

## Porches

A Building Permit is required for construction of all porches, regardless of size or cost. If you are building on top of an existing deck, structural upgrades may be required. Please review all of the application requirements. Once plan approval has been given, and a permit issued, if you decide to make changes to or alter your plan, you must submit changes for approval.

**To obtain a permit for construction, you will need to submit the following 3 items:**

1. Building Permit Application
2. Site Plan (example enclosed)  
Your site plan should indicate the location of the dwelling and the proposed porch location & dimensions.  
Lot irons are required to be located.
3. Construction Plans (one copy)

**Incomplete plans will not be reviewed.** Please allow 7-10 working days for review. You will be contacted by the Building Inspections Division when your plan has been approved.

**NOTE: If you are in a development with a homeowners' association, a letter from the Board of Directors approving construction is required.**

**Your Plan must include all of the following:**

(Use this as your checklist)

- Dimensions of porch: length \_\_\_\_\_, width \_\_\_\_\_
- Floor Layout
- Cross Section
- Footing depth \_\_\_\_\_ size \_\_\_\_\_
- Size of beam/beams
- Size of joists
- Spacing of joists
- Spacing of roof trusses/rafters
- Roof & ledger attachment details

**If your porch has stairs you will need to include the following items:**

- Height of guardrail: \_\_\_\_\_
- Size of openings in guardrail:
  1. Distance between balusters: \_\_\_\_\_
  2. Distance between decking & guardrail bottom: \_\_\_\_\_
- Height of the stair riser: \_\_\_\_\_
- Depth of stair treads: \_\_\_\_\_
- Height of the handrail: \_\_\_\_\_

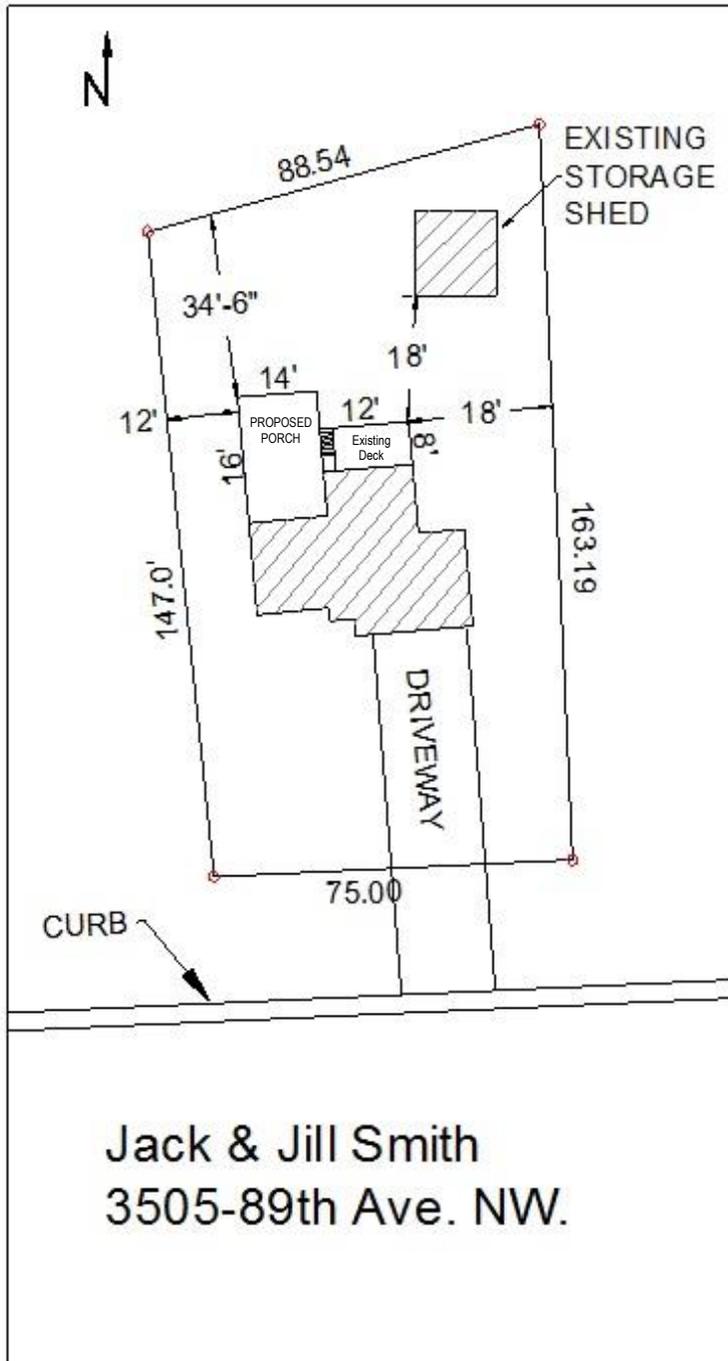
**STAIRWAY LIGHTING: Exterior stairways shall be provided with a means to illuminate the stairs, including the landings and treads.**

# EXAMPLE SITE PLAN

## PROPOSED PORCH LOCATION

USE YOUR CERTIFICATE OF SURVEY TO INDICATE THE LOCATION & DIMENSIONS OF YOUR PROPOSED PORCH.

YOU MAY CONTACT  
THE BUILDING INSPECTION DEPT.  
AT 763-767-6476  
TO REQUEST A COPY OF YOUR LOT SURVEY.  
**NOTE: NOT ALL PROPERTIES HAVE  
A CERTIFICATE OF SURVEY ON FILE.**



Jack & Jill Smith  
3505-89th Ave. NW.

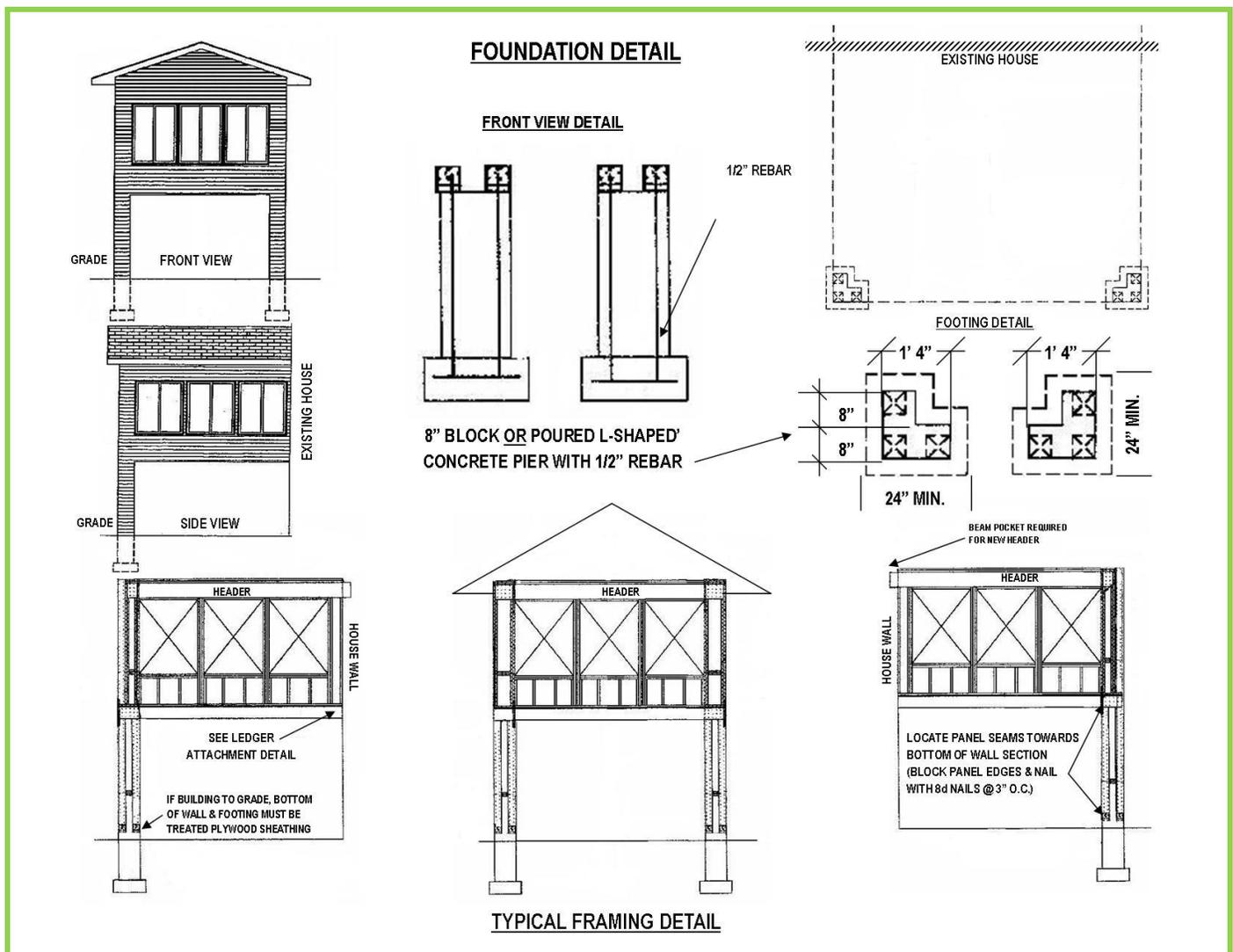
1"=20' SCALE

- SHOW ON PLAN
1. LOT LINES.
  2. LOT DIMENSIONS.
  3. OWNERS NAME.
  4. ADDRESS.
  5. DRIVEWAY.
  6. POND/LAKE/STREAM.
  7. EASEMENTS.
  8. POWER SUPPLY.
  9. DIMENSIONS TO PROPOSED PROJECT AND ALL OTHER STRUCTURES.
  10. SIZE OF NEW STRUCTURE.
  11. DIMENSIONS TO LOT LINES.
  12. DIMENSIONS TO OTHER BLDGS.
  13. INCLUDE YARD SETBACKS AND EASEMENTS ON SIDE, FRONT, AND BACK YARDS.
  14. LABEL ALL ADJACENT STREETS.
  15. INCLUDE SCALE.

NOTE: PLEASE PROVIDE (2) COPIES OF THE PROPOSED SITE PLAN.

IF A COMPLETED SITE PLAN IS NOT PROVIDED, PLAN REVIEW WILL BE DELAYED.

**CALL BEFORE YOU DIG!**  
CONTACT GOPHER STATE ONE-CALL  
FOR UTILITY LOCATIONS  
**651-454-0002**  
OR  
**811 FROM YOUR CELL PHONE**



### **INSPECTIONS:**

You must call for a scheduled appointment time. The approved plan must be on site for all inspections. Typically 8 inspections are required:

- 1. Footings** - Your footings will be **checked** for proper **diameter and depth, flare, a flat surface** at the base, and **no water** in the holes. The location will also be checked to make sure you are not building within the setback/easements.
- 2. Framing** – If your **deck surface** is **4 feet**, or closer, to the ground, you **must pass a framing inspection before the floor material** may be **applied** to the porch floor. Structural integrity and proper attachment of all connectors will be inspected. Connection to the existing house roof/wall will be inspected at this time.
- 3. Pan Flashing** – If applies. A plan flashing inspection will be required for windows/door installation.
- 4. Sheathing** – A sheathing inspection will be required **prior** to house wrap installation
- 5. Ice and Water** – Ice and Water inspection is required **prior** to shingle installation. The Ice & Water is required to extend 24" beyond the inside wall line.
- 6. Insulation/Vapor Retarder** – Insulation shall be R20 in the walls, R30 in the floor, and R49 in the ceiling. A Vapor Retarder is required on the warm side of the insulated exterior walls.
- 7. House Wrap** – Pictures of House Wrap will be accepted at the final inspection.
- 8. Final** – A **final inspection must be completed** to be sure that the porch complies with the current Minnesota State Building Code. Smoke/Co Alarms will be checked at the time of final inspection.

**HEAT SOURCE: If heating, this area shall meet the requirements of the 2015 MN Residential Energy Code.**

# LEDGER ATTACHMENT GUIDE

**TABLE R507.2**  
**FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FER DECK LEDGER & A 2-INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST**

JOIST SPAN	6' and less	6' 1" to 8'	8' 1" to 10'	10' 1" to 12'	12' 1" to 14'	14' 1" to 16'	16' 1" to 18'
Connection details	On-center spacing of fasteners <sup>d,e</sup>						
<sup>1</sup> / <sub>2</sub> inch diameter lag screw with <sup>15</sup> / <sub>32</sub> inch maximum sheathing <sup>a</sup>	30	23	18	15	13	11	10
<sup>1</sup> / <sub>2</sub> inch diameter bolt with <sup>15</sup> / <sub>32</sub> inch maximum sheathing	36	36	34	29	24	21	19
<sup>1</sup> / <sub>2</sub> inch diameter bolt with <sup>15</sup> / <sub>32</sub> inch maximum sheathing and <sup>1</sup> / <sub>2</sub> inch stacked washers <sup>b,h</sup>	36	36	29	24	21	18	16

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

a. The tip of the lag screw shall fully extend beyond the inside face of the band joist.

b. The maximum gap between the face of the ledger board and face of the wall sheathing shall be <sup>1</sup>/<sub>2</sub> inch.

c. Ledgers shall be flashed to prevent water from contacting the house band joist.

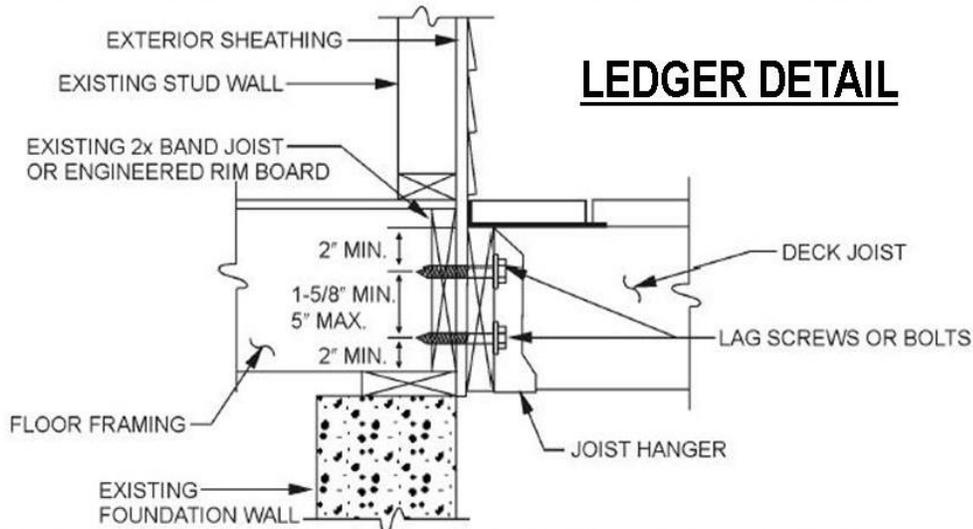
d. Lag screws and bolts shall be staggered in accordance with [Section R507.2.1](#).

e. Deck ledger shall be minimum 2 x 8 pressure-preservative-treated No. 2 grade lumber, or other approved materials as established by standard engineering practice.

f. When solid-sawn pressure-preservative-treated deck ledgers are attached to a minimum 1-inch-thick engineered wood product (structural composite lumber, laminated veneer lumber or wood structural panel band joist), the ledger attachment shall be designed in accordance with accepted engineering practice.

g. A minimum 1 x 9<sup>1</sup>/<sub>2</sub> Douglas Fir laminated veneer lumber rimboard shall be permitted in lieu of the 2-inch nominal band joist.

h. Wood structural panel sheathing, gypsum board sheathing or foam sheathing not exceeding 1 inch in thickness shall be permitted. The maximum distance between the face of the ledger board and the face of the band joist shall be 1 inch.



MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS				
	TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING
Ledger <sup>a</sup>	2 inches <sup>d</sup>	<sup>1</sup> / <sub>4</sub> inch	2 inches <sup>b</sup>	1 <sup>5</sup> / <sub>8</sub> inches <sup>b</sup>
Band Joist <sup>c</sup>	<sup>3</sup> / <sub>4</sub> inch	2 inches	2 inches <sup>b</sup>	1 <sup>5</sup> / <sub>8</sub> inches <sup>b</sup>

For SI: 1 inch = 25.4 mm.

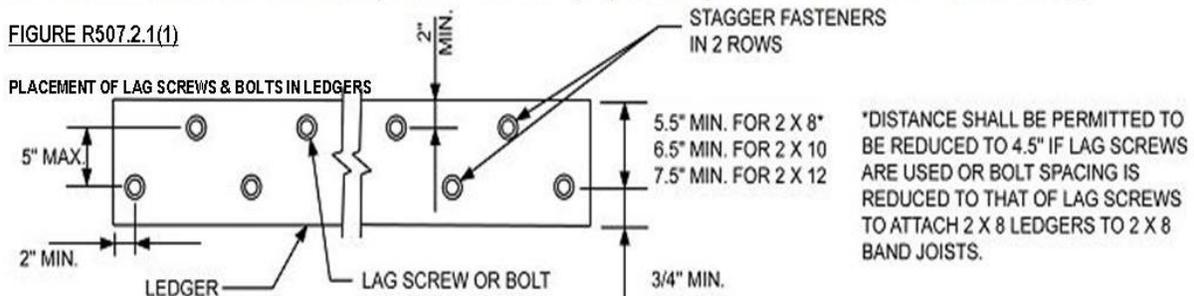
a. Lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with Figure R507.2.1(1).

b. Maximum 5 inches.

c. For engineered rim joists, the manufacturer's recommendations shall govern.

d. The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with Figure R507.2.1(1).

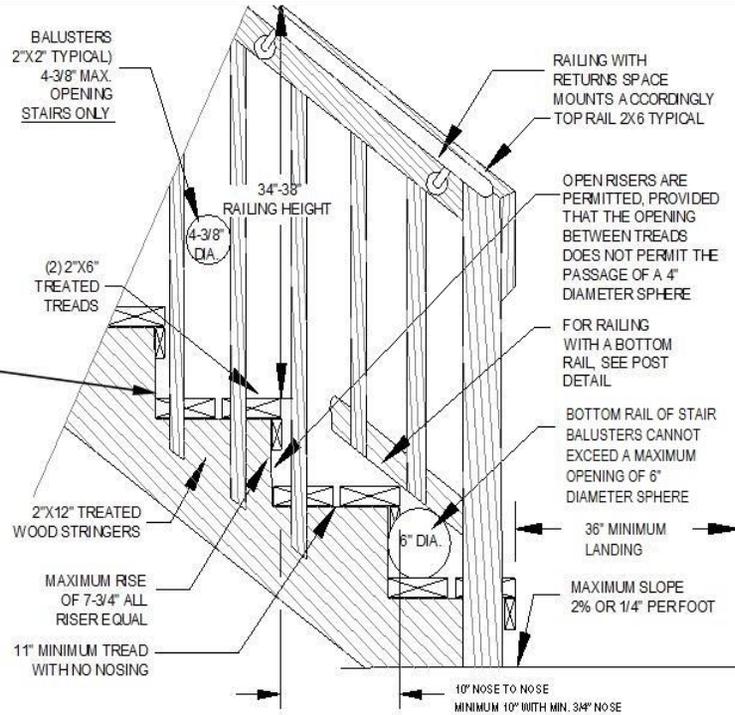
**FIGURE R507.2.1(1)**



## RISERS AND TREADS

THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8"

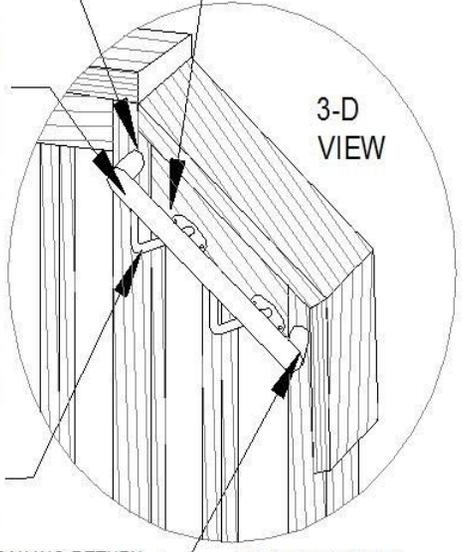
THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8"



PROVIDE RAILING RETURN

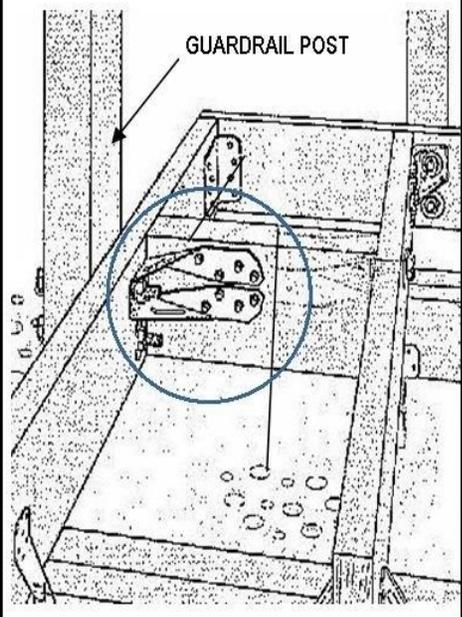
1-1/2" CLEARANCE BETWEEN HANDRAIL AND OPPOSING SURFACE

TYPE 1, 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 DIMENSION OF AT LEAST 4" AND NOT GREATER THAN 6-1/4" WITH A MAXIMUM CROSS SECTION DIAMETER OF 2-1/4"



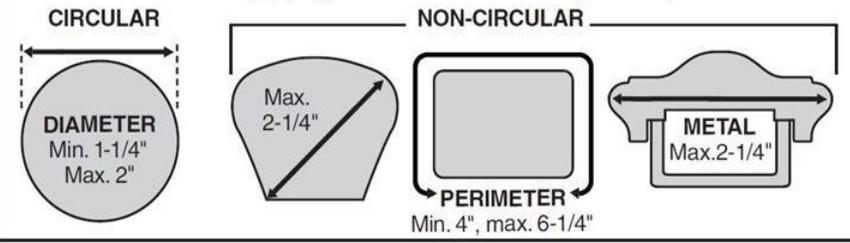
RAILING DETAIL

## POST TO JOIST CONNECTION

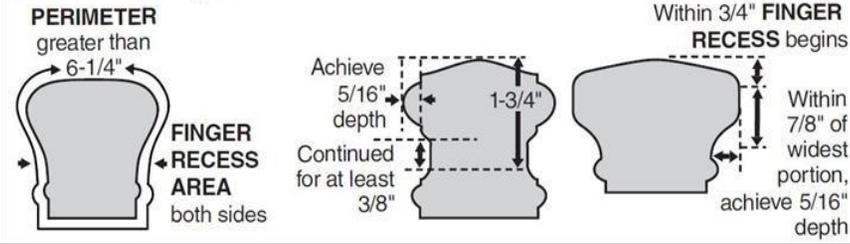


## Handrail details

Other shapes may be acceptable if they provide equivalent gripping service. Contact Building and Inspection.



## Handrail samples



POST DETAIL

HANDRAILS ARE TO BE FASTENED PER THE MANUFACTURER'S RECOMMENDATION