Uncovered Deck Project Checklist

A **Project Checklist** for Homeowners & Contractors

The majority of building permit applications are processed with little delay. The submitted documents will help determine if the project is in compliance with building safety codes, zoning ordinances and other applicable laws.

Uncovered Decks Requirements

Directions:

1. Read through this **Project Checklist.**
2. Check with HOA first to identify restrictions or requirements for your neighborhood.
    a. HOA may require additional permitting for the association prior to applying with the Town.
    b. Call 811 for utility locates before digging.

3. Complete **SAFEbuilt Uncovered Deck & Porches Building Guide** documents for your project.
4. Register on our online permitting software Community Connect.
    a. *Link located on Homeowners Page on the Town of Wellington website.*
        i. *Residents register as a Community Member for free.*
        ii. *Contractors must be licensed with the Town prior to accessing Community Connect account.*
5. Complete Online Application in Community Connect.
    a. Permit Type **'Deck'** Category *'**Residential Alteration**'*
6. Upload **SAFEbuilt Uncovered Deck & Porches Building Guide Page 5 and additional documents** to online application & submit.
    a. Decks for hot tubs, spas, and conditions such as attachment to cantilevers or veneers will require engineered design plans.

Required Documents to upload into Online Application:

- ☐ Site or Plot Plan - 1.1 for Example Site Plan
- ☐ Plan View – 1.2 for Example Plan View drawing
- ☐ Complete **SAFEbuilt Uncovered Deck & Porches Building Guide Page 5** – Construction Details
- ☐ Decks for hot tubs, spas, and conditions such as attachment to cantilevers or veneers will require engineered design plans.

Inspections:

A typical deck project will require the following inspections:

1. Setbacks
2. Footings / Piers / Caissons
3. Frame/Rough Inspection:
    This inspection is made after all framing, bracing, and fasteners are in place.
    If installing electrical components, a rough electrical inspection will be required.
4. Final Building Inspection:
    Scheduled after the structure is completed including all stairs, grabrails, and guardrails.

Permits are valid for 180 days.

Local Design Criteria:

The Town of Wellington has adopted the 2018 International Residential Code with local amendments. All items below are reflected and noted in the adoption.

Table R301.2(1) Climatic and Geographic Design Criteria											
Ground Snow Load	Wind Design		Seismic Design Category	Subject to Damage From			Winter Design Temp	Ice Barrier Required	Flood Hazard	Air Freezing Index	Mean Annual Temp
	Speed (MPH)	Topographic Effects		Wintering	Frost Depth	Termite				1000	45 Degrees F
30 PSF	115	NO	B	Severe	30in	Slight to Moderate	1	Yes	*		

Drafting a Detailed Site Plan:

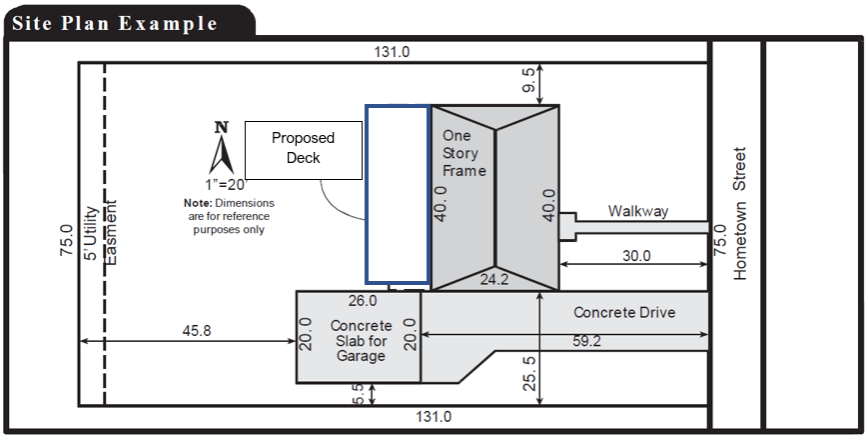
This will need to be uploaded to your Permit Application when applying on Community Connect.

A site plan is a detailed drawing of your property, also known as a survey of your land. These are usually drawn by a land surveyor. The site plan will show the dimensions of your project and its relationship to existing setbacks, easements, utilities, other structures on the property, and distance to your property lines. If your project will require moving any utilities (gas, water, sewer/septic, electric, etc.), show where those meters will be relocated.

Drawing Must include:

- Street Name
- Directional Arrow orientation of parcel.
- Existing structures on property. e.g., existing shed. fences.
- Property Lines
- Primary Residential Structure
- Existing concrete slabs
- Risers / Stairs Details
- Larimer County Health Department requires approval for deck proposed over septic system.

Figure 1.1 – Example Site Plan



Setback Requirements:

Setback Requirements adopted in the 2022 Land Use Code Effective April 25th, 2022. Refer to the towns Zoning Map located on the Towns Planning Webpage to determine your Zone.

Figure 1.2- Town of Wellington Setback Chart

Deck and Patio Cover						
Zone	A	R-1	R-2	R-3	R-4	MH
Minimum Front yard	50 FT	50FT.	20 FT.	15 FT.	15 FT.	10 FT.
Minimum Side yard	20 FT.	20 FT.	7 FT.	7 FT.	5 FT.	5 FT.
Minimum Rear yard	10 FT.	10 FT.	10 FT.	10 FT.	10 FT.	10 FT.

Construction Details:

1. Unless noted otherwise, all lumber shall be naturally durable wood, grade #2 or better or shall be pressure treated.

2. All screws or nails shall be hot dipped galvanized or stainless steel.
3. All connectors shall use nails or approved screws for attachment.
4. Stairways shall be not less than 36” in width.
5. Vertical and lateral supports per **R507.8 (Definition)** and **Figure R507.9.2 (1 & 2)**

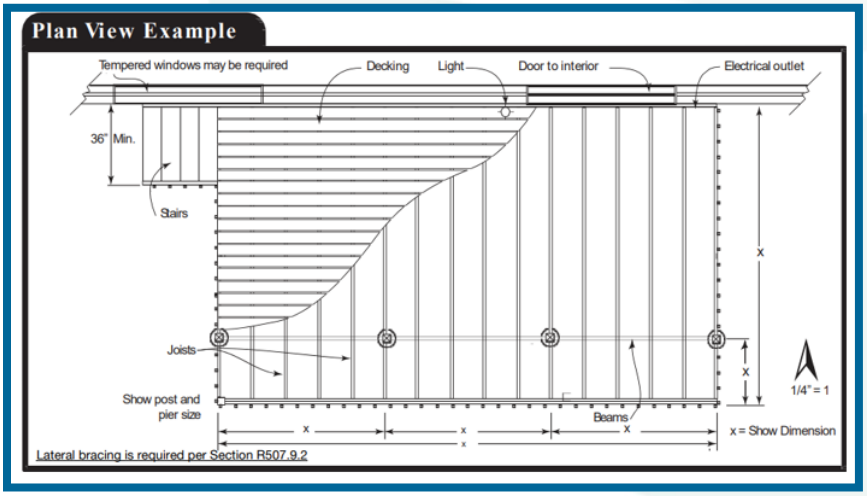
List Measurements & Dimensional sizes:

- Deck Square Footage
- Window Type:
    - Window Wells
- Doorway – Exit or egress from the existing building.
- Post & Beam Connections.
- Footing / caisson / pier sizes dimensions & depth.
- Column dimensions
- Size, lengths and spans of joist, beams, decking, footing, and material type.

Drafting a Detailed Example Plan View:

Figure 1.3 – Example Plan View

This will need to be uploaded to your Permit Application when applying on Community Connect.



Construction Detail – Footing Requirements

- Holes must be at a minimum 30” below grade to accommodate local frost line.
- Diameter to meet footing size per **Figure 1.5 Table R507.3.1** shown below.
- Call for an inspection prior to pouring concrete.
- A minimum ½” anchor bolt must be embedded 7” into concrete pier or alternate approved base plate assembly.

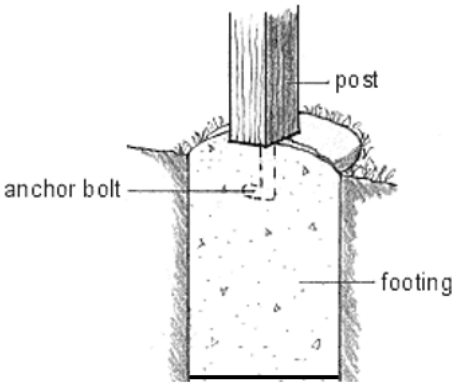


Figure 1.4 – Caisson Diagram

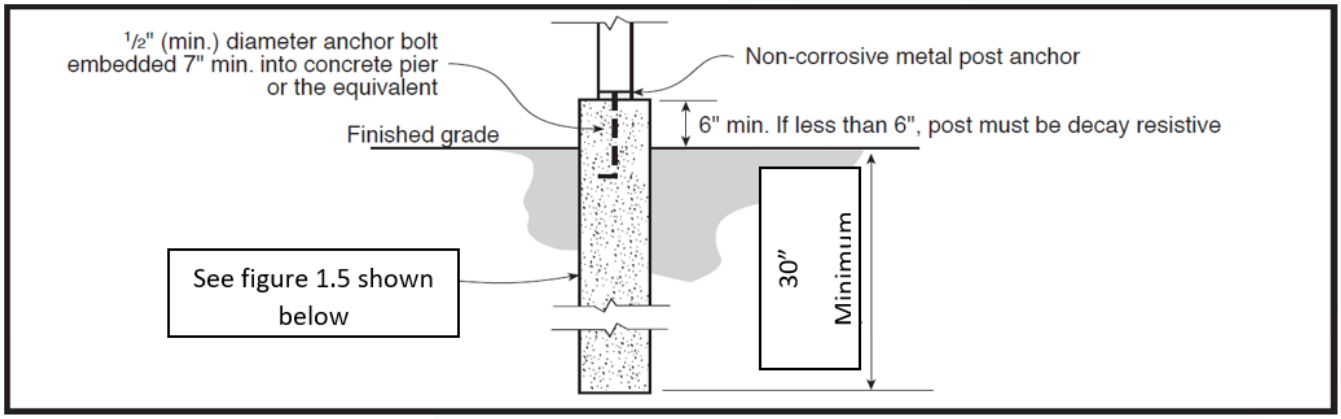


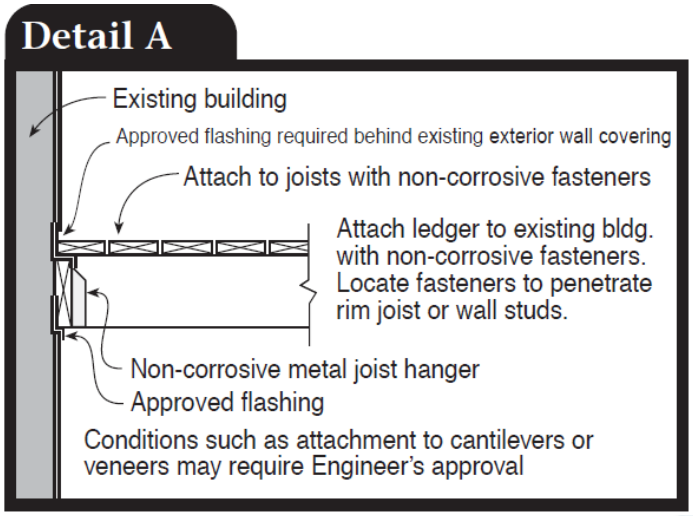
Figure 1.5 - IRC Table R507.3.1 Caisson Sizing

