

December 8, 2025

City of Lee's Summit - Development Services 220 SE Green Lee's Summit, MO 64063

RE: CITY INSPECTION COMMENTS REGARDING FIREWALL ASSEMBLIES

Everstead was informed that city inspectors are regularly calling for sheetrock/drywall on the interior side of the 2-hour fire rated party walls behind tub units and fireplaces. Everstead has reviewed the plans and while the detail appears to show the sheetrock as part of the fire rated assembly, item 5B of the UL Solutions U336 assembly (attached to this letter) states that batt insulation is an alternate to gypsum or plywood sheathing on the interior face of the assembly. Based on this, the assembly meets the 2-hour rating requirements as is in these instances.

Please feel free to contact us with any further questions on this matter.

Sincerely.

Everstead Terms and Conditions

1. SCOPE

The Client warrants that he or she has made all necessary arrangements with the owner of the property for the Engineer to enter, review the property, and offer findings and opinions about the property. All opinions and conclusions by the Engineer, whether written or oral, and any plans, specifications, reports, or other documents and services provided by the Engineer are for the sole use and benefit of the Client. Nothing within the scope of this review shall create a contractual relationship with or cause of action in favor of any third party against either the Engineer or the Client.

NO EXPRESSED WARRANTY IS GIVEN CONCERNINