



PREPARATION OF RESIDENTIAL PLANS

Mariposa County Development Services
5100 Bullion St. P.O. Box 1268 Mariposa, CA 95338
(209) 966-3934 Fax (209) 742-5024

GENERAL REQUIREMENTS FOR NEW CONSTRUCTION AND ADDITIONS

All plans must include the legible name of the architect, engineer, designer or other person preparing the plans. The drawings must be clear, complete, and must show in detail how the proposed work will comply with the codes.

All plans must be to a common scale. All plan views must be drawn to a minimum scale of 1/4" = 1'. Plans on graph paper are not acceptable due to the difficulty of distinguishing graph lines from drawing and dimension lines, especially on photocopies.

Completeness and clarity of the plans is essential to avoid delays in the issuance of your permit. Your plans would be considered complete if you could give them to a total stranger and he or she could understand how the building will be constructed and what the finished project will look like.

ENGINEERED DESIGNS

All construction which falls outside the category of "Conventional Light-Frame Construction" as described in Section 2320 of the California Building Code must be designed by an architect or engineer with a California license. This includes, but is not limited to, truss systems, retaining walls over forty-eight inches high, foundations with pilings or caissons, roofs on posts such as carports and patio covers which are freestanding or which extend more than 6' beyond the building to which they are attached, and wall bracing systems which are not described in Section 2320. Buildings with more than two stories also require engineering. Structural calculations for such designs must be submitted in two copies with the designer's stamp, signature, and license number. All design elements required by the calculations must appear on the plans as well as in calculations. The building or field inspector should not need to refer to the calculations to see how the structure is to be built.

TITLE 24 ENERGY COMPLIANCE DOCUMENTATION

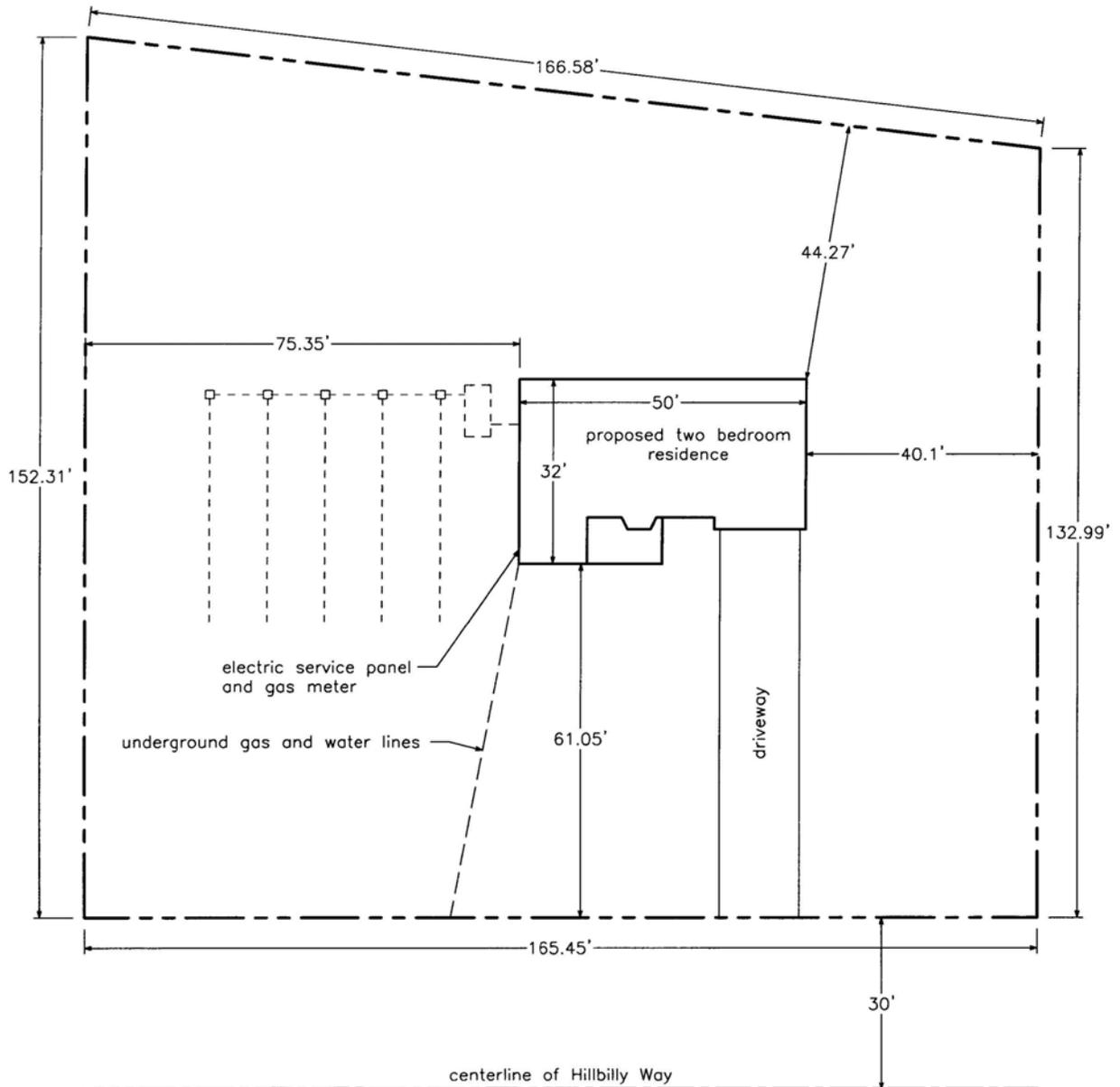
"Energy calcs" are required for projects creating heated or cooled space. This documentation shows how the project will comply with California Energy Commission regulations for energy conservation. For most projects, this documentation is best prepared by an experienced professional.