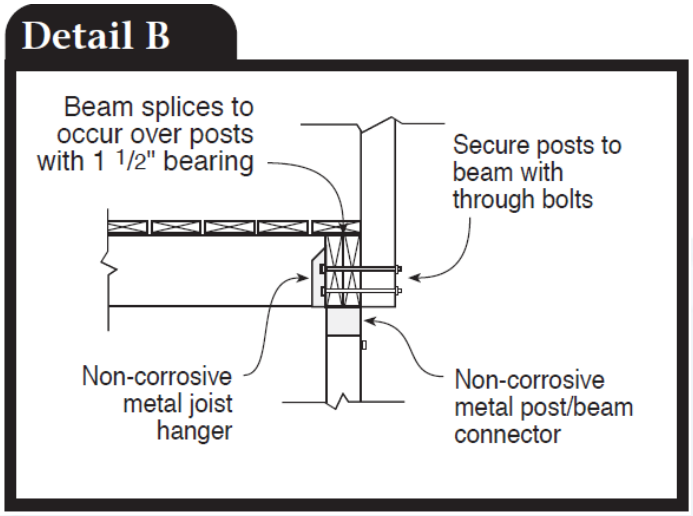
Table R507.3.1

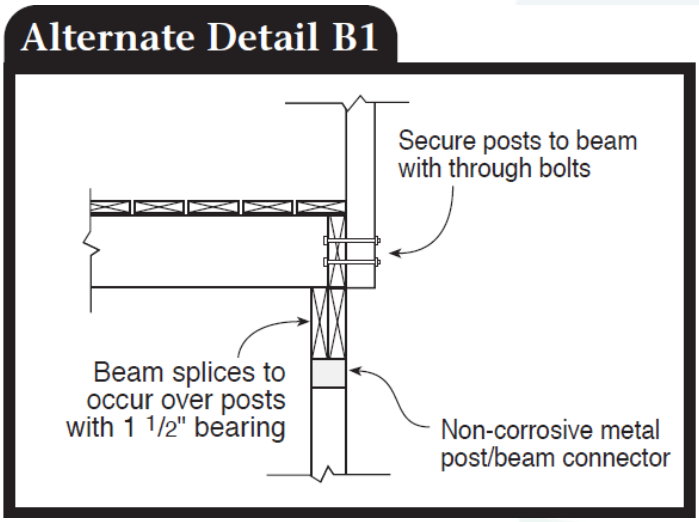
LIVE OR GROUND SNOW LOAD[b] (psf)	TRIBUTARY AREA (sq. ft.)	1500[a]		
		Side of a square footing (inches)	Diameter of a round footing (inches)	Thickness (inches)
40	20	12	14	6
	40	14	16	6
	60	17	19	6
	80	20	22	7
	100	22	25	8
	120	24	27	9
	140	26	29	10
	160	28	31	11

Construction Details Beam/ Post Connections:

Figure 1.7- Connections







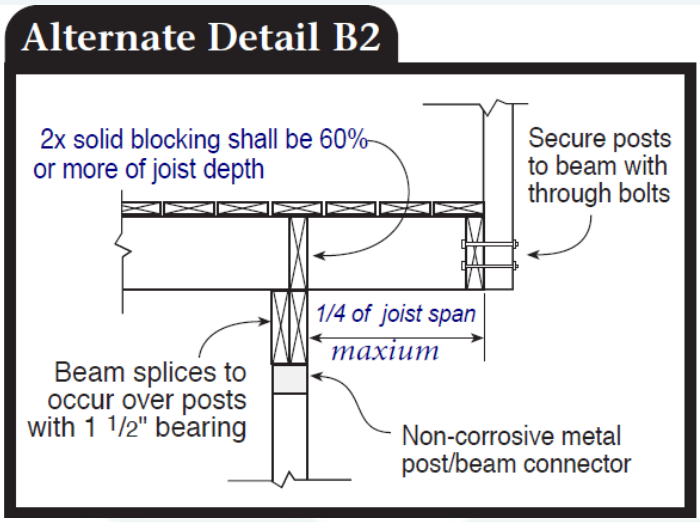


Table 4 - Wood Post

	Deck Wood Post	Live Load 40 psf		
Deck post size	4x4	4x6	6x6	8x8
Maximum height	6'-9"	8'	14'	14'

Construction Details Ledgers:

Figure 1.8 - R507.9.1.3 (2)

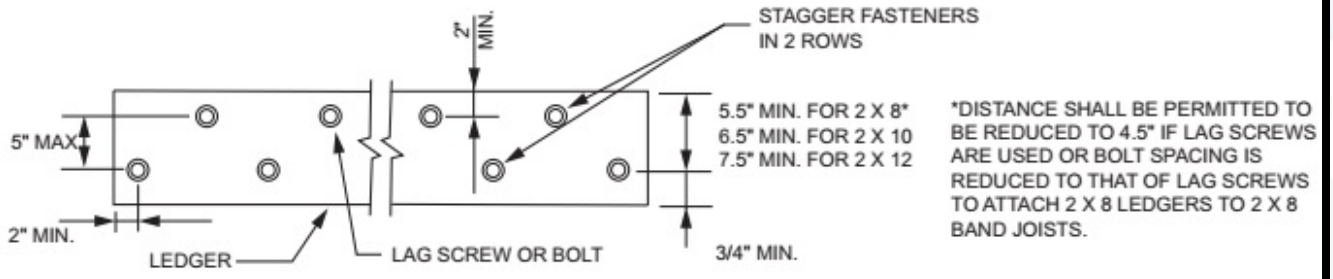
TABLE R507.9.1.3(2)

PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS

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

For SI: 1 inch = 25.4 mm.

Figure 1.9 - R507.9 (2)



For SI: 1 inch = 25.4 mm.

- The maximum gap between the face of the ledger board and face of the house band joist shall be 1/2-inch (13mm).
- Ledgers shall be flashed to prevent water from contacting the house band joist.
- Bolts shall be staggered as depicted above.
- Conditions such as attachment to cantilevers or veneers will require engineer stamped approval at plan submittal.

Construction Details Lateral Loads

Definition - R507.8

Where 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 using toenails or nails subject to withdrawal. For decks with cantilevered framing members, connection to exterior walls or other framing members shall be designed and constructed to resist uplift resulting from the full live load specified in Table R301.5 acting on the cantilevered portion of the deck. Where positive connection to the primary building structure cannot be verified during inspection, decks shall be self-supporting.

Figure 1.10- R507.9.2 (1)

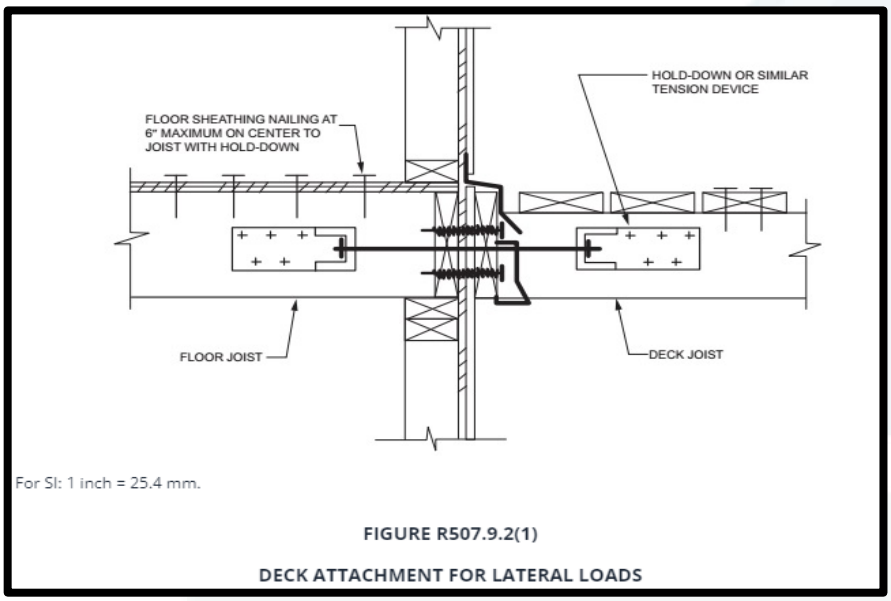


FIGURE R507.9.2(1)

DECK ATTACHMENT FOR LATERAL LOADS

Figure 1.11- R507.9.2 (2)

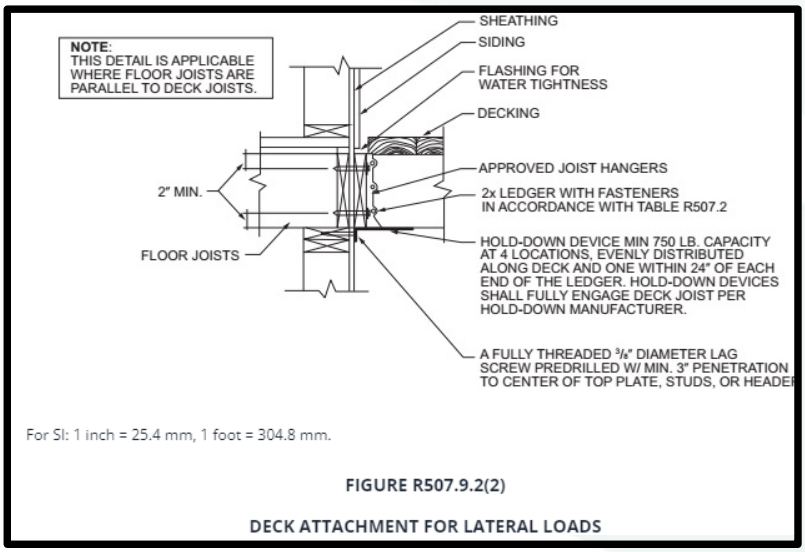


FIGURE R507.9.2(2)

DECK ATTACHMENT FOR LATERAL LOADS

TOWN OF WELLINGTON

Construction Details Deck Joist Spans:

Figure 1.12 – Beam Sizing & Joist Spans - 2018 International Residential Code

Table 3 - Wood Beam simple span

Maximum Live Load or Ground Snow Load 40psf, Maximum Dead Load 10psf deflection L/360 Main span; L/180 cantilever

WOOD SPECIES grade #2 or better	SIZE	DECK JOIST SPAN (ft-in) LESS THAN OR EQUAL TO:						
		6	8	10	12	14	16	18
Southern pine	(2)-2x8	8-9	7-7	6-9	6-2	5-9	5-4	5-0
	(2)-2x10	10-4	9-0	8-0	7-4	6-9	6-4	6-0
	(2)-2x12	12-2	10-7	9-5	8-7	8-0	7-6	7-0
	(3)-2x8	10-10	9-8	8-6	7-9	7-2	6-8	6-4
	(3)-2x10	13-0	11-3	10-0	9-2	8-6	7-11	7-6
	(3)-2x12	15-3	13-3	11-10	10-9	10-0	9-4	8-10
Douglas fir-larch, hem-fir, spruce-pine-fir,	3 x 8 or (2)- 2 x 8	6-10	5-11	5-4	4-10	4-6	4-1	3-8
	3 x 10 or (2)- 2 x 10	8-4	7-5	6-6	5-11	5-6	5-1	4-8
	3 x 12 or (2)- 2 x 12	9-8	8-5	7-6	6-10	6-4	5-11	5-7
	4x6	6-5	5-6	4-11	4-6	4-2	3-11	3-5
	4x8	8-5	7-3	6-6	5-11	5-6	5-2	4-10
	4x10	9-11	8-7	7-8	7-0	6-6	6-1	5-8
	4 x12	11-5	9-11	8-10	8-1	7-6	7-0	6-7
	(3)-2x8	9-8	8-6	7-7	6-11	6-5	6-0	5-8
	(3)-2x10	12-0	10-5	9-4	8-6	7-10	7-4	6-11
	(3)-2x12	13-11	12-1	10-9	9-10	9-1	8-6	8- 1

Figure 1.13 - Typical Deck Joist Span

FIGURE R507.6

TYPICAL DECK JOIST SPANS
TABLE R507.6

DECK JOIST SPANS FOR COMMON LUMBER SPECIES (ft. - in.)

SPECIES[a]	SIZE	ALLOWABLE JOIST SPAN[b] SPACING OF DECK JOISTS (inches)			MAXIMUM CANTILEVER[c, f] SPACING OF DECK JOISTS WITH CANTILEVERS[c] (inches)		
		12	16	24	12	16	24
Southern pine	2 × 6	9-11	9-0	7-7	1-3	1-4	1-6
	2 × 8	13-1	11-10	9-8	2-1	2-3	2-5
	2 × 10	16-2	14-0	11-5	3-4	3-6	2-10
	2 × 12	18-0	16-6	13-6	4-6	4-2	3-4
Douglas fir-larch[d], hem-fir[d] spruce-pine-fir[d],	2 × 6	9-6	8-8	7-2	1-2	1-3	1-5
	2 × 8	12-6	11-1	9-1	1-11	2-1	2-3
	2 × 10	15-8	13-7	11-1	3-1	3-5	2-9
	2 × 12	18-0	15-9	12-10	4-6	3-11	3-3
Redwood, western cedars, ponderosa pine[e], red pine[e]	2 × 6	8-10	8-0	7-0	1-0	1-1	1-2
	2 × 8	11-8	10-7	8-8	1-8	1-10	2-0
	2 × 10	14-11	13-0	10-7	2-8	2-10	2-8
	2 × 12	17-5	15-1	12-4	3-10	3-9	3-1

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa, 1 pound = 0.454 kg.

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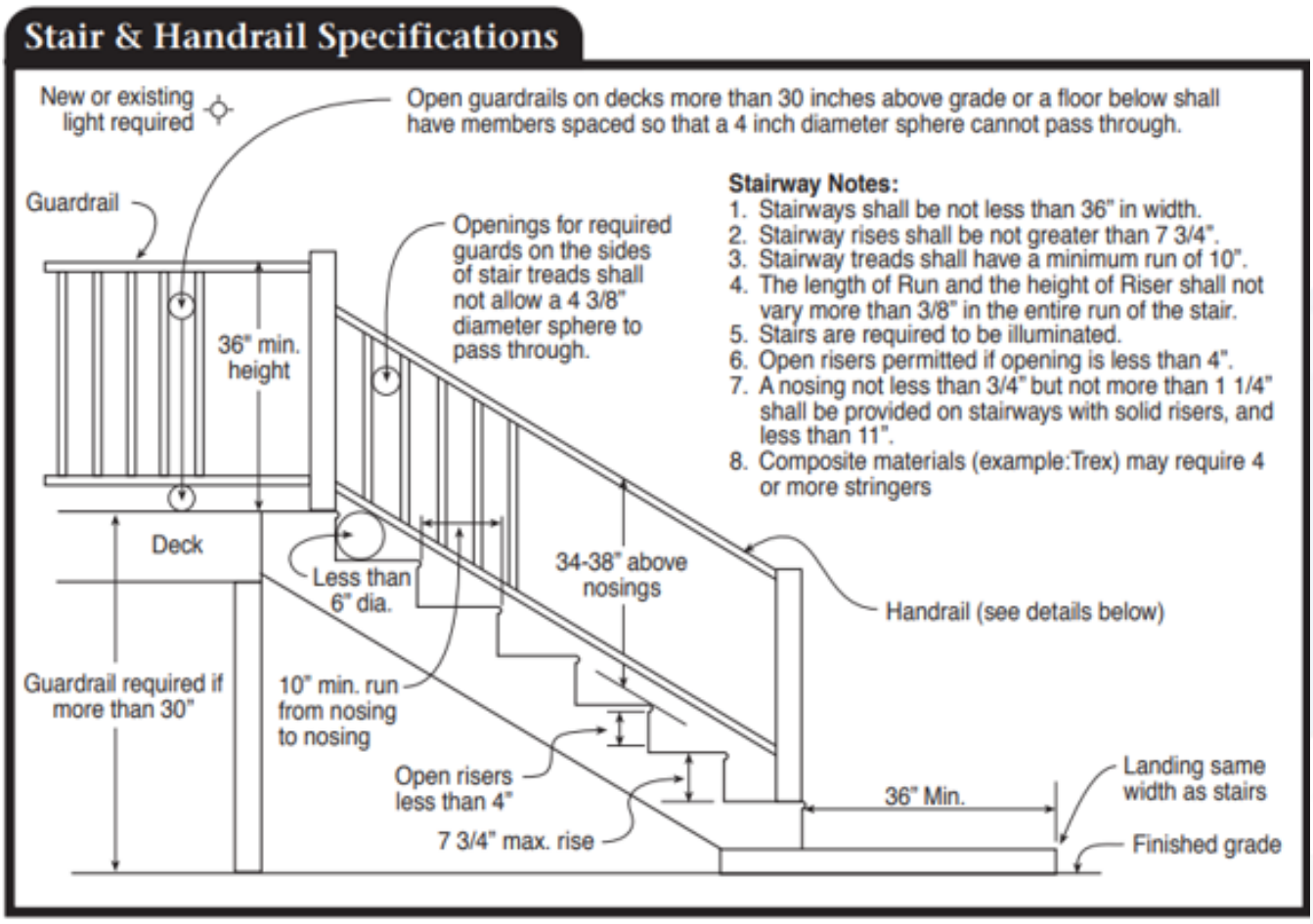
Construction Detail – Guardrail & Handrail Requirements

Figure 1.14 - Example Stair & Handrail Detail



Handrail Notes:

1. Handrails shall be continuous on at least one side of stairs with 4 or more risers.
2. Top of the handrails shall be placed not less than 34 inches nor more than 38 inches above stair nosings.
3. The handgrip portion of handrails shall be not less than 1-1/4 inches nor more than 2 1/4 inches in cross section for non circular handrails
4. Handrails shall be placed not less than 1-1/2 inches from any wall or other surface.
5. Handrails to be returned to wall, post or safety terminal (per 311.7.8.4 IRC)

