

BUILDING A DECK

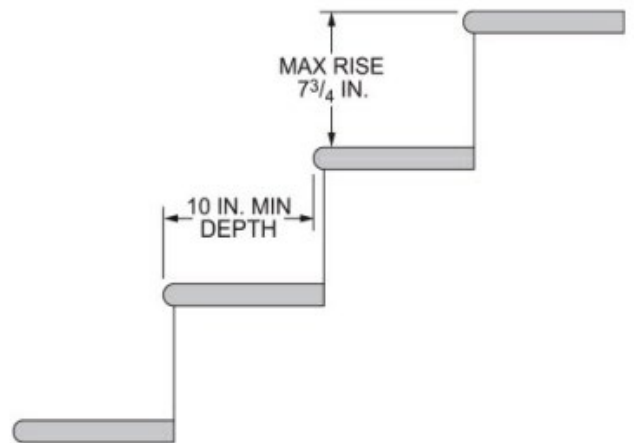
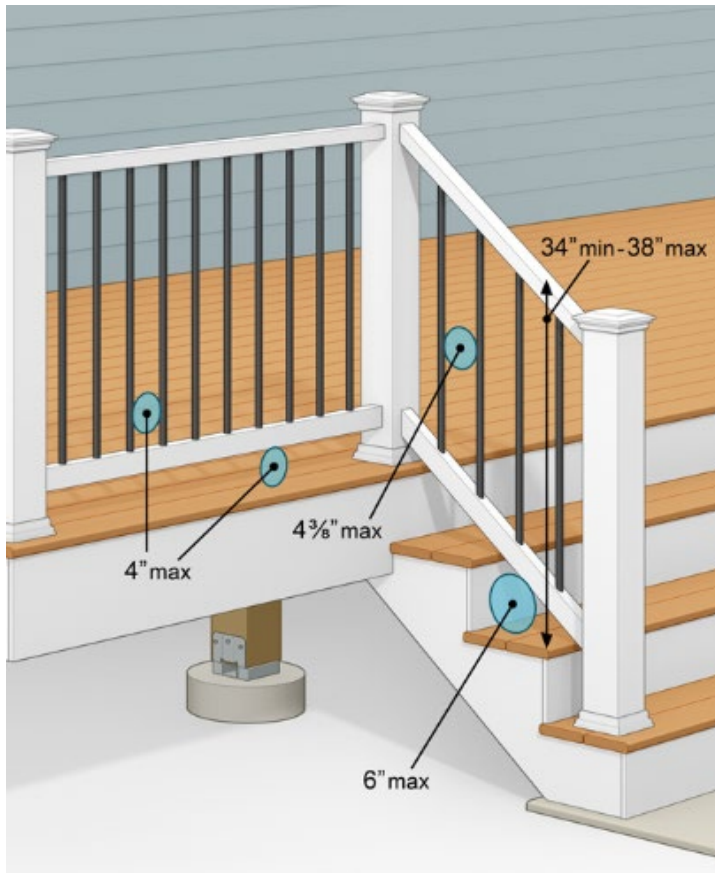
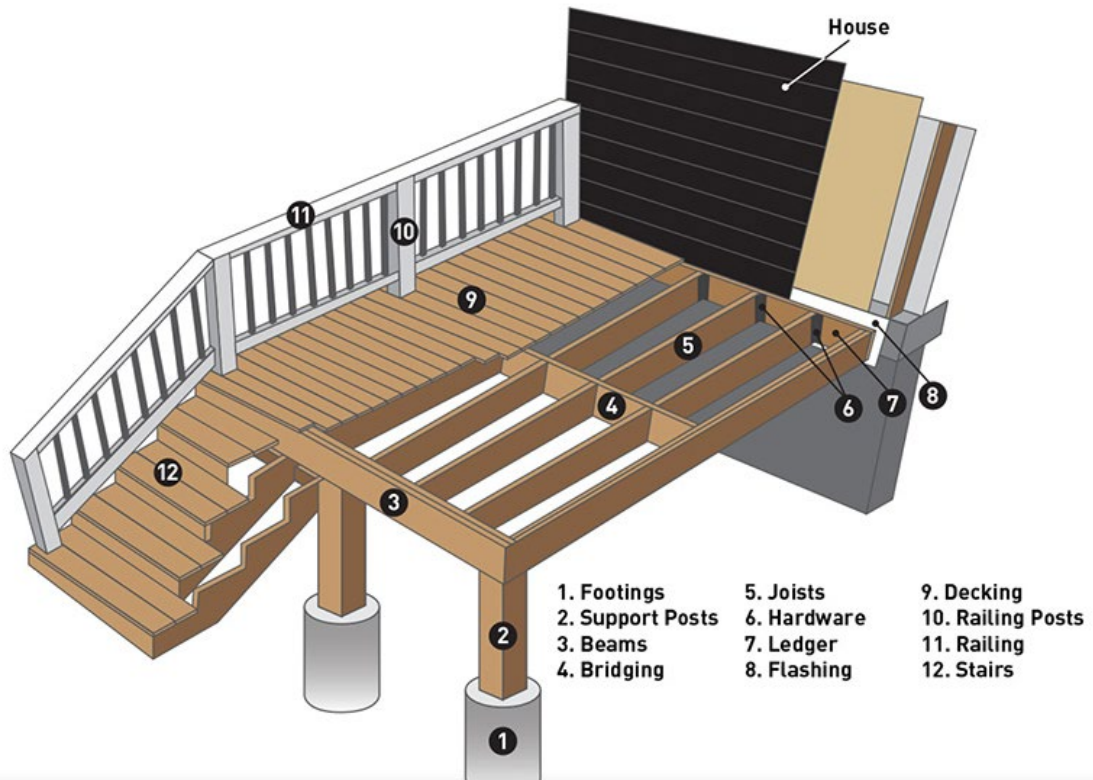
INFORMATION REQUIRED WITH YOUR APPLICATION **Section R507 Exterior Decks of the 2021 IRC (Residential Building Code)**

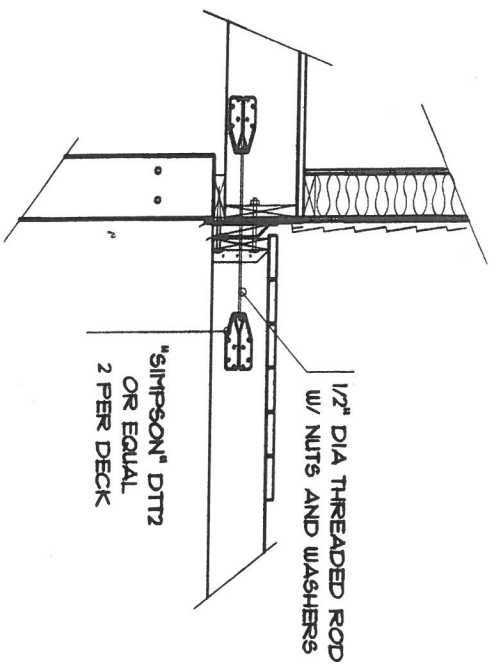
The following is a guideline of information required for the review of a deck application. It is intended to help you supply proper and complete application packages. Please label all the following items on your plans. Thank you!

1. A complete plot plan showing all structures and proposed structures with distances to all property lines labeled.
2. Type of foundation system (footing depth – 48” minimum required)
 - A. Depth below grade (minimum 4’ – 0” below grade)
 - B. Anchorage of column to footing
 - C. Spacing and location of tubes/piers
 - D. If using precast supports we will need to see spec sheet during inspection.
3. Framing Members
 - A. Columns – wood size and location (members supporting framing of floor system)
 - B. Ledger size attached to building
 - C. Fastener size and spacing attaching ledger
 - D. Girder size and spans carrying floor system
 - E. Joist size, span, and spacing
 - F. Joist hangers or ledger
4. Guardrails & Handrail Details
 - A. Guardrail height (minimum of 36”)
 - B. Minimum height of 34 inches but on higher than 38 inches measured vertically from the nosing of the tread.
 - C. Baluster spacing (4”max spacing)
 - D. Handrail height (36” high from deck to top railing)
 - E. Minimum clearance of 1 ½ inches between wall and handrail.
 - F. Circular cross section with diameter of 1 ¼ to 2 inches, or
 - G. Other handrail shapes must have a perimeter of 4 inches to 6 ¼ inches and a maximum cross section of 2 ¼ inches
 - H. Handrails with a perimeter greater than 6 ¼ inches must be provided with a graspable finger recess section of 2 ¼ inches.
5. Stair Details
 - A. Tread depth (Minimum 10 inches measured nosing to nosing)
 - B. Riser height (maximum riser height 7 3/4”)
 - C. Nosing on tread (3/4” minimum nosing 1 ¼” max nosing)
 - D. Width of stairs (residential 36”)

