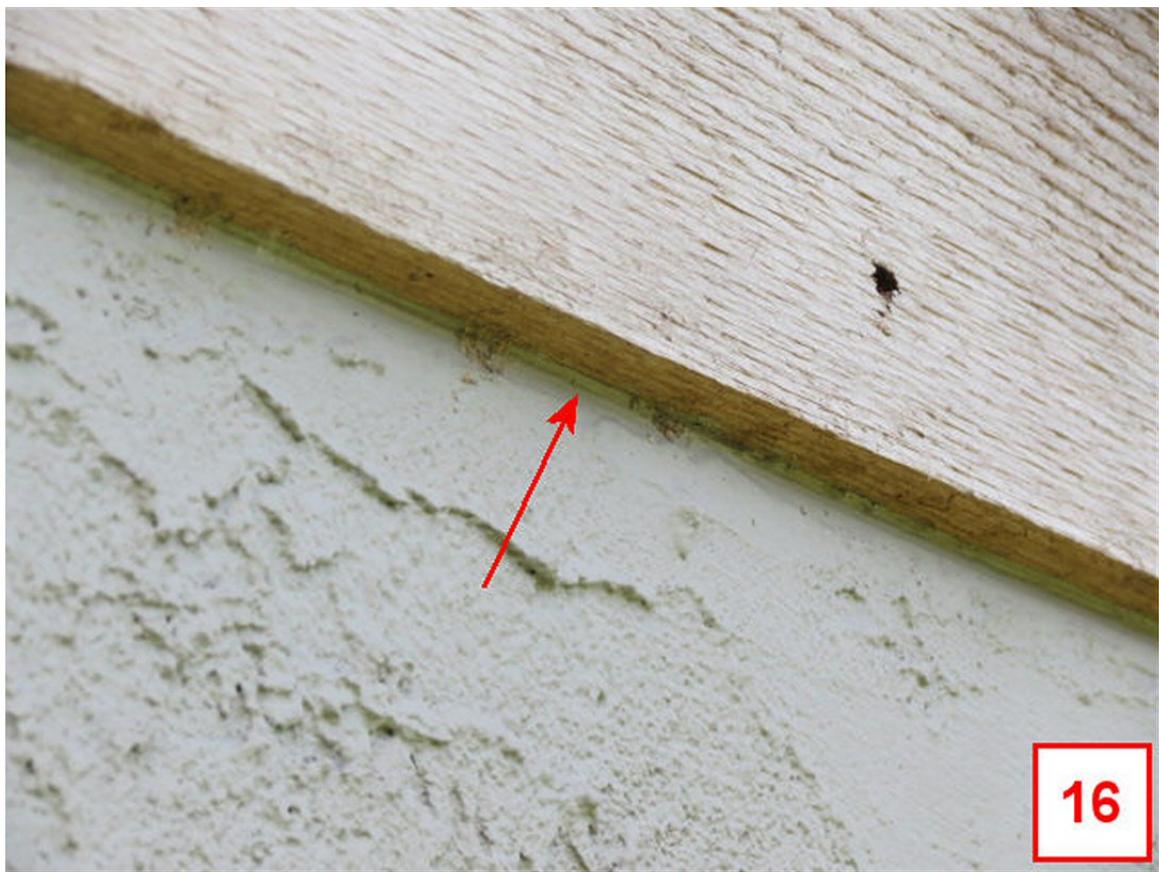
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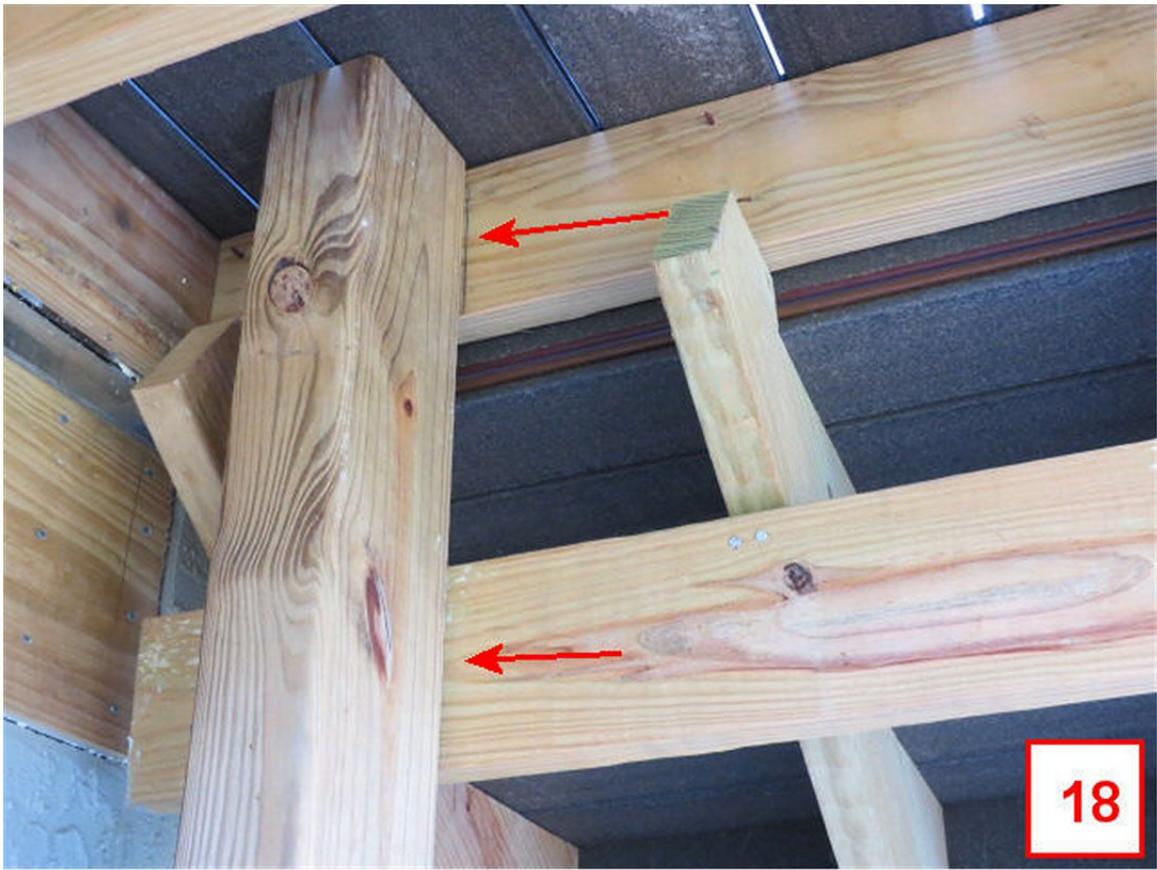


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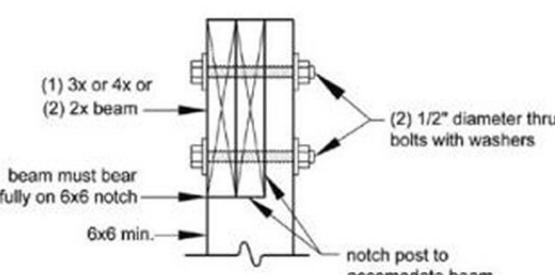
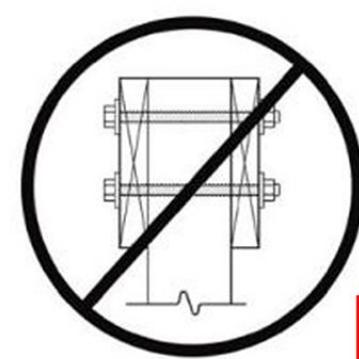
