PLANNING AND DEVELOPMENT SERVICES
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Planning & Development Services
Building Division Policy

Title: Residential Patio Cover Construction Policy

Code Name: *International Residential Code* (IRC)

Code Section: R301.1.3 Engineered design.

Code Language: R301.1.3 Engineered design. Where a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the *International Building Code* is permitted for buildings and structures, and parts thereof, included in the scope of this code.

Scope of Policy: To create pre-engineered prescriptive provisions as an option for construction of certain wood-framed patio covers and pergolas attached to single-family dwellings and their accessory structures, without the requirement for a specific engineered design.

Policy: Unless otherwise required by the building official, an application for a permit to build a wood-framed patio cover or pergola attached to a single-family residential home or accessory structure, will not require structural specific engineering if it meets all of the following applicable provisions:

1. The longest side of the patio structure is fully attached to a home or accessory structure.
2. The span from home or accessory structure-to-post and post-to-post is 12’ or less and any overhangs are 2’ or less.
3. The height of the patio structure at the column line is 10’ or less and the roof pitch is less than 40 degrees (10/12).
4. All footings are installed to frost depth and are sized per the pre-engineered drawings at a minimum, according to local design loads.
5. All framing materials are per the attached pre-engineered drawings or equivalent.
6. All construction connections are per the attached pre-engineered drawings or equivalent.

7. Lateral forces are resisted by wood structural roof-sheathing installed as required by current IRC and/or by knee-braces installed per the attached pre-engineered drawings.
8. Reference the attached pre-engineered drawings with all other prescriptive provisions noted.

Intent: The purpose of this policy is to provide a construction method option for wood-framed patio covers and pergolas, meeting certain parameters, that do not require project specific structural engineering to be submitted with the application for a permit. Pre-engineered design drawings with specified prescriptive provisions accompany this policy.

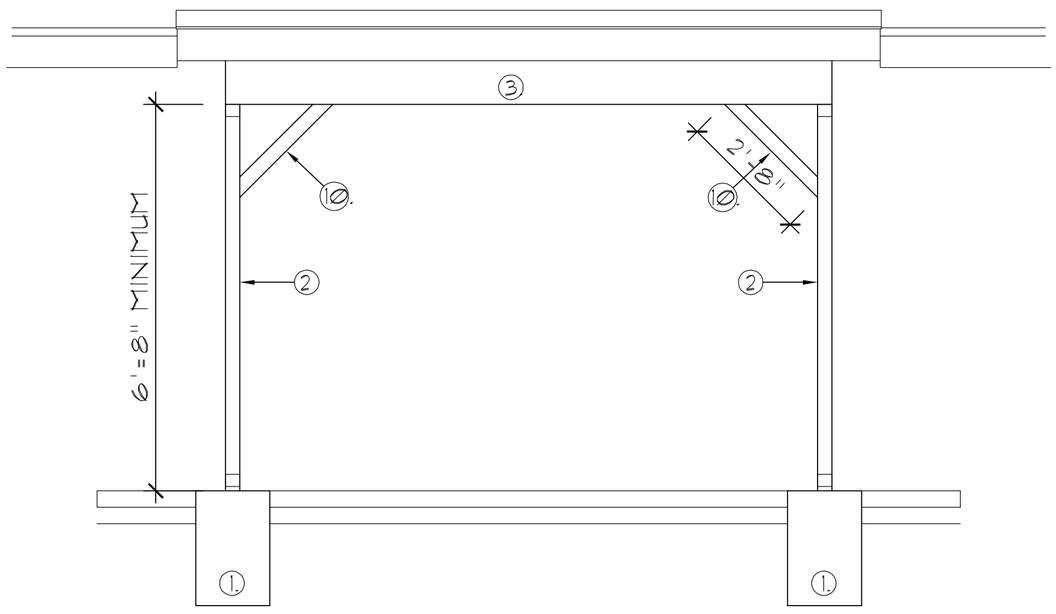
Where submittals do not meet the prescriptive provisions outlined in this policy and per the pre-engineered drawings, an engineered design will then be required to be provided.