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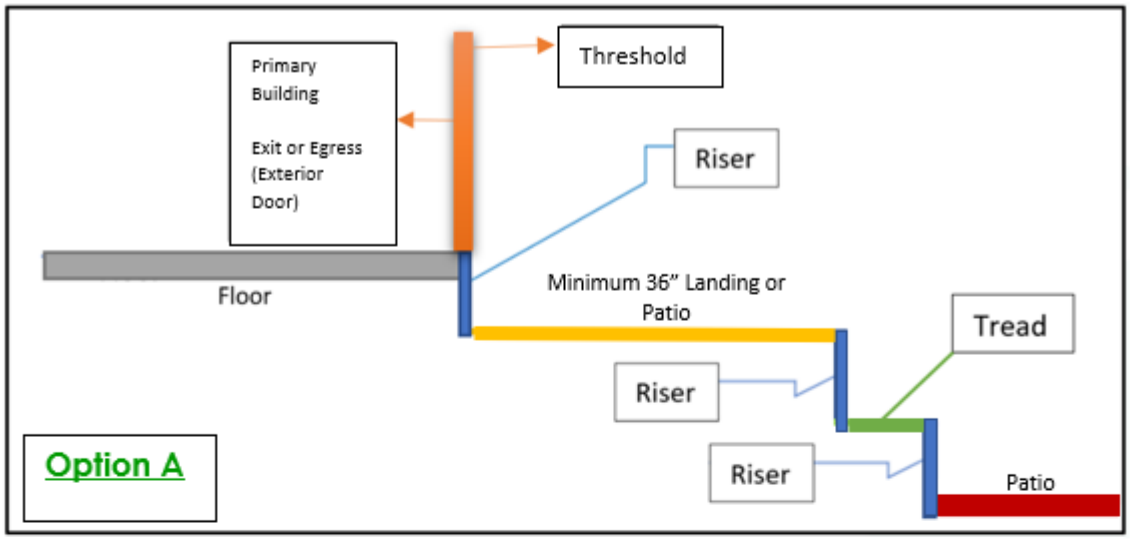
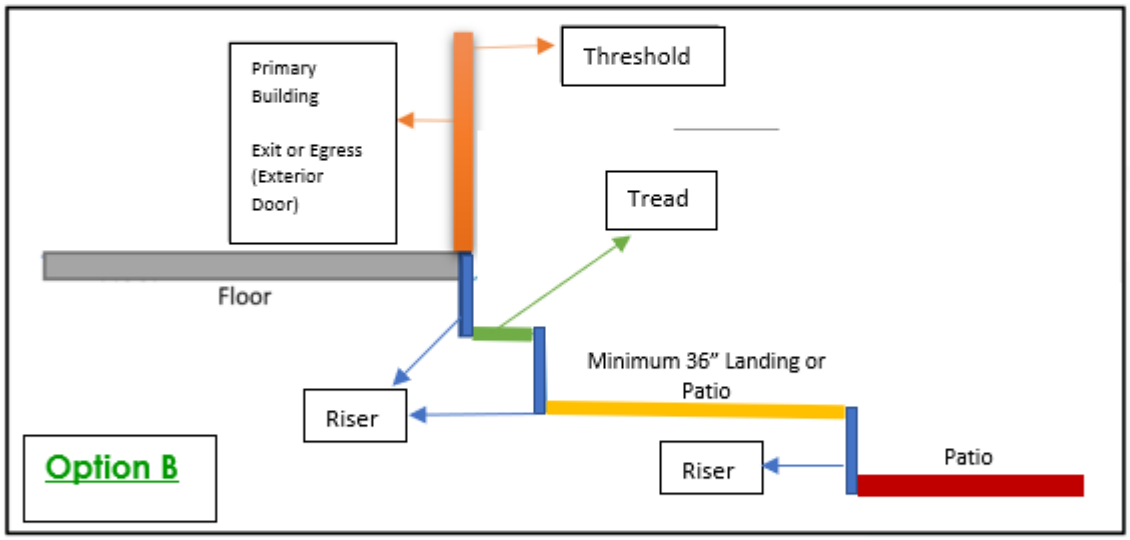
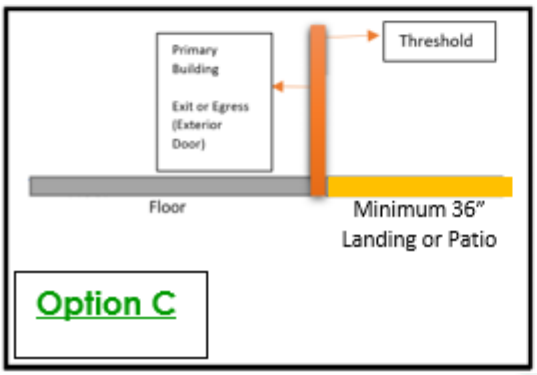
Construction Detail

Figure 1.15- Example Riser/ Tread Example Diagram







Riser: The vertical components of a step design. (Maximum 7 ¾".)

- Maximum 1 riser at front egress door.
- Maximum 2 risers from threshold to landing at exterior doors.

Tread: The horizontal component of a step or stair.

- Minimum tread 10" including a nosing ¾" – 1" ¼ or 11" without a nosing.

Why do I need a permit?

Protects property values
Your home is typically your largest investment. If your construction project does not comply with the building codes, your investment could lose value. If others in your neighborhood make unsafe or substandard changes to their homes, it could lower the resale values for the entire community.

Saves Money
Homeowners insurance policies may not pay for damages caused by work done without permits and inspections.

Improves resale
Listing associations require owners to disclose any home improvements or repairs and if permits were obtained. Many financial institutions will not finance a purchase without proof of a final inspection. If you decide to sell a home or building that has had modifications without a permit, you may be required to remove the addition, leave it unoccupied or perform costly repairs.

Improves safety
Your permit allows the building department to inspect for potential hazards and un-safe construction. By ensuring your project meets the minimum building code standards of safety, the building department can reduce the risk of fire, structural collapse and other issues that might result in costly repairs, injuries and even death. Inspections complement the contractor's experience and act as a system of checks and balances resulting in a safe project.

It's the Law
Permits are required by Ordinance. Work without a permit may be subject to removal or other costly remedies.

Tips on hiring contractors

- ✓ Get at least 3 bids.
- ✓ Get 3 references and ask to see a project.
- ✓ Get it in writing, but before you sign the contract, make sure you completely understand. Do not make final payment until you have received a Certificate of Completion (CC) or until final inspections have passed
- ✓ Have the contractor apply for the required permits.