



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

September 22, 2017

SECOND REVIEW
WC³ Project #: 217-525-147

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

Attention: Craig Browne, Building Official

Subject: Miguel McKelvey SFD – Plan Review Comments (2nd Review)

Mr. Browne:

West Coast Code Consultants has completed the second review of the proposed Miguel McKelvey SFD project located in Eden, UT. This review was based upon the following:

1. Architectural drawings dated 9/15/2017 by ARExA.
2. Civil drawings dated 9/14/2017 by NVS, sealed and signed by Ryan W Cathey, Professional Engineer.
3. Structural drawings and calculations dated 9/1/2017 by ARW Engineers, sealed and signed by Troy M Dye, Professional Structural 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.
Senior Plan Review Engineer

Attachment: Comments



Plan Review Comments – No. 2

Project Name: Miguel McKelvey SFD

Code Review by: DeAnn Wilde

Location(s): 7914 East Heartwood Drive Unit 5, Eden, UT

Structural by: Joe Bingham

SQUARE FOOTAGE SUMMARY:

Main Level	Upper Level	Finished Basement	Unfinished Basement	Deck(s)	Covered Patio(s)	Garage	Carport
954- ft ²	425- ft ²	-	-	-	-	-	-

GENERAL INFORMATION:

The responses and revisions provided for the above noted project have been checked. These responses and revisions were made in reference to comments made by WC³ dated 8/28/2017. The following items require correction, clarification, or additional details before they can be approved. The appropriate design professional must address each comment below and submit a written response in addition to revised plans, specifications, and calculations as necessary. **Please cloud any revisions made to the construction drawings and provide the date of the latest revision on each revised sheet.**

Normal font: initial plan review comments

PC2: second plan review comments

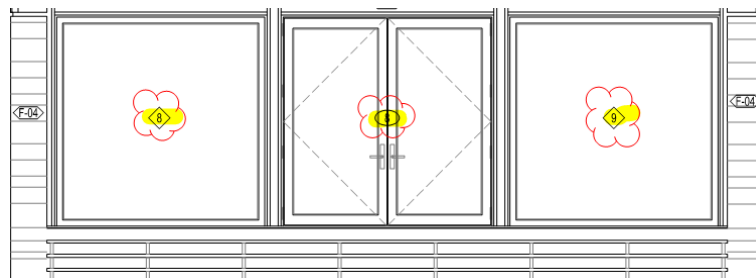
CODE REVIEW COMMENTS:

A1. -A4. *Resolved.*

A5. Sheet A-101: Please address the following:

- A. The doors and windows are identified with keyed references. However, a door and window schedule does not appear to be a part of the plans. Ensure all tempered glazing is identified on the schedule.

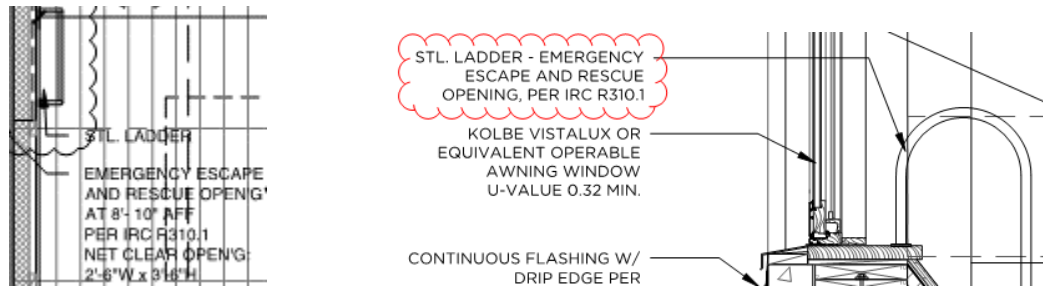
PC2: Door 8 and Windows 8 and 9 are required to be tempered glazing, per IRC 308.4. Please note this information on the door and window schedules.



- B. The window in the master bedroom does not meet the requirements for emergency escape and egress openings, as required by IRC R310.1.

PC2: The emergency escape and rescue opening in the master bedroom is identified with a sill height on 8'10". Per IRC R310.2.2, the sill height shall not be more than 44 inches above the

floor. This sheet and Detail 5/A-504 identify a steel ladder for emergency escape and references R310.1. IRC R310.1 does not identify or allow such a ladder for emergency escape and rescue. Make all necessary corrections to the plans to provide a code compliant emergency escape and rescue opening in the bedroom.



NEW PC2 COMMENT: Sheet G-002 provides a furniture schedule. The schedule identifies a “bed set @ bunk”. Please clarify in writing where this bed set is to be located. If it is to be in the loft, the loft area will be required to meet all requirements of code for emergency escape and rescue openings, habitable ceiling height, and all other requirements for sleeping rooms. Advisory Note: If the intention is to locate the bed set in the loft, remove the bed set from the furniture schedule.

C. – E. Resolved.

A5. Per R311.7, identify on the plans the required landing at the top and bottom of all stairs. The width of each landing shall not be less than the stair served. Every landing shall have a minimum dimension of 36 inches measured in the direction of travel.

PC2: The note added to Sheet A-101 is insufficient for construction. Detail on the plans that the depth of the landing in the direction of travel shall be not less than 36 inches.



A6. Resolved.

A7. Per R311.7.8, please identify the required handrails on the plans. A handrail is required on not less than one side of each continuous run of treads or flight of stairs with four or more risers. Identify the required handrail height at 34-inches minimum and 38-inches maximum measured vertically from the sloped plane adjoining the tread nosing.

PC2: Per R311.7.8, a handrail(s) is required at the exterior stairs. Please detail the required handrail(s) on the plans.

A8. Duplicate comment.

A9. – A15. Resolved.

A16. Please show electrical outlet spacing to comply with IRC E3901.2.1.

A17. PC2: IRC E3901.2 requires general purpose receptacles to be located within six feet of all doors and 12-feet o.c. along all walls. Make all necessary corrections.

A18. – A30. Resolved.

ENERGY REVIEW COMMENTS:

N1. No insulation values have been noted on the plans. Please provide corresponding insulation values, notes, and details, including the air barrier and vapor retarder, to ensure the work will comply with the IRC R702.7. Information on construction documents shall be sufficient in detail to indicate that all work proposed will conform to the provisions of the IRC N1101.5.

N2. Please detail on the plans the extent of the building thermal envelope, per IRC N1101.5.1.

PC2: The plans do not appear to detail the building thermal envelope, per IRC N1101.5.1. Please address.

N3. Sheet G-002: Please address the following:

A. – B. *Resolved.*

C. The REScheck identifies R-50 continuous roof insulation and an R2.9 cavity insulation. Please detail on the plans how this is to be constructed. Also see Plan Review Comment A11 above.

PC2: The revised REScheck identifies R-60 continuous insulation. The closed-cell insulation in the unvented attic constitutes cavity insulation. If the 1 ½" Fabral has an R-value that would constitute continuous insulation. Detail 10/A-504 identifies the closed-cell insulation as R-6.5 per inch and provides a scale of 1" = 1'-0". Provide complete and accurate information on the REScheck and the plans regarding the insulation values for the roof.

I. *Resolved.*

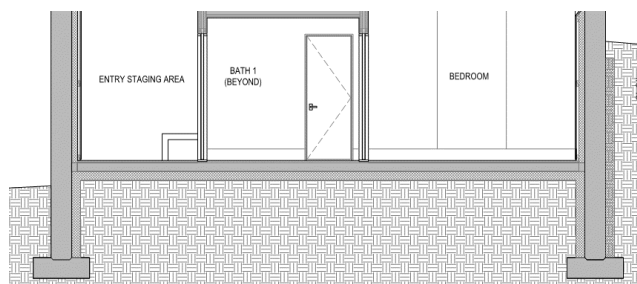
D. Please detail on the plans how the east and west insulated concrete walls will be constructed to meet the identified R-20 continuous insulation value.

PC2: The REScheck identifies four basement walls as solid concrete below grade with R-46 continuous insulation.

1) ***There are no concrete walls below the concrete slab.***

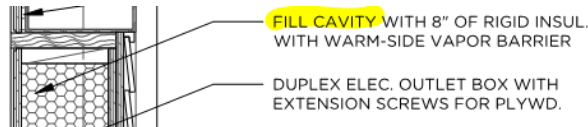
2) ***A substantial portion of the structure is above grade.***

3) ***At the location of the below grade concrete wall, detail how R-46 continuous insulation will be achieved. Normally, a concrete wall will be furred and cavity insulation installed in the furred space.***



- E. Please detail on the REScheck the construction materials for the east and west spandrel walls. Detail on the plans how the wall is to be constructed to meet the identified R-40 continuous insulation value.

PC2: The REScheck identifies all walls with R-46 continuous insulation. Provide complete information identifying how continuous insulation will be achieved, or identify on the plans and the REScheck the R-value of the cavity insulation.



- F. Please detail on the plans how the north spandrel wood framed wall will be constructed to meet the identified R-20 continuous insulation value.

PC2: See comment E above.

- G. Please detail on the REScheck the construction materials for the north and west retaining wall. Detail on the plans how the wall is to be constructed to meet the identified R-51 continuous insulation value.

PC2: This information does not appear to be detailed on the construction plans. REScheck now identifies R-46 continuous insulation.

- H. Resolved.

- N4. Please note that a permanent certificate shall be completed and located in an approved location that lists the predominant R-values of the insulation installed in the ceiling/roof, walls, foundation and ducts outside conditioned spaces, and U-factors for fenestration.

PC2: This information does not appear to be detailed on the plans. Please address.

STRUCTURAL COMMENTS:

Structural comments resolved.

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]