*NOTES:

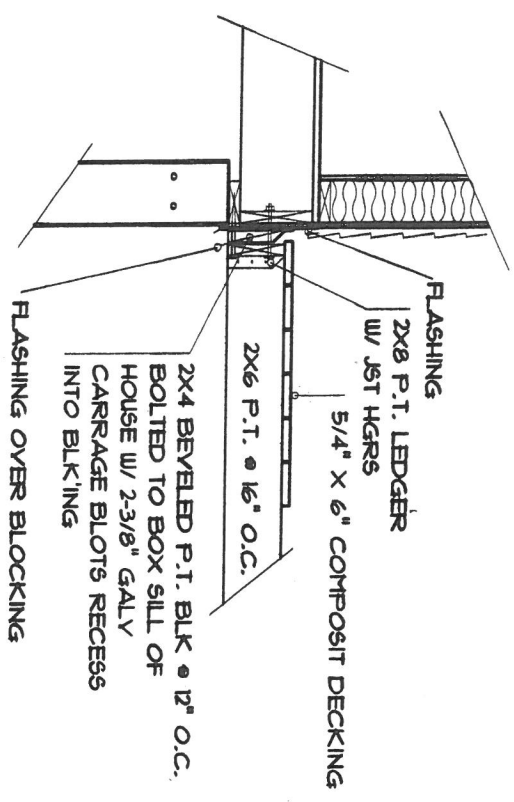
- Any landing or stair that is 30” or more from grade must have guard rails and handrails.
- The handrail must be continuous for the full length of the stairway from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight.
- Handrail ends shall be returned back to wall or posts.
- Any mobile home that is not frost protected by a full foundation or frost wall does not have to have frost protection for the deck.
- Any landing at the top, bottom or within the flight of stairs must be a minimum of 3’ x 3’.



