



908 WEST GORDON AVE. SUITE #3
LAYTON, UT 84041
(801) 547-8133

October 2, 2017

FIRST REVIEW
WC³ Project #: 217-525-169

Weber County
Building Inspection Department
2380 Washington Boulevard, Suite 240
Ogden, Utah 84401
Phone: (801) 399-8374

Attention: Craig Browne, Building Official

Subject: Seth Tan SFD – Plan Review Comments

Mr. Browne:

West Coast Code Consultants, Inc. (WC³) has completed the first review of the proposed Seth Tan SFD project located in Eden, UT. This review was based upon the following:

1. Civil drawings dated 8/17/2017 by Talisman Civil Consultants, sealed and signed by Ryan W Cathey, Professional Engineer.
2. Structural drawings and calculations dated 8/31/2017 by Innovative Structural Engineering, sealed and signed by Shawn D Lothrop, Professional Engineer.
3. Geotechnical investigation report (#01628-008) dated 7/15/2017 by Intermountain GeoEnvironmental Services, Inc., sealed and signed by David A Glass, Professional Engineer.

The 2015 IRC, as adopted by the State of Utah, were used as the basis of our review. Specific comments regarding this project are enclosed with this cover letter. If you have any questions regarding this review please do not hesitate to contact me.

Sincerely,

Mike Molyneux, P.E.

Attachment: Comments

Plan Review Comments

Project Name: Seth Tan SFD

Code Review by: DeAnn Wilde

Location(s): 7914 East Heartwood Drive, Eden, UT

Structural by: Daniel Mooney

SQUARE FOOTAGE SUMMARY:

Main Level	Upper Level	Finished Basement	Unfinished Basement	Covered Deck	Covered Porch	Garage	Carport
720-ft ²	-	-	-	185 - ft ²	31- ft ²	-	-

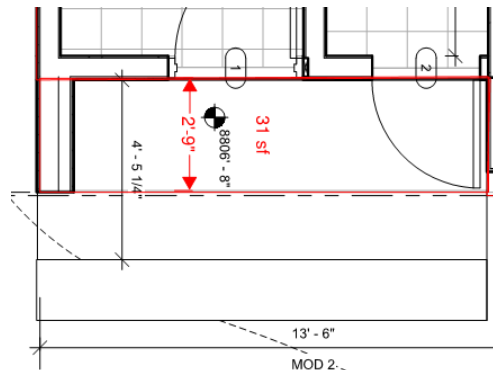
GENERAL INFORMATION:

The submitted documents for the above-mentioned project, as outlined in the cover letter, have been reviewed. The following comments address areas of concern, non-compliance with the governing code, potential errors, or omissions in the proposed design. The appropriate design professional must address each comment below and submit a written response in addition to revised plans and calculations if necessary. **Please cloud any revisions made to the construction drawings and provide the date of the latest revision on each revised sheet.**

CODE REVIEW COMMENTS:

A1. Sheet A2.1: Please address the following:

- A. Per R311.3, there shall be a floor or landing on each side of each exterior door. The width of the landing shall not be less than the door served with a minimum dimension of 36" measured in the direction of travel. May be 7³/₄" lower than threshold if the door does not swing over the landing.



A2. Sheet A4.1: Please address the following:

- A. The elevation drawings identify a crawl space. Detail the following on the plans.
 - I. Per R 408.1 and R4082, identify on the plans how the crawl space will be ventilated and show the size and locations of the vents. If the crawl space is to be unvented, please note how this is to be accomplished, per R408.3.
 - II. Per R408.4, please show the size and location of the crawl space access. The access is required to be a minimum of 18 inches by 24 inches.



- III. Note the distance between the floor of the crawl space and the bottom of the floor joist.
- IV. Per R506.2.3, identify on the plans the required 6 mil vapor barrier below the slab in the crawl space.