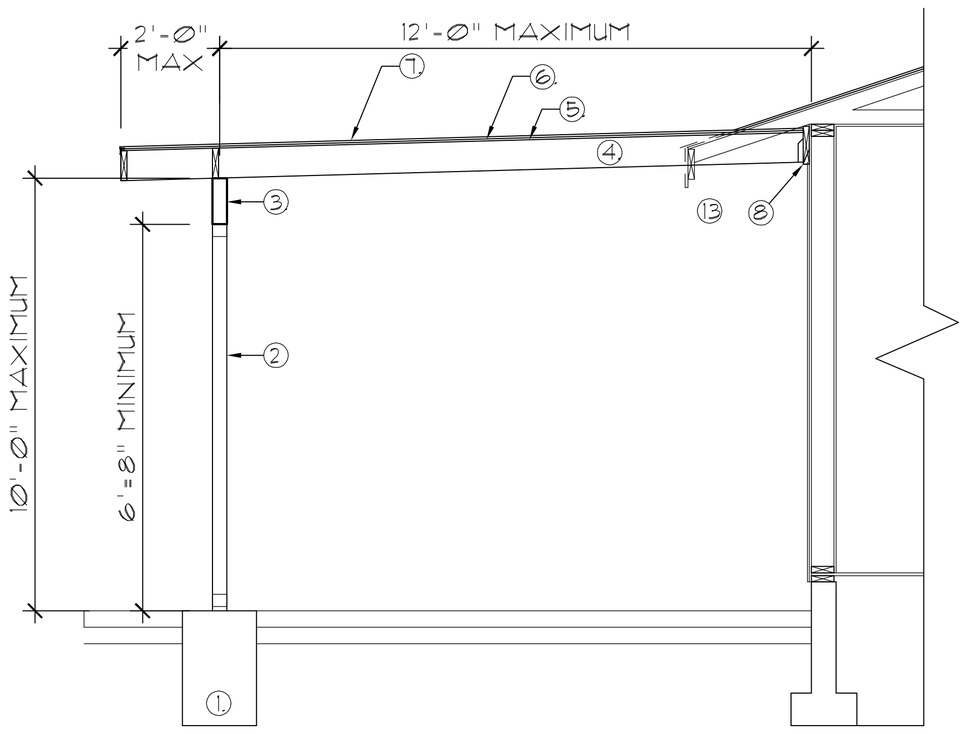
Jason Blais
Building Official

5/17/22
Effective Date

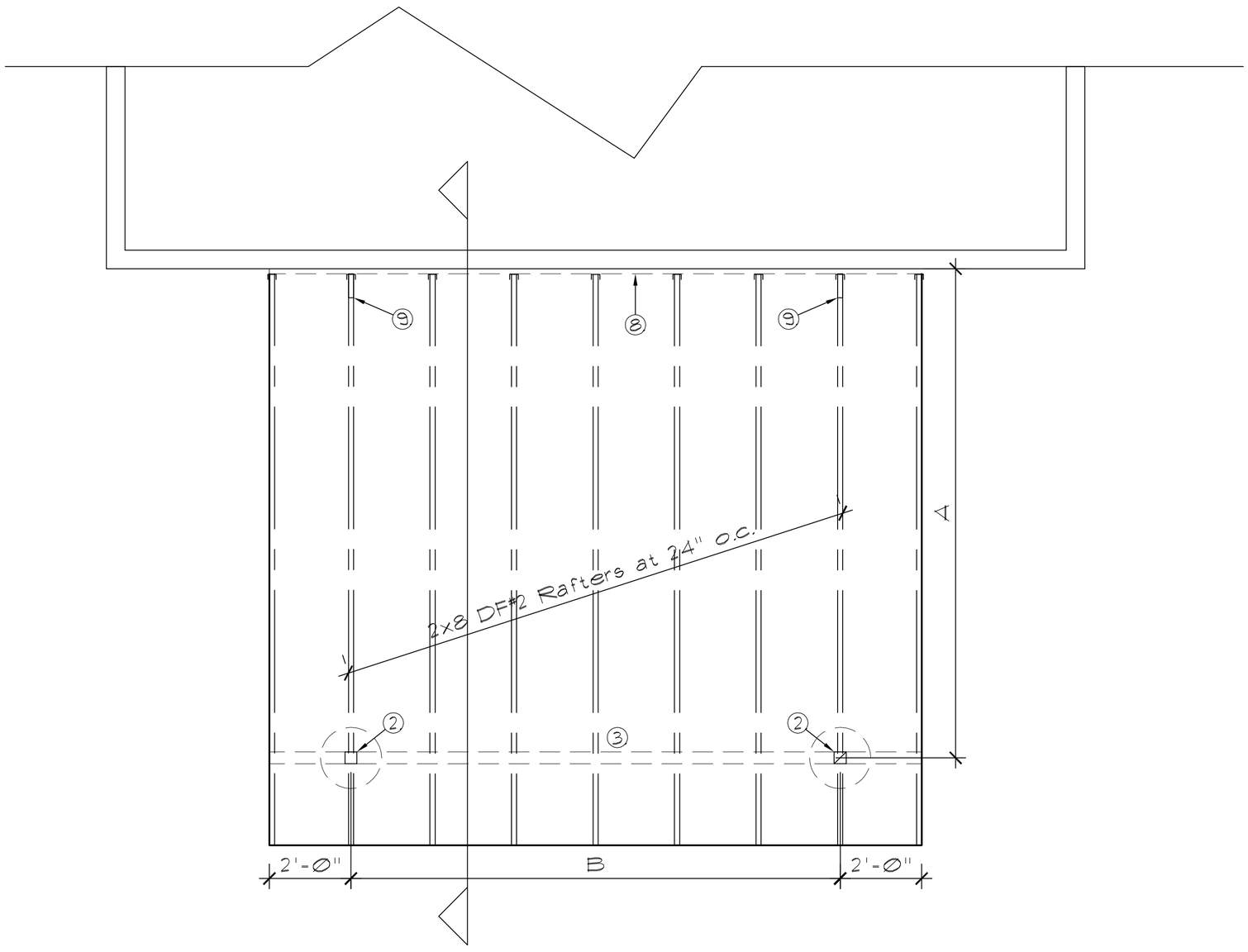
Date Retired

RESIDENTIAL PATIO COVER CONSTRUCTION POLICY
PRE-ENGINEERED PRESCRIPTIVE PROVISIONS





Ⓐ Distance From House Wall (Maximum 12'-Ø")
Ⓑ Distance Posts (Maximum 12'-Ø")
① 18"ϕ x 24" Deep Concrete Pier
② Minimum 4x4 DF#2 Post (CB44, BC4)
③ 4 x 12 DF#2 Beam
④ 2 x 8 DF#2 rafters at 2'-Ø" o.c.-attach to beam w/ H2.5 or equal, attatch to ledger w/ Simpson LUS28 or equal
⑤ 24/16 Rated 7/16" OSB w/ 8d (2-1/2") Common (6" oc Edges, 12" oc Field)
⑥ Underlayment as required (15# Felt, (2) Layers for roof slopes less than 4/12)
⑦ Roofing- Asphalt Shingles w/ 2:12 slope or greater. TPO for 2:12 slope or less.
⑧ Ledger board- Minimum 2x8 DF#2 attatched w/ 1/2 x 4 1/2 lag screws at 15" o.c. min in a W pattern
⑨ DTTIZ Tension Tie (or equal)
⑩ 4x4 x 32" DF#2 Diagonal Brace w/ (2) 1/4" x 6" SDS screws at each end (Required only for Pergolas)
⑪ Add venting if any soffit vents are removed