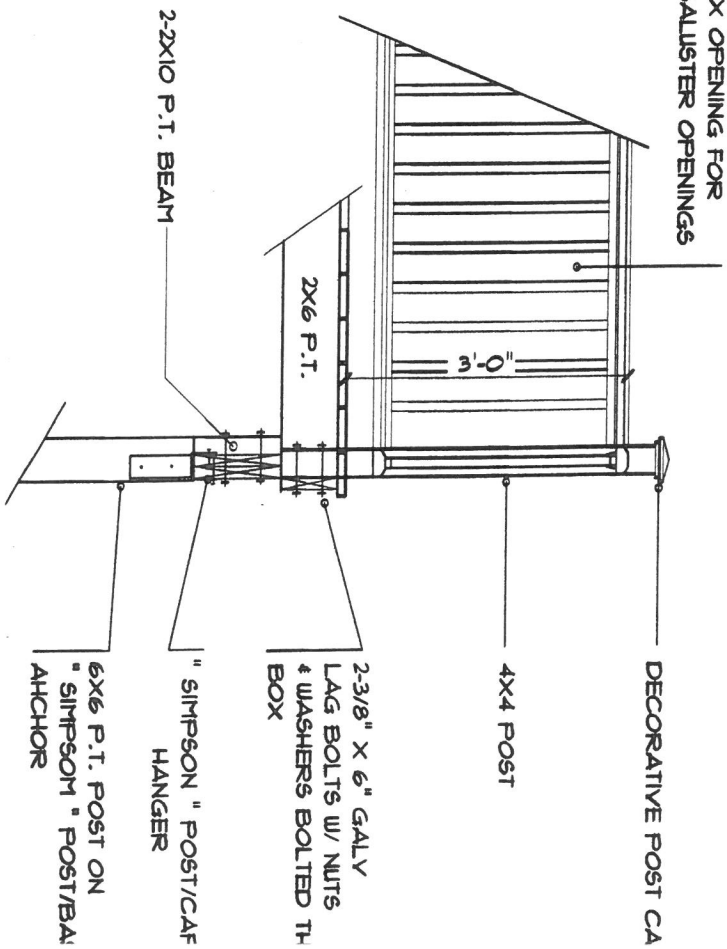


LATERAL LOAD DETAIL X

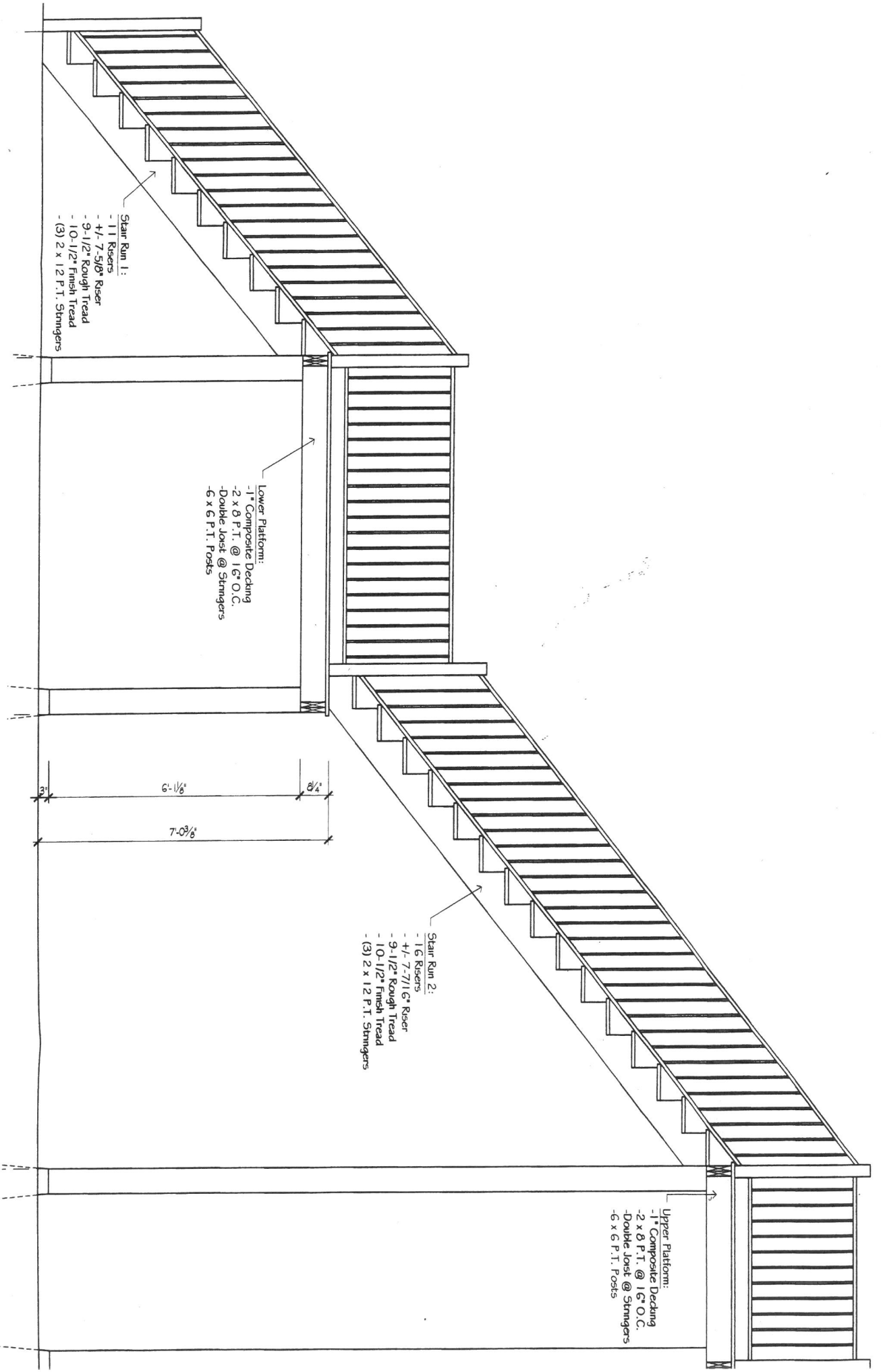
SCALE : 1/2" = 1'-0"



4" MAX OPENING FOR ALL BALUSTER OPENINGS



TYPICAL DECK SECTION X



- Stair Run 1:
- 11 Risers
 - 4'-7"-5/8" Riser
 - 9'-1/2" Rough Tread
 - 10'-1/2" Finish Tread
 - (3) 2 x 12 P.T. Stringers

- Lower Platform:
- 1" Composite Decking
 - 2 x 8 P.T. @ 16" O.C.
 - Double Joist @ Stringers
 - 6 x 6 P.T. Posts

3"
6'-1/8"
7'-0 3/8"
8/4"