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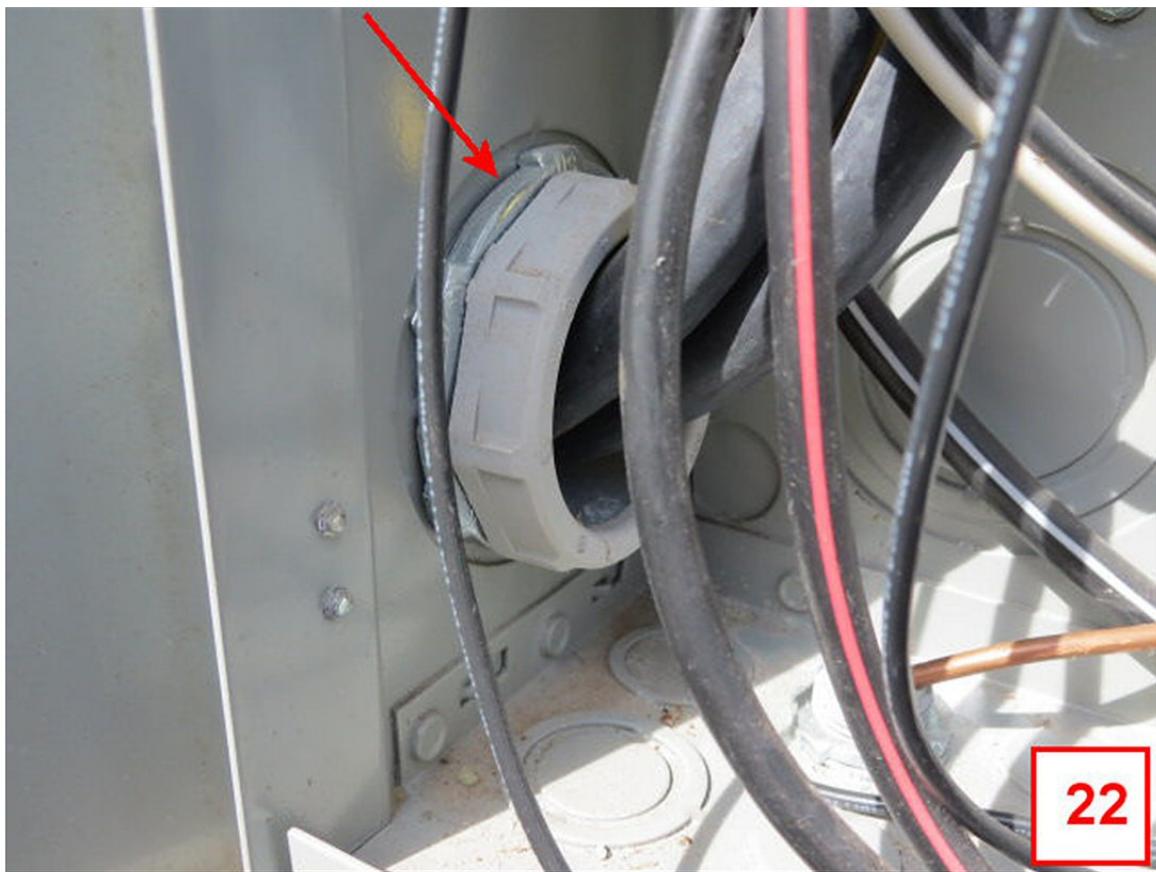




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Post-to-Beam Attachment Requirements	Prohibited Post-to-Beam Attachment Condition
 <p>(1) 3x or 4x or (2) 2x beam</p> <p>beam must bear fully on 6x6 notch</p> <p>6x6 min.</p> <p>(2) 1/2" diameter thru- bolts with washers</p> <p>notch post to accommodate beam</p>	 <p>A large black circle with a diagonal slash through it, indicating that the attachment method shown is not allowed.</p>

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NEC 250.92

26