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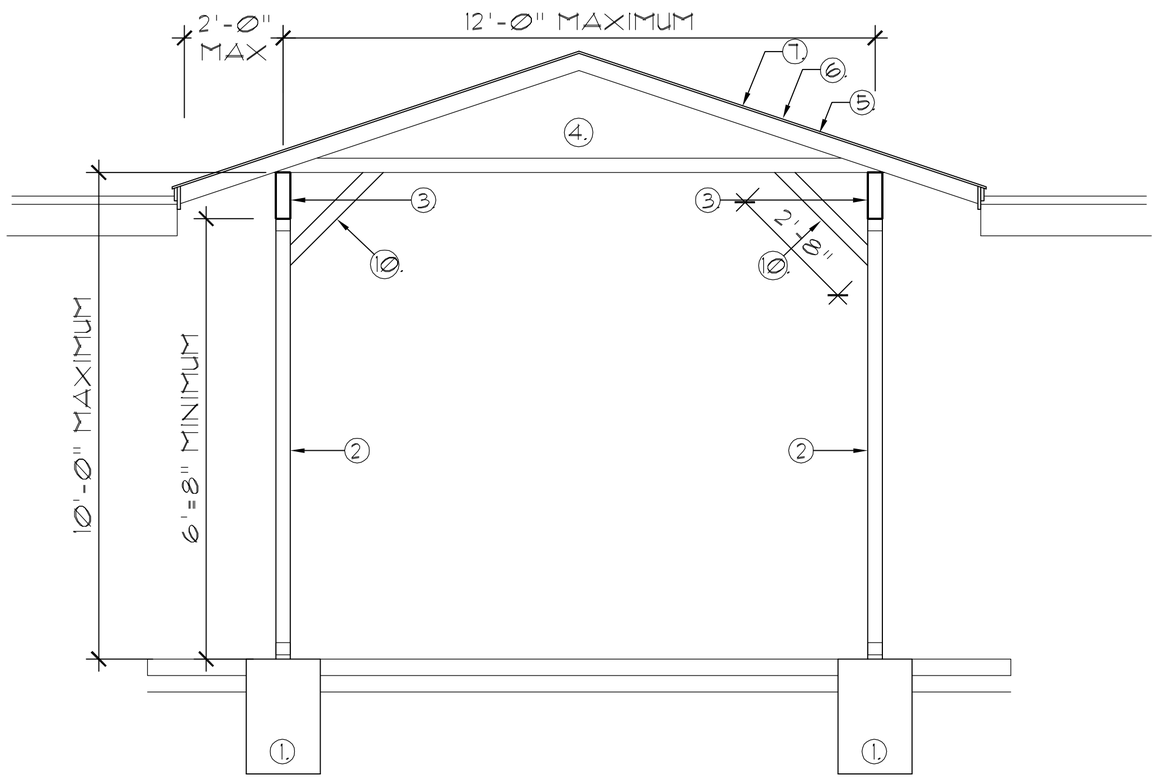