- Stair Run 2:
- 16 Risers
 - 4'-7"-7/16" Riser
 - 9'-1/2" Rough Tread
 - 10'-1/2" Finish Tread
 - (3) 2 x 12 P.T. Stringers

- Upper Platform:
- 1" Composite Decking
 - 2 x 8 P.T. @ 16" O.C.
 - Double Joist @ Stringers
 - 6 x 6 P.T. Posts

R507.2.3 Decks

Deck lateral load connectors must be installed in two locations on a deck. The lateral load connectors must have a design capacity of 1500 pounds. See Figure R507.2.3

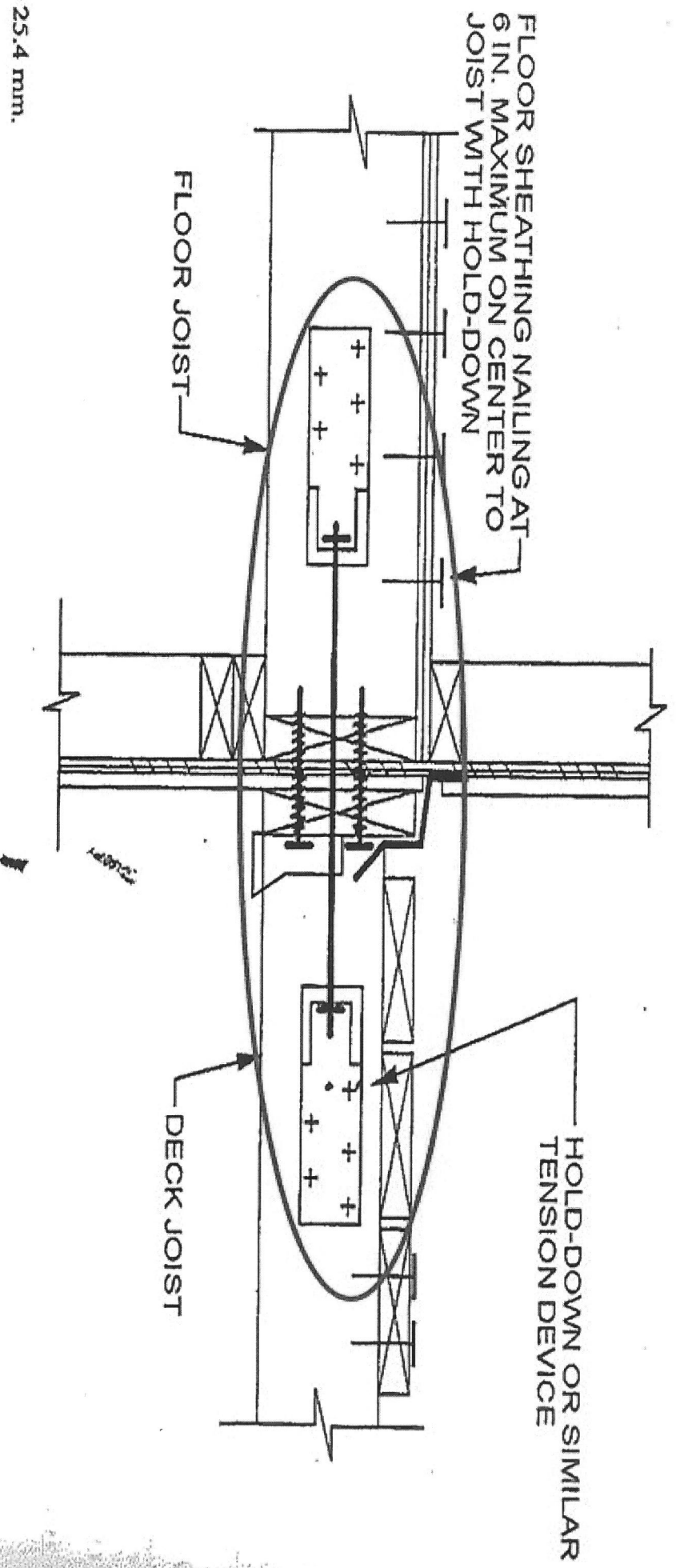


FIGURE 507.2.3
DECK ATTACHMENT FOR LATERAL LOADS

NOTE:
THIS DETAIL IS APPLICABLE
WHERE FLOOR JOISTS ARE
PARALLEL TO DECK JOISTS.