INFORMATION REQUIRED ON PLANS

For purposes of accuracy, clarity and efficiency in the plan review, construction and inspection processes, the following minimum plans standards are adopted as policy by the Mariposa County Building Department. Use this as a checklist when preparing your plans. Some items may not apply to your project but if you address all those which do, unnecessary delays in the plan review process can be avoided. If you have any questions about any of the items on this list we will be glad to discuss them with you.

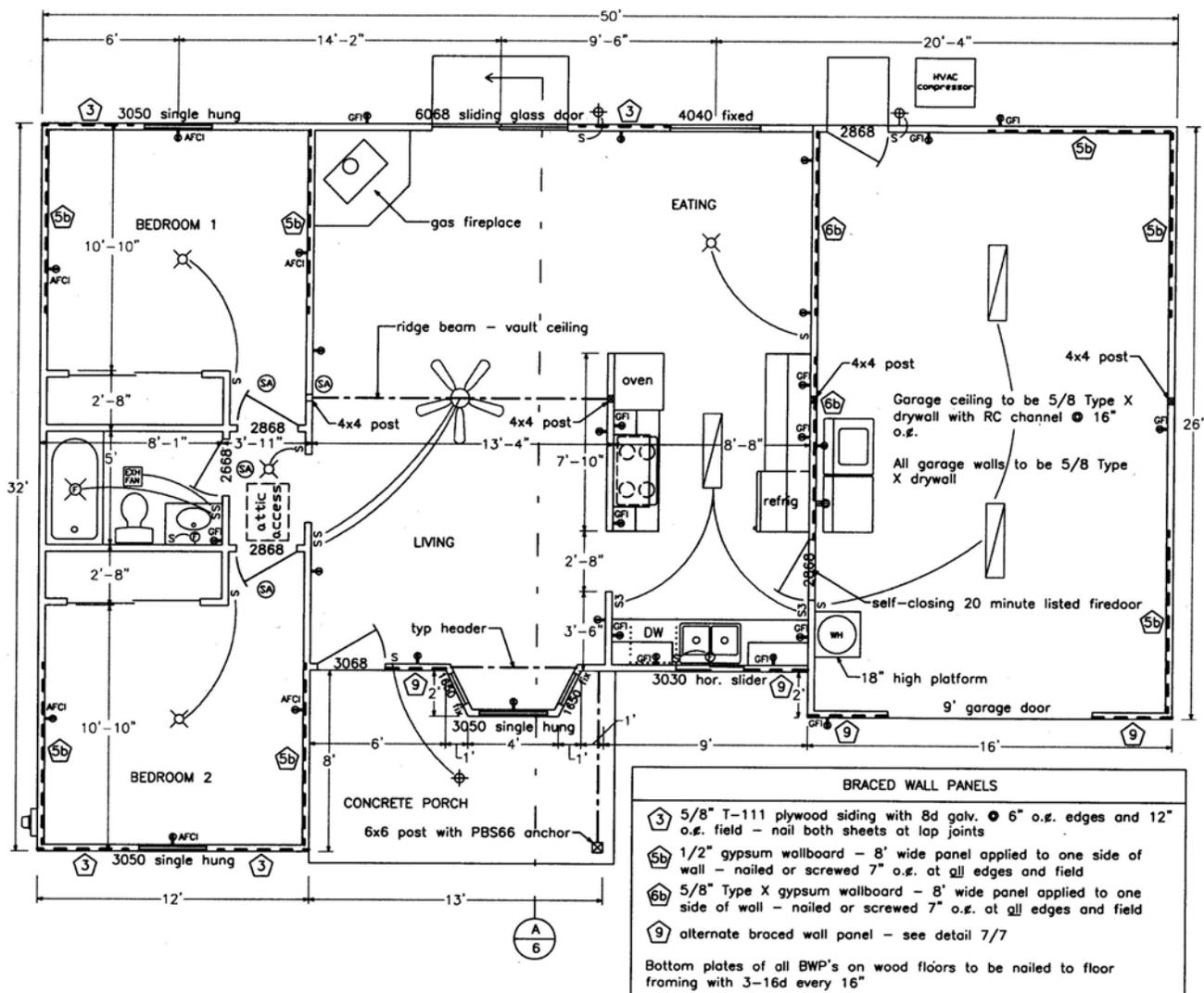
Site Plans must be provided for new buildings and for any work which alters the footprint of an existing building. Site plans must be drawn to a common engineers scale and must show:

- Property lines
- Lot dimensions
- Front, rear, and side setback distances to buildings
- Septic tank, leach field and replacement area
- Topographic features such as streams and drainage areas
- All existing and proposed structures on the property including covered patios, porches, and roof overhangs longer than 3'
- The proposed building's exterior dimensions
- All public and private easements
- Underground gas, electric and water lines
- Proposed and existing gas and electric meter locations
- North arrow showing the compass orientations
- The name of the adjacent road(s) and the road centerlines(s)
- Driveway location



Floor Plans are required for all new construction. They should be drawn to 1/4" = 1' scale and must include:

- A separate plan for each floor level
- Descriptions and dimensions of all rooms
- Locations and descriptions of all Braced Wall Panels
- Locations and sizes of doors and windows
- Description of window types (and doors if glazed)
- Locations and sizes of skylights (indicated if open able)
- Changes of ceiling height
- Location and size of attic access opening(s)
- Required landing at exterior doors
- Plumbing fixtures and appliances
- Location and description of room heaters
- Location of heating and cooling appliances
- Method of providing combustion air for fuel-burning appliances in confined spaces
- Locations of electrical service panel, sub-panels, receptacles, lights, switches, fans and smoke detectors (may need to be shown on a separate electrical plan if the floor plan is too crowded to maintain clarity)
- Location and size of posts supporting roof or ceiling beams
- Locations of section views
- For additions, adjacent existing rooms must be included
- For alterations to existing rooms, the plans must clearly show what is existing and what is new



Foundation Plans are required for all new construction. They should be drawn to 1/4" = 1' scale and must include:

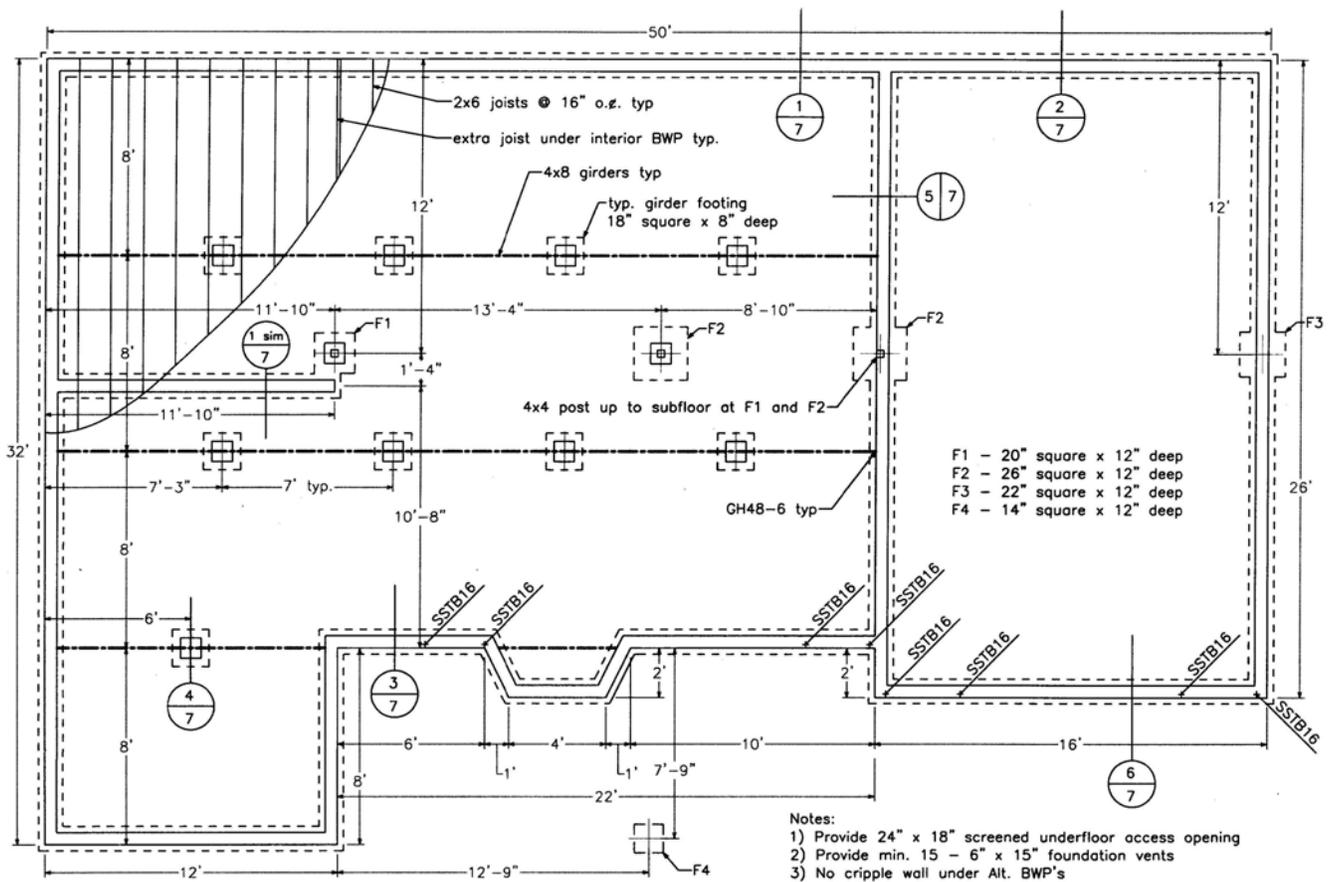
- All continuous footing with length of each segment
- Cross-section detail(s) with markers showing where they apply – may be on a separate sheet
- Foundations for interior bearing walls
- Locations of all pier footings (centers dimensioned in both directions)
- Size and depth of all pier footings
- Location and description of the embedded portion of all hold-downs
- Post anchor specifications for exterior posts

For slab floors the following is also required:

- Footings or thickened slab under interior Braced Wall Panels with note on how sills will be attached

Floor Framing Plans for the first story are normally included on the foundation plan. If the building has more than one wood-framed floor level, a separate floor framing plan must be provided for each level unless no floor is above the other at any point, such as a split level. The Following must be included:

- Size and center to center spacing of girders
- Size and center to center spacing of joists
- Dimensions showing spans of girders and joists
- Size and span of any floor beams
- Under-floor posts at all point load footings
- Additional joists or blocking under interior Braced Wall Panels
- Location and size of under-floor access opening
- Calculations detailing how the under-floor ventilation requirement will be met (see worksheet on page 8)