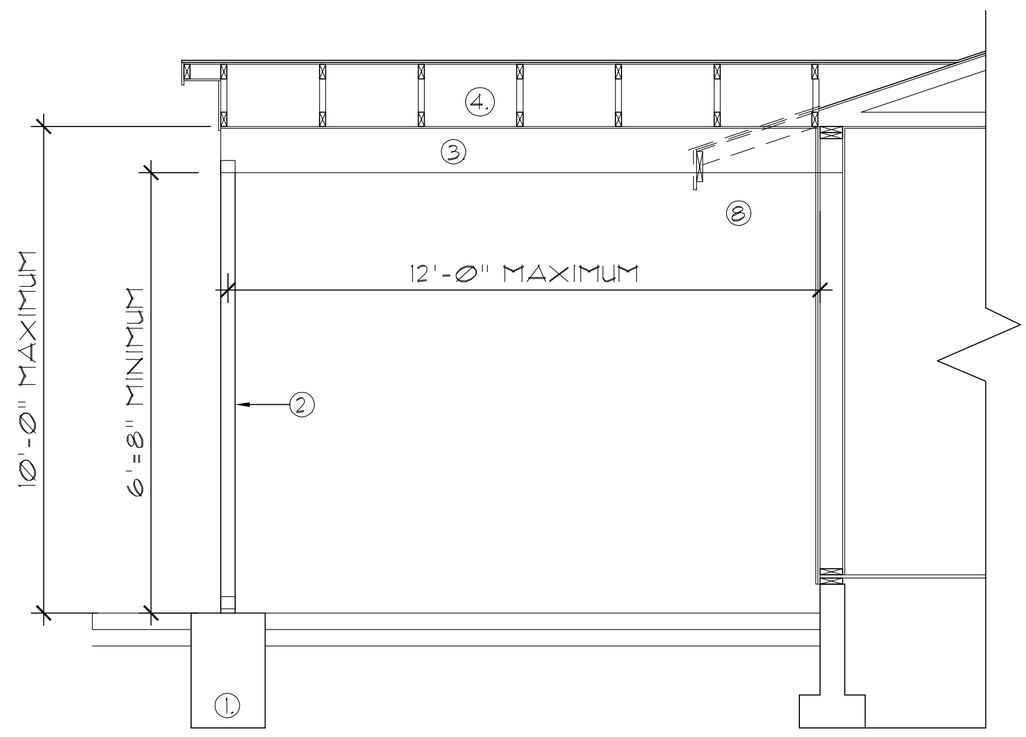

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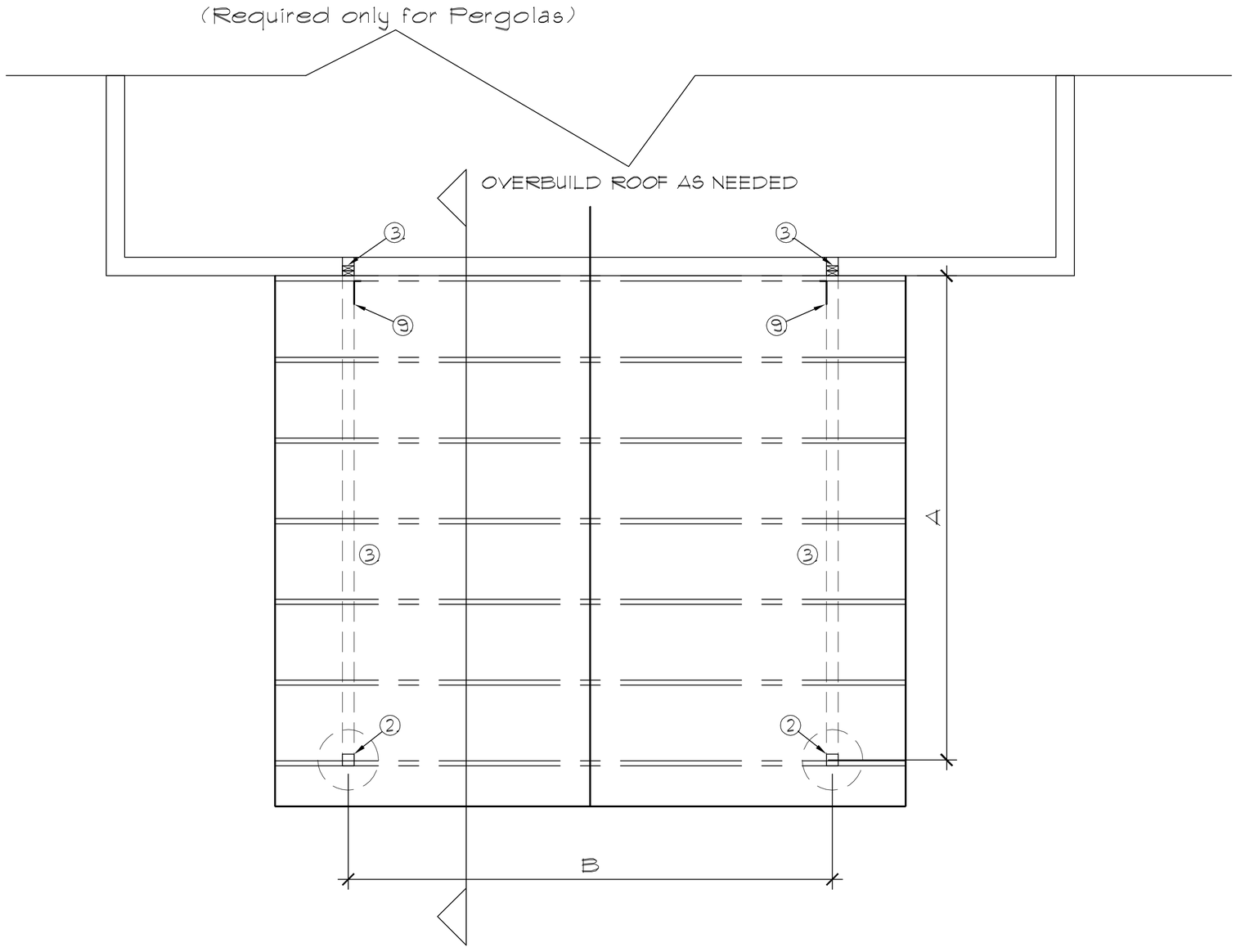
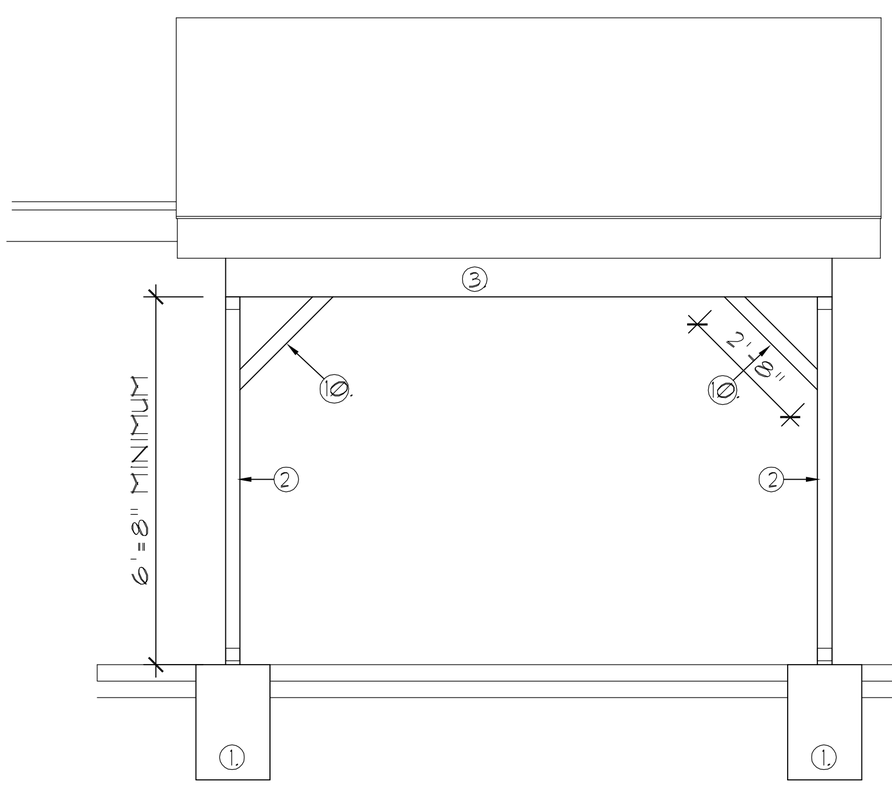
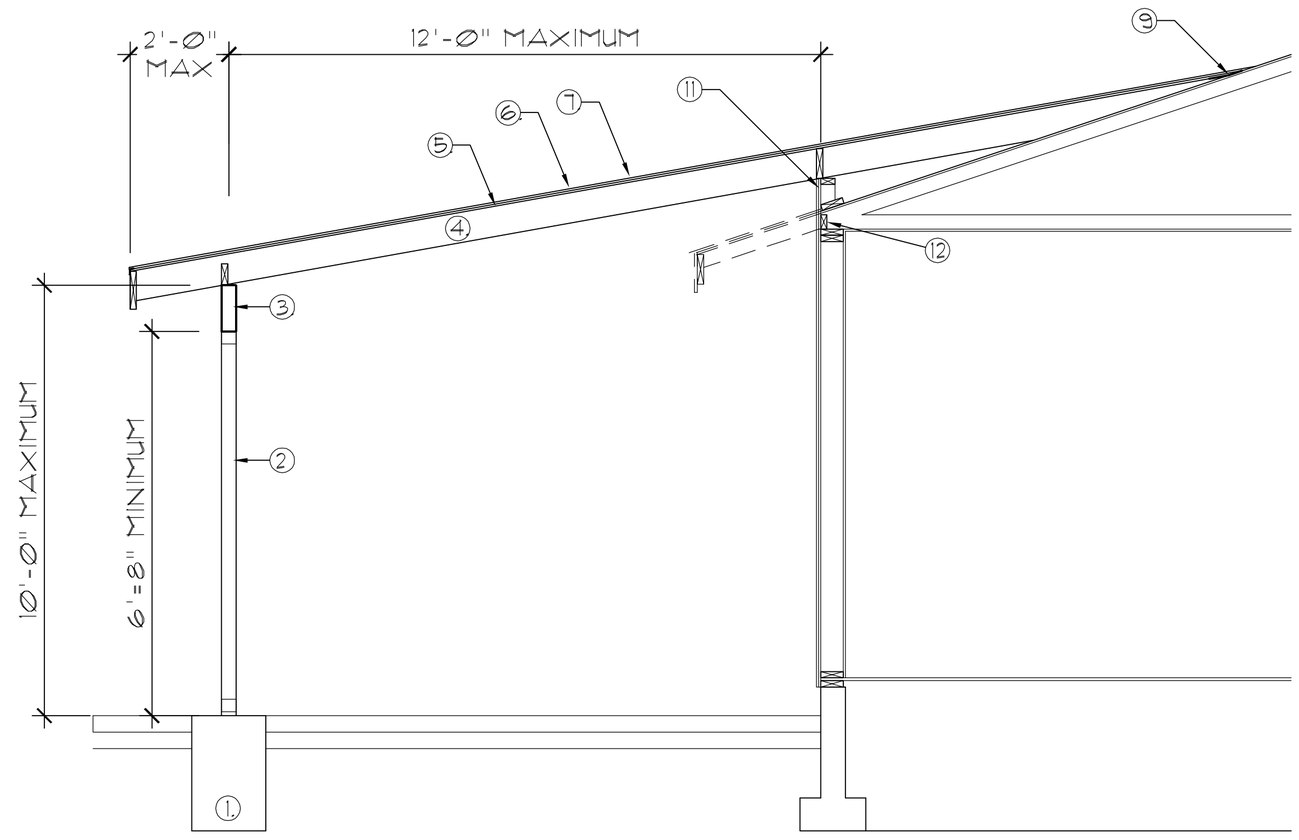
① 18"ϕ x 24" Deep Concrete Pier
② Minimum 4x4 DF#2 Post (CB44, BC4)
③ 4 x 12 DF#2 Beam, pocket set in wall or attach w/HUC410 or equal to post in wall to carry new beam load
④ Pre-Mfg Trusses at 2'-Ø" o.c.
⑤ 24/16 Rated 7/16" OSB w/ 8d (2-1/2") Common (6" oc Edges, 12" oc Field)
⑥ Underlayment as required (15# Felt, (2) Layers for roof slopes less than 4/12)
⑦ Roofing- Asphalt Shingles w/ 2:12 slope or greater. TPO for 2:12 slope or less.
⑧ Add venting if any soffit vents are removed
⑨ DTTIZ Tension Tie (or equal)
⑩ 4x4 x 32" DF#2 Diagonal Brace w/ (2) 1/4" x 6" SDS screws at each end (Required only for Pergolas)







Ⓐ Distance From House Wall (Maximum 12'-Ø")
Ⓑ Distance Posts (Maximum 12'-Ø")
1. 18"ϕ x 24" Deep Concrete Pier
2. Minimum 4x4 DF#2 Post (CB44, BC4)
3. 4 x 12 DF#2 Beam
4. 2 x 8 DF#2 rafters at 2'-Ø" o.c.-attach to beam w/ H2.5 or equal
5. 24/16 Rated 7/16" OSB w/ 8d (2-1/2") Common (6" oc Edges, 12" oc Field)
6. Underlayment as required (15# Felt, (2) Layers for roof slopes less than 4/12)
7. Roofing- Asphalt Shingles w/ 2:12 slope or greater. TPO for 2:12 slope or less.
8. 2x cripple wall aligned over exterior wall
9. Attach new rafters to existing rafter/truss w/ LTS12 Strap (or equal)
10. 4x4 x 32" DF#2 Diagonal Brace w/ (2) 1/4" x 6" SDS screws at each end (Required only for Pergolas)
11. Add venting if any soffit vents are removed
12. Verify Blocking- Add if not present