



TOWNSHIP OF NUTLEY
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DECK REQUIREMENTS



1. This handout is based on the 2006 International Residential Building Code, New Jersey Edition. This is only a guide and cannot cover every situation.
2. A building permit and zoning review is required for all new and replacement decks
3. Plans are required for all decks. Plans may be drawn by the homeowner of an owner occupied single family dwelling, and the homeowner must sign a certificate on the permit application that they drew their own plans. Any other plans must be prepared by a New Jersey licensed architect.
4. Required Inspections
 - a. Footing – Prior to concrete being poured
 - b. Framing – If framing cannot be seen by inspector from underneath
 - c. Final – when deck is fully complete, a Certificate of Approval will be issued
5. Requirements for Plan Review:
 - a. Three (3) copies of current survey to scale, with the proposed location of deck.
 - b. Three (3) sets of plans, drawn to scale. All drawings should indicate owners name, address of job site, block and lot. Plans shall include the following information:

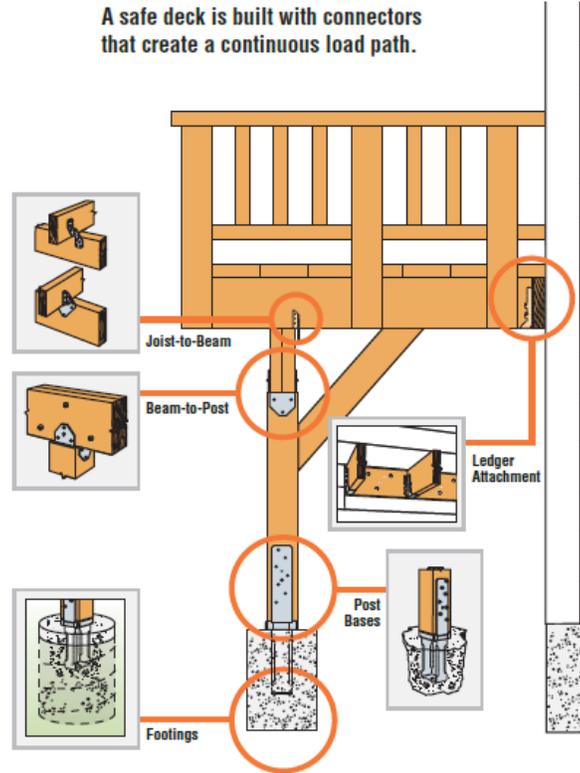
(1) Footings:

The footing shall be a minimum of 12” in diameter and at least a depth which is below the frost level. In this area, the frost level is considered to be 36”.

The diameter of the footing shall be eight (8) inches larger than the largest dimension of the post.

Example: 4 x 4 post = 12” in diameter
 6 x 6 post = 14” in diameter
 6 x 6 post = 14” in diameter

(2) All lumber used for construction shall be naturally durable wood or wood that is preservative treated.



(3) Girders:

Joists in girders must be directly above the support columns (posts), and must bear a minimum of 1½” on the column or post.

Maximum span for girders between columns or posts:

2 – 2” x 6”	5’0”
3 – 2” x 6”	6’0”
2 – 2” x 8”	6’4”
3 – 2” x 8”	8’0”
2 – 2” x 10”	8’0”
3 – 2” x 10”	9’0”
2 – 2” x 12”	9’0”

Note: 4” x 4” posts may not exceed 4’ in height

(4) Floor Joist:

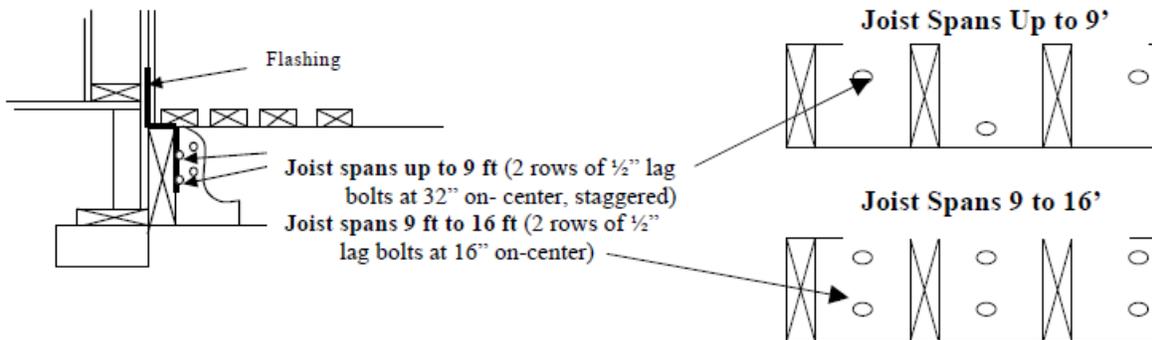
Floor joist must comply with I.R.C. 2006, N.J. Edition, Section Table R502.3.1(2). Floor joist spans must be sized in accordance with the following table. The table is based on a 40-psi live load with a deflection limit of 1/360, and with a 10 psf dead load.

Joist span based on use of pressure treated southern pine lumber

Joist Size	2 x 6	2 x 8	2 x 10	2 x 12
12" O.C.	10'9"	14'2"	18'0"	21'9"
16" O.C.	9'9"	12'10"	16'1"	18'10"
19.2" O.C.	9'2"	12'10"	14'8"	17'2"
24" O.C.	8'6"	11'0"	13'1"	15'5"

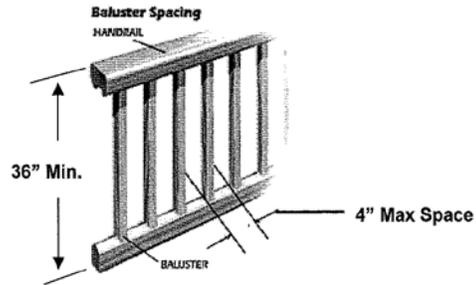
(5) Deck Attachment:

Flashing must be installed to prevent water from getting behind the ledger board. Flashing must be an approved flashing material. Where decks are supported by attachment to an exterior wall, decks shall be positively anchored to the primary structure and designed for both vertical and lateral loads. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal. Where positive connection to the primary structure can not be verified during inspection, decks shall be self-support. For decks with cantilever framing members, connections to exterior walls or other framing members, shall be designed and constructed to resist uplift resulting from live loads acting on the cantilever portion of the deck.



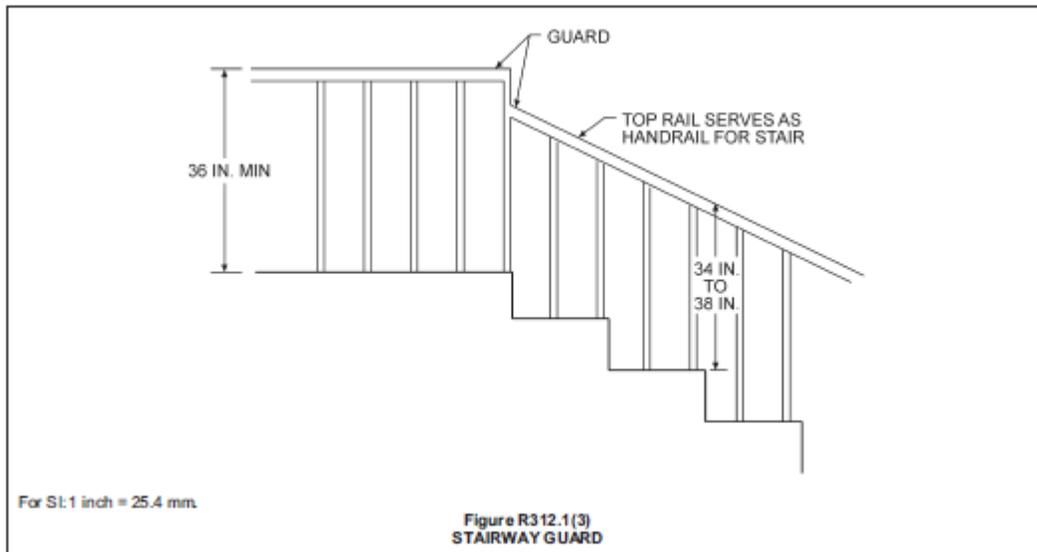
(6) Guardrails (Railings)

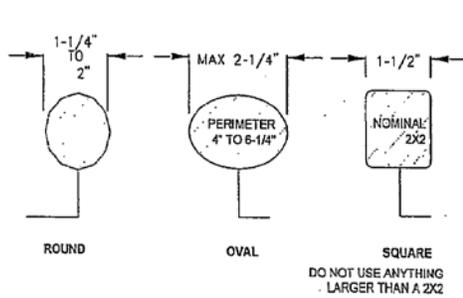
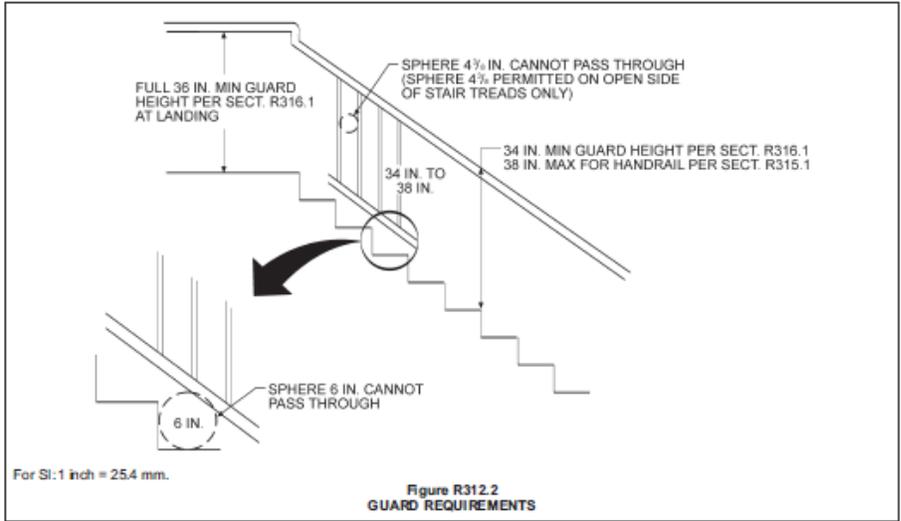
Decks that are more than 30" above the adjacent grade must have a guardrail. The guardrails must be 36" high.



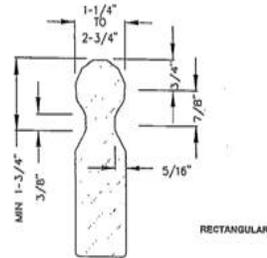
(7) Graspable Handrails

A graspable handrail must be provided on all stairs. The handrail must be mounted 34" to 38" above the stair nosing.





TYPE 1 HANDRAIL PROFILE
 HANDRAILS WITH A CIRCULAR CROSS-SECTION SHALL HAVE AN OUTSIDE DIAMETER OF AT LEAST 1-1/4" AND NOT GREATER THAN 2". IF THE HANDRAIL IS NOT CIRCULAR, IT SHALL HAVE A PERIMETER OF AT LEAST 4" AND NOT GREATER THAN 6-1/4" WITH A MAXIMUM CROSS SECTION OF 2-1/4"

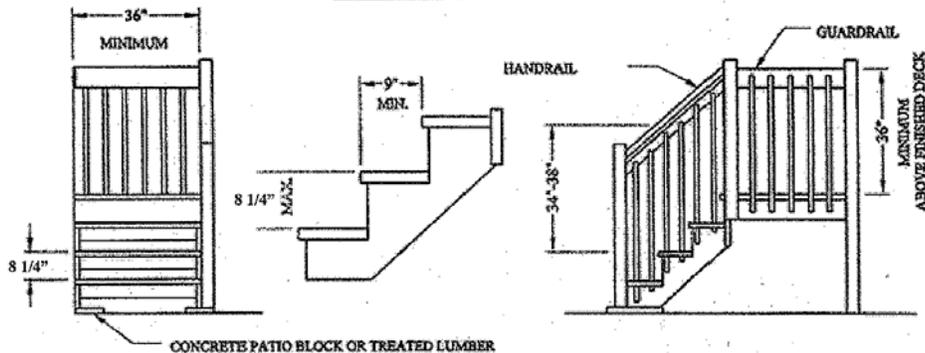


TYPE 2 HANDRAIL PROFILE
 HANDRAILS WITH A PERIMETER GREATER THAN 6-1/4" SHALL PROVIDE A GRASPABLE FINGER RECESS ON BOTH SIDES OF THE PROFILE. THE FINGER RECESS SHALL:
 1. BEGIN WITH A DISTANCE OF 3/4" MEASURED VERTICALLY FROM THE TALLEST PORTION OF THE PROFILE AND
 2. ACHIEVE A DEPTH OF AT LEAST 5/16" WITHIN 7/8" BELOW THE WIDEST PORTION OF THE PROFILE. THE REQUIRED DEPTH SHALL CONTINUE FOR AT LEAST 3/4" TO A LEVEL THAT IS NOT LESS THAN 1-3/4" BELOW THE TALLEST PORTION OF THE PROFILE. THE MINIMUM WIDTH OF THE HANDRAIL ABOVE THE RECESS SHALL BE 1-1/4" TO A MAXIMUM OF 2-3/4". EDGES SHALL HAVE A MINIMUM RADIUS OF .01"

(8) Stairs

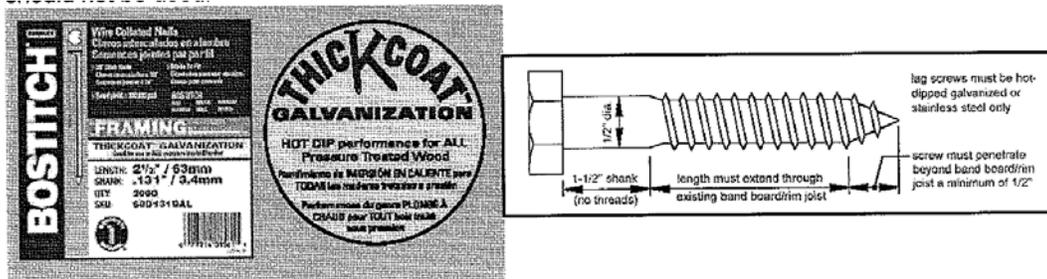
Stairs must be 36" wide, steps are to have a maximum rise of 8 1/4" and a minimum run of 9". Stairs should not have any opening in the risers greater than 4". Stairs must be equal in rise and tread depth to within 3/16" between adjacent stairs and no more than 3/8" difference between all stairs.

Stair requirements



(9) Fasteners

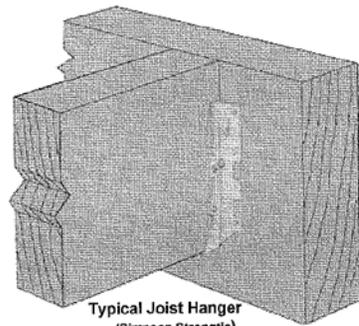
All fasteners must be **hot dipped galvanized, stainless steel** or approved for use with ACQ treated lumber. Nail gun nails that are electro-galvanized will not hold up with ACQ lumber and should not be used.



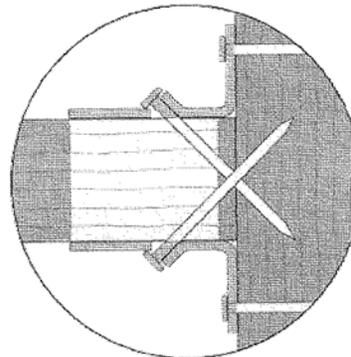
Sample Product Label (Bostitch)

(10) Joist Hangers

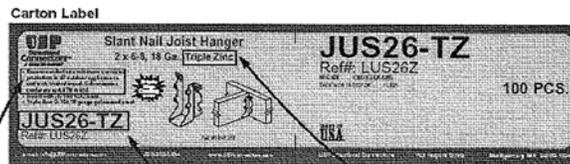
Joists should be attached to ledger and flush girders with joist hangers. **The manufacturer must approve joist hangers for use with ACQ treated lumber.** Simpson designates their hangers for use with ACQ with the “Z-max” trade name, USP (United Steel Products) uses the name “Triple Zinc.” Make sure to follow manufactures instructions on nailing hangers. Special nails are made for joist hangers, roofing nails or deck screws are not acceptable.



