



## **A Conventional Construction Guide to Covered and Uncovered Projections from One and Two Family Dwellings**

**The Purpose of this policy is to assist the development community and general public in obtaining a Building Permit for Covered and Uncovered projections from Single Family Dwellings. The requirements specified in this policy have been determined by the Tuolumne County Building and Safety Division to meet the intent of the Structural and Life Safety provisions of the California Code of Regulations Title 24.**

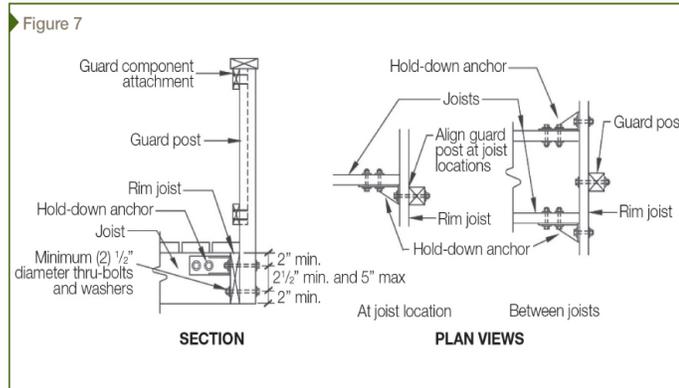
The following construction methods will be allowed without Justification by Engineering Design. The following limitations shall apply to this policy:

- This policy applies to floor and roof projections that are justified to be located in Seismic Design Category “C” only.
- This policy is valid up to a maximum ground snow load of #70 provided all aspects and limitations specified in this policy are followed.
- This policy does not remove or negate the requirement for complete building plans and details, drawn to scale, to be provided for review. The typical policy for building permit application, plan review and inner Divisional review will still apply.
- This policy does not apply to Townhouse type dwelling units.
- All structural lumber shall be Douglas Fir #2 and 2” nominal in dimension as a minimum.
- The “Prescriptive Residential Deck Construction Guide” based on the 2012 International Residential Code. (© 2015 American Wood Council) is an allowed method of compliance. *\*All of the specific construction methods, fasteners, member heights, spans etc. identified in this policy shall be considered as an amendment to the noted “Prescriptive Residential Deck Construction Guide” and shall be a specific requirement of compliance.*
- This policy is limited to single story decks and/or single story decks with a roof or a roof projection only.
- The Column heights in all conditions shall be measured to the top of the floor projection and/or the bottom of the bearing portion of the roof rafter. Structural columns shall be limited to the following:
  - 8’ maximum for 4”x4” column

- 14' maximum for 6"x6" column

\*All columns using let-in girder beams shall be 6"x6" minimum regardless of height.

- Guard rail supports/columns shall not exceed 6' o.c. spacing. See the following detail for appropriate attachment:



- Ledgers shall be a minimum Pressure Treated 2"x8" nominal member and attached in the following manner:

- Bolts shall be 1/2" minimum bolts attached per the following Table:

**TABLE R502.2.2.1**  
**FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER**  
**AND A 2-INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST<sup>c,f,g</sup>**  
 (Deck Live Load = 40 psf, Deck Dead Load = 10 psf)

Joist Span	6'-0" and Less	6'-1" to 8'-0"	8'-1" to 10'-0"	10'-1" to 12'-0"	12'-1" to 14'-0"	14'-1" to 16'-0"	16'-1" to 18'-0"
	On-Center Spacing of Fasteners <sup>d,e</sup>						
1/2" diameter lag screw with 15/32" maximum sheathing <sup>a</sup>	30	23	18	15	13	11	10
1/2" diameter bolt with 15/32" maximum sheathing	36	36	34	29	24	21	19
1/2" diameter bolt with 15/32" maximum sheathing and 1/2" stacked washers <sup>b,h</sup>	36	36	29	24	21	18	16

- OR Simpson® SDS or equivalent screws shall be installed per the following Table:

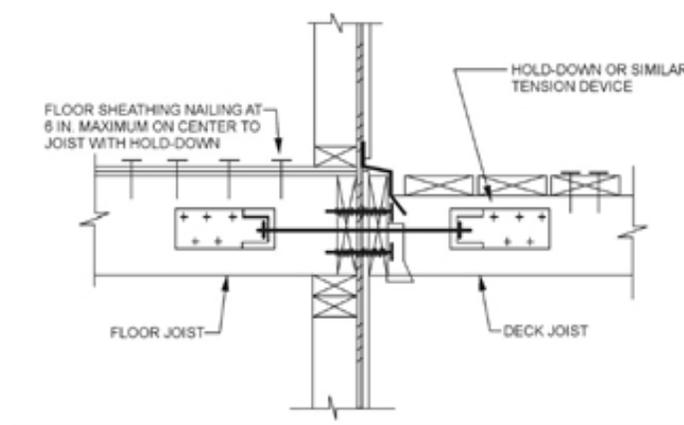
Loading Condition	Ledger Nominal Size (in.)	SDS Screw Length (in.)	Band Joist Material and Size	Maximum Deck Joist Span						
				Up to 6 ft.	Up to 8 ft.	Up to 10 ft.	Up to 12 ft.	Up to 14 ft.	Up to 16 ft.	Up to 18 ft.
				Maximum On-Center Spacing of Fasteners (in.)						
40 psf Live 10 psf Dead	2x	3½	2" Nominal Sawn Lumber	13"	10"	8"	6"	5"	5"	4"
	2-2x3	5		12"	9"	7"	6"	5"	4"	4"
	2x	3½	1" Min. Oriented Strand Board (OSB) Rim Board	15"	11"	9"	7"	6"	5"	5"
	2x	3½	1½" Min. Oriented Strand Board (OSB) Rim Board or 1¼" Min. Structural Composite Lumber	15"	11"	9"	7"	6"	5"	5"
60 psf Live 10 psf Dead	2x	3½	2" Nominal Sawn Lumber	9"	7"	5"	4"	4"	3"	3"
	2-2x3	5		8"	6"	5"	4"	3"	3"	2"
	2x	3½	1" Min. Oriented Strand Board (OSB) Rim Board	10"	8"	6"	5"	4"	4"	3"
	2x	3½	1½" Min. Oriented Strand Board (OSB) Rim Board or 1¼" Min. Structural Composite Lumber	10"	8"	6"	5"	4"	4"	3"

- Girder, Header and Rafter sizes and spans shall meet the requirements of either of the following:
  - All member sizes and spans are in compliance with CRC Chapter 5 and 8 respectively.
  - As an alternate to the laminated or solid sawn deck floor girder requirements of CRC Chapter 5 the following shall be allowed:
    - A minimum 2"x10" Spandrel Beam with a Maximum span of 6' shall be allowed if placed on both sides of the structural column and attached in the following manner:
      - A minimum of (2) ½" through bolts per structural attachment with washers on each end. The bolts shall be centered in the structural column.
    - Splices in the Spandrel member shall occur over a Column size of 6"x6" minimum.

**Limitations for Uncovered Decks/Floor Projections:**

- A maximum projection of 18' from a structural building wall is allowed with a Ground Snow Load up to #50.
- Knee braces shall be installed at 45° angles shall be installed on both sides of all structural columns for projections exceeding 10'. Knee bracing requirements shall be as follows:
  - Knee Braces shall be of the same dimension as the column being attached to.
  - Knee Braces shall be attached with (1) ½" Lag bolt at each end of the Knee Brace with a minimum 2" penetration into the supporting member OR (2) SDS or equivalent screws at each end of the Knee Brace with a minimum 2" into the supporting member.
- A maximum projection of 10' from a structural building wall is allowed with a Ground Snow Load up to #70. All projections with a Ground Snow Load between 50# and 70# shall have Knee Braces installed regardless of the projection from a structural wall.

- A lateral hold-down attachment shall be installed within 4' of each end of a floor projection that is unrestrained by attachment to another portion of the main structure. See example:



### **Covered Deck or Roof Projection:**

- A maximum projection of 10' from a structural building wall is allowed with a Ground Snow Load up to #70.
- Knee braces installed at 45° angles shall be installed on both sides of all structural columns of all roof projections.
- The ledger attachments identified in the Uncovered Decks/Floor Projections portion of this policy shall be used for shed/sloping type roof projections from a structural building wall.
- Gable type roof projections shall be constructed and attached to the primary structure as required by the respective section of the CRC.

\*\*Please note that all projects of this nature that are determined to be located in Seismic Design Category "D" shall be limited to a maximum projection of 6' per CRC section 301.2.2.2.5 exception 2.

All construction methods, procedures, materials, fasteners and specifications not specifically identified in this policy shall be as required by the current and governing edition of the California Residential Code.

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