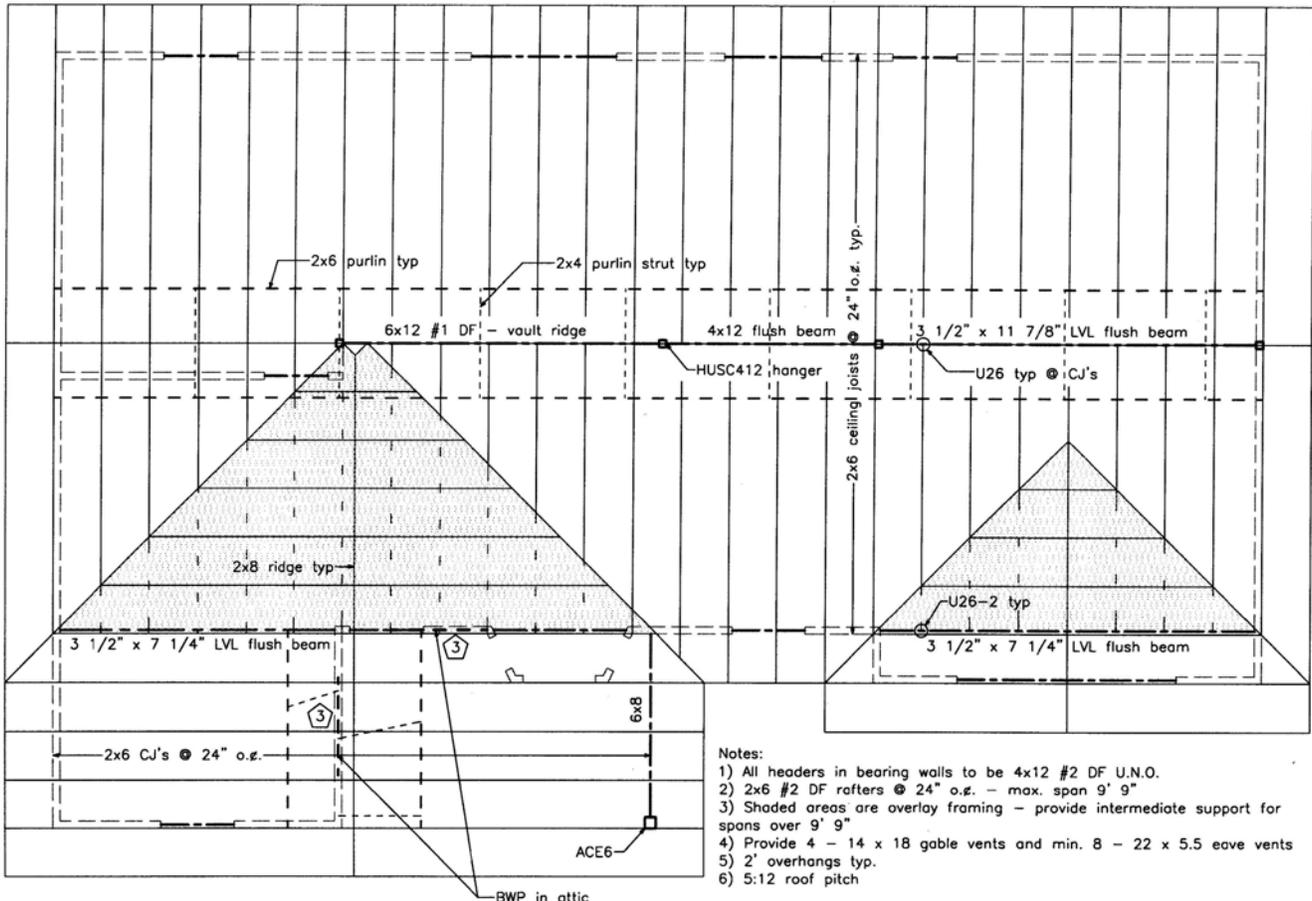


Roof Framing Plans are required for all “stick-framed” roofs. They are also required for “stick-framed” portions of truss roofs, such as overlay (or “California”) framing, porch roofs, etc. Ceiling framing may be included on the roof framing plan or the floor plan if adequate clarity can be maintained. Complex structures may need separate roof and ceiling framing plans. These must include:

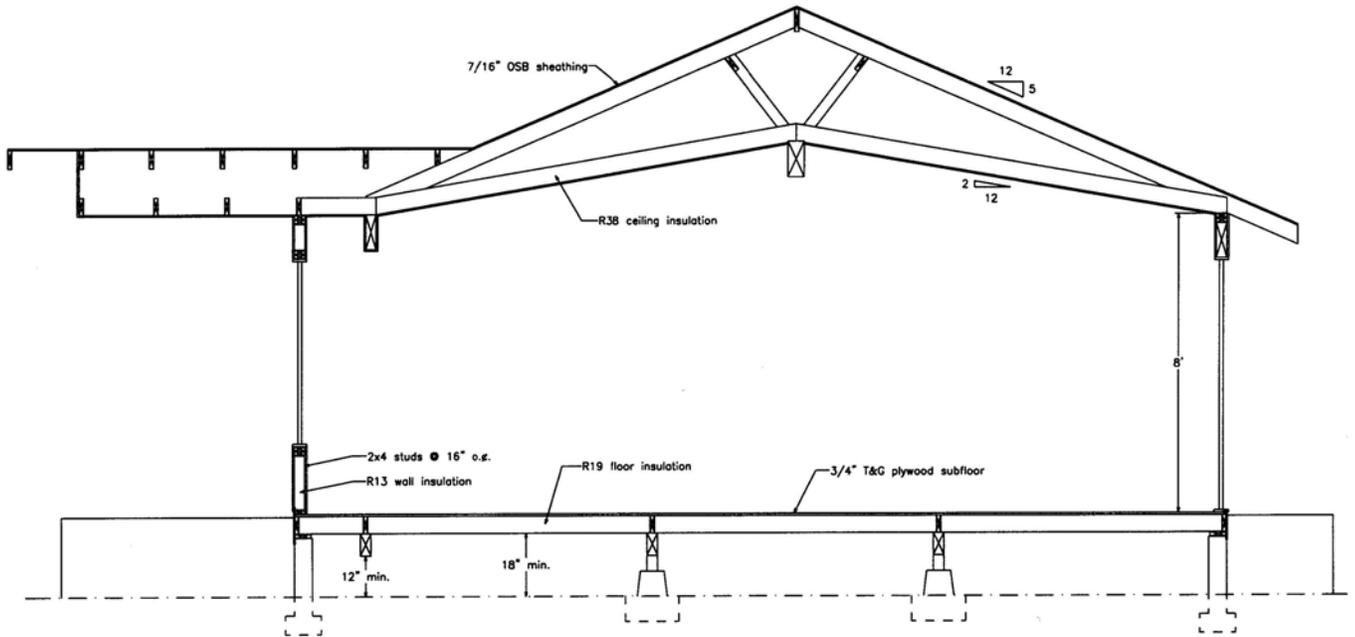
- Roof pitch
- Header sizes for all openings in bearing walls (may be on floor plan instead)
- Location, size, grade and span of each roof or ceiling beam (or on floor plan)
- Sizes, center to center spacing and spans of rafters
- Sizes, center to center spacing and spans of ceiling joists
- Locations and sizes of purlins
- Location of each purlin support, showing where it is supported by a beam or bearing wall
- Calculations detailing how the attic ventilation requirement will be met (see worksheet on page 8)

For truss roofs the following must be submitted if applicable:

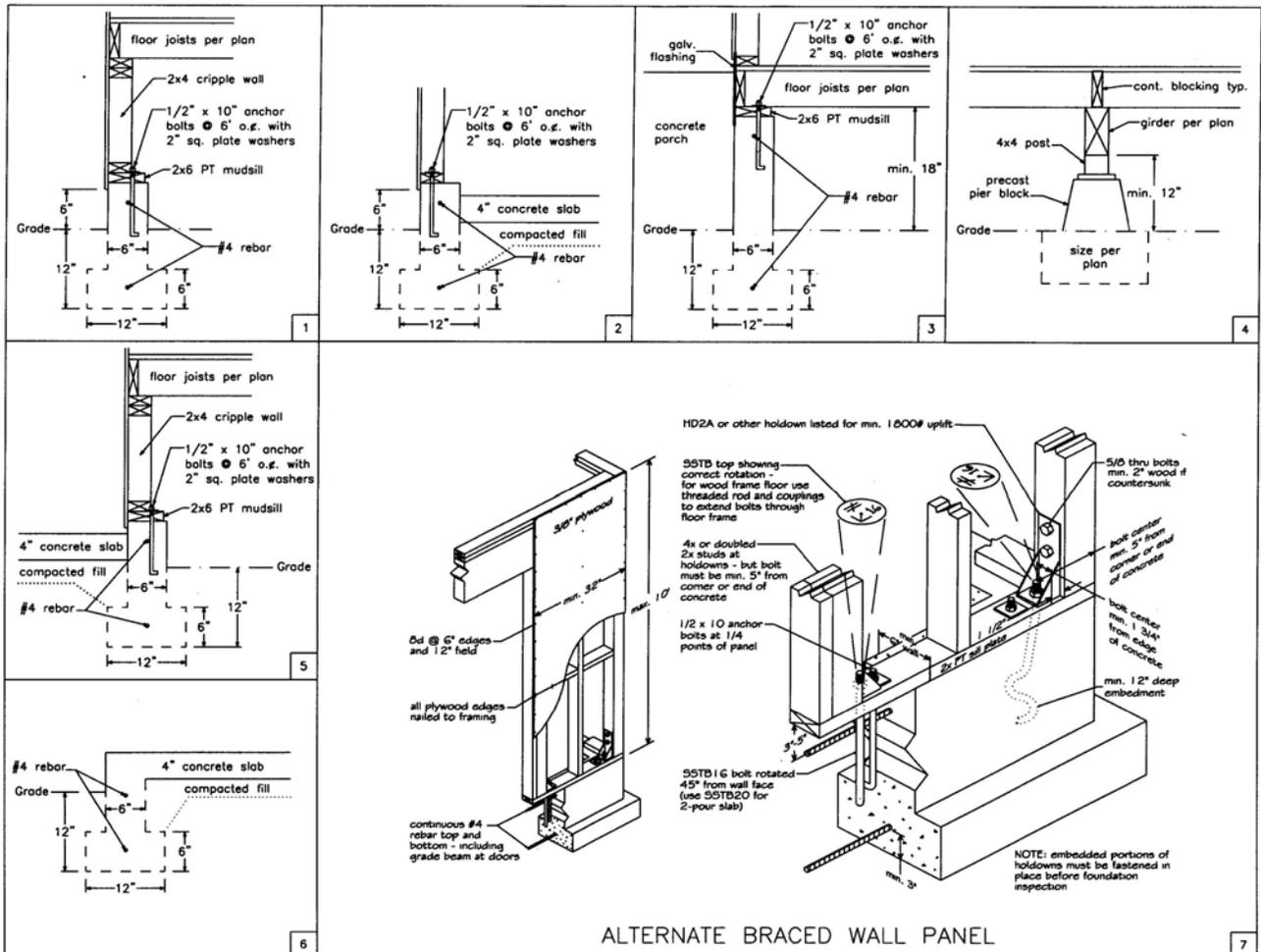
- Truss layout
- Engineering for each truss
- Gable stud bracing detail
- Web bracing specifications
- Bottom chord bracing specifications
- Hat truss attachment specifications
- Truss-to-truss hanger specifications
- Overlay framing specifications
- Calculations detailing how the attic ventilation requirement will be met (see worksheet on page 8)



Section Views are helpful for clarifying framing in complex buildings. Even in simple structures such as garages a “typical” section view can be very helpful. More complex buildings may require several section views. The location of each section view must be marked on the floor plan. Section views should specify all materials not called out on one of the plan views such as sub-flooring, roof sheathing, wall framing, insulation, etc. as well as vertical dimensions not shown on other drawings.

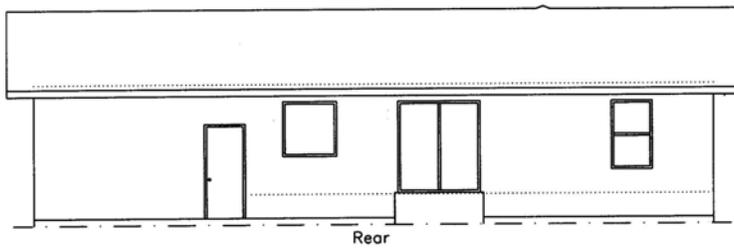
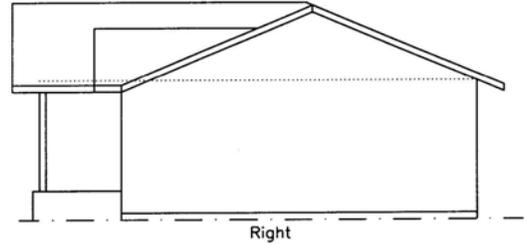
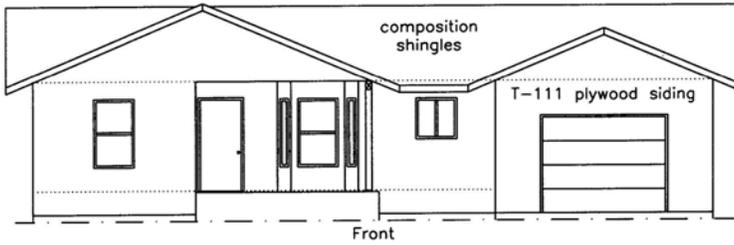


Details should be numbered and the number of each one marked at appropriate location(s) on the plan views.