Typical Joist Hanger (Simpson Strongtie)

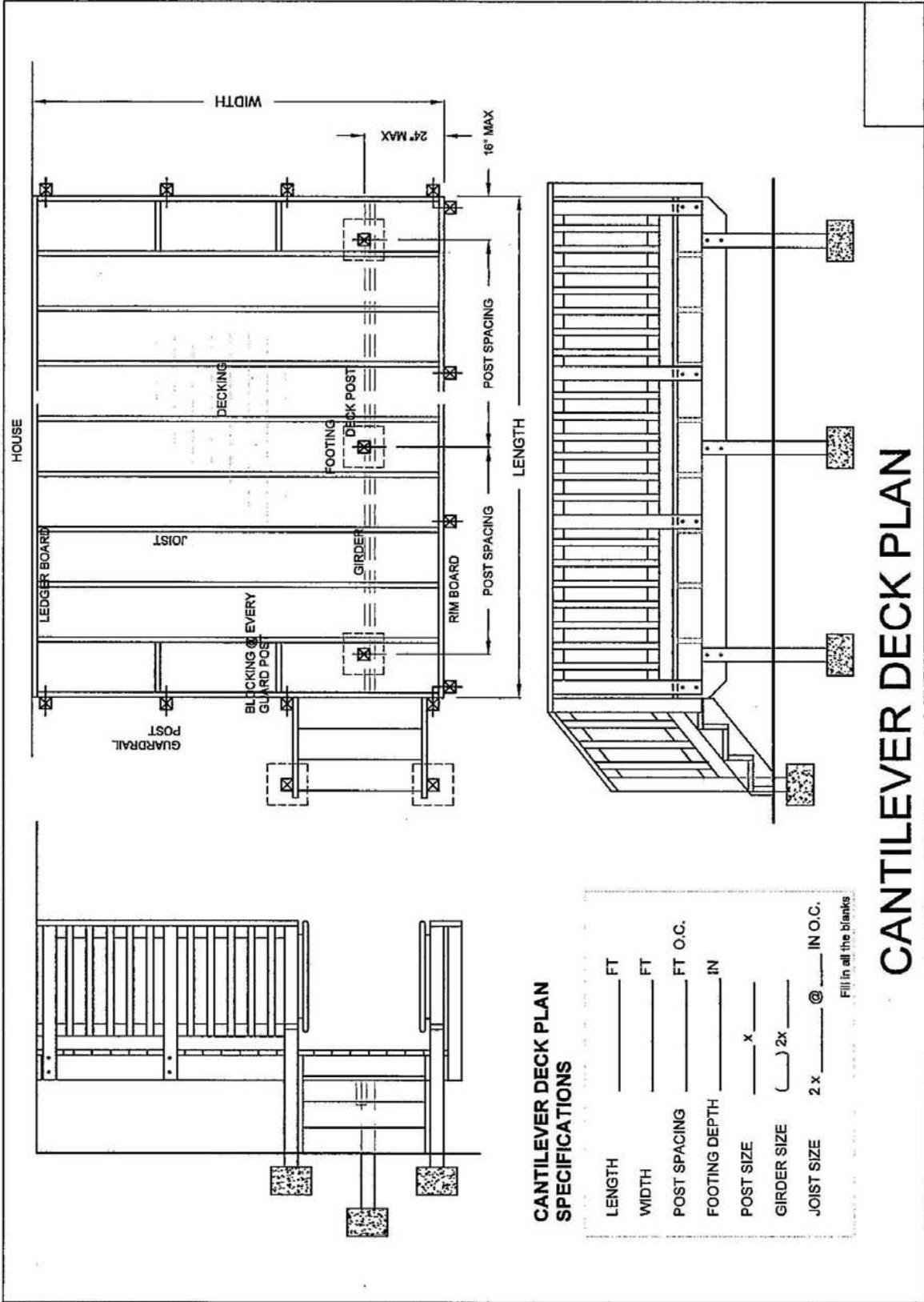


Sample Nailing Details (Simpson Strongtie)



USP recommendation and standards that are met with the Triple Zinc coating. Part number is referenced with a TZ at the end for Triple Zinc products. Triple Zinc is called out after product description.

Sample Joist Hanger Product Labels (Simpson Strongtie & USP)



CANTILEVER DECK PLAN SPECIFICATIONS

LENGTH _____ FT
 WIDTH _____ FT
 POST SPACING _____ FT O.C.
 FOOTING DEPTH _____ IN
 POST SIZE _____ x _____
 GIRDER SIZE () 2x _____
 JOIST SIZE 2 x _____ @ _____ IN O.C.

Fill in all the blanks

CANTILEVER DECK PLAN