MECHANICAL REVIEW COMMENTS:

- M1. A fireplace is identified on the floor plans; however, no information is detailed for the fireplace. Please address the following:
 - A. Is a wood burning fireplace being installed? Is a factory-built chimney to be used? If a factory-built chimney is being used and if the chimney will have an offset, please note on the plans that the chimney must be at an angle not more than 30 degrees from the vertical and the assembly will not contain more than 4 elbows, per R1005.7.
 - B. Is the fireplace to be a gas-fired appliance? Per R1004.1, please provide the listing and manufacturer's installation instructions for the gas fireplace, and clarify the air supply to be provided for combustions, per IRC R1006.
 - C. Complete details regarding the fireplace and chimney need to be addressed on the plans.

PLUMBING REVIEW COMMENTS:

- P1. Sheet A2.1 and Sheet A7.1: Please address the following:
 - A. A boiler is shown on Sheet A2.1 in the mechanical room and no water heater is shown, and yet a vented water heater is detailed on Sheet A7.1.
 - I. Please provide boiler manufacturer details, venting and combustion air requirements.
 - II. If a water heater is to be utilized, please indicate its location on the plans.
 - a. Please note that appliances shall be accessible for inspection, service, and repair without removing permanent construction or other appliances. M1305.1. If a water heater is to be used in addition to the boiler this may present an issue. Please clarify.
 - b. Fuel burning appliances shall not be located in storage closets, bathrooms, or toilet rooms or in spaces that only open into such rooms. G2406.2 (303.3) except where appliance meet one of the following 1-5 conditions. Please justify.
 - c. Per M1305.1, please show a minimum working space of at least 30" in front of the boiler.
 - d. Please show or specify combustion air for all fuel-burning appliances. If a single duct will be used for combustion air, please specify a minimum duct size of 1 square inch per 3000 Btu/hour input. The one opening must be in the top 12 inches of the room. G2407.6.2
 - e. Please note on the plans where the condensate for the boiler will drain. M1411.3 requires that condensation must drain to an approved location.

ELECTRICAL REVIEW COMMENTS:

- E1. Sheet A2.4: Please address the following:

- A. An encased grounding electrode is required. Please identify its location on the electrical plan.
- B. If electrical receptacles are to be installed in the crawl space, the receptacles are required to be GFCI protected, per E3902.
- C. Identify the exterior receptacle as water proof, per E3902.

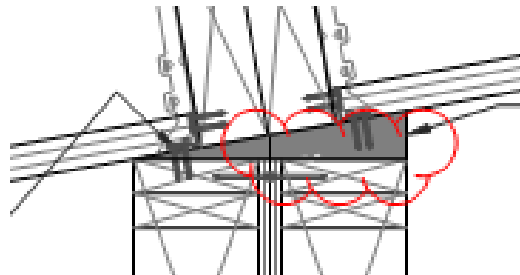
ENERGY REVIEW COMMENTS:

- N1. Sheet A0.2 provides the prescriptive requirements of the IECC Table 402.1.2. Sheet A0.4 provides a REScheck. Please clarify which applies to the structure and remove the information that does not apply.
- N2. Per N1102.2.4, please note that the crawl space access door over conditioned spaces shall be weather stripped and insulated to a level equivalent to the insulation of the surrounding areas.

STRUCTURAL COMMENTS:

Structural Drawings:

- S1. Details 5-6/SD1: Please clarify the length, spacing, quantity, etc. of the SDS or Lag screws called out as “TBD” in the details.
- S2. Detail 8/SD3: Please clarify the connection of the bevel block shown to the top plate to adequately transfer lateral seismic and wind forces to the top plate, as shown in the image below.



Structural Calculations:

- S3. Page 44: Please clarify whether the skewed wall along grid 0 has been designed for 100% of the forces in the direction parallel to grid E, and 30% of the forces in the direction perpendicular to grid E, as per ASCE 7-10 §12.5.3a resulting from the Type 5 horizontal structural irregularity per ASCE 7-10 Table 12.3-1.

If you have any questions regarding the above comments, please contact Mike Molyneux at MikeM@WC-3.com or by phone at (801) 547-8133.

[END]