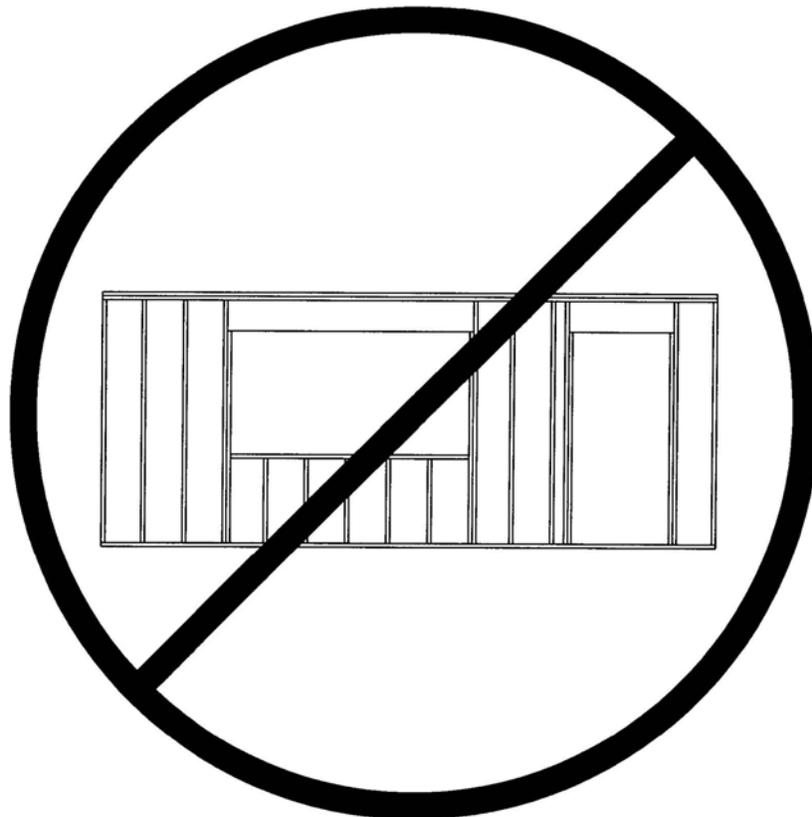


Elevation views are required for each side of all new construction. They are usually drawn to 1/4" = 1' scale, but may be drawn to 1/8" = 1' scale if clarity is maintained. They should show:

- Approximate grade including actual slopes at the site
- Type of siding and roofing
- Windows, doors and skylights
- Porches and decks
- Roof overhangs
- Chimney extensions



Drawings of the following type have little or no value to a plan checker. Submittals which consist primarily of such drawings will probably not be acceptable for review.



ATTIC / UNDERFLOOR VENTILATION WORKSHEET

<input type="checkbox"/> Attic <input type="checkbox"/> Underfloor				Sq. ft. of NET ventilation area required		Gross area of vents required in sq. ft.	
Floor area in sq. ft.*		+ 150 =		+ 0.7 =		_____	
<hr/>							
Type of vent	Width in inches	Height in inches	Area in sq. in. each	Area in sq. feet each	How many	Area in sq. ft. provided	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
Total vent area provided - must equal or exceed gross area required							_____

<input type="checkbox"/> Attic <input type="checkbox"/> Underfloor				Sq. ft. of NET ventilation area required		Gross area of vents required in sq. ft.	
Floor area in sq. ft.*		+ 150 =		+ 0.7 =		_____	
<hr/>							
Type of vent	Width in inches	Height in inches	Area in sq. in. each	Area in sq. feet each	How many	Area in sq. ft. provided	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
Total vent area provided - must equal or exceed gross area required							_____

<input type="checkbox"/> Attic <input type="checkbox"/> Underfloor				Sq. ft. of NET ventilation area required		Gross area of vents required in sq. ft.	
Floor area in sq. ft.*		+ 150 =		+ 0.7 =		_____	
<hr/>							
Type of vent	Width in inches	Height in inches	Area in sq. in. each	Area in sq. feet each	How many	Area in sq. ft. provided	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
_____	_____	x _____	= _____ + 144	= _____ x _____	= _____	= _____	
Total vent area provided - must equal or exceed gross area required							_____

* Separate attic or underfloor areas must be calculated separately, e.g. house and garage attics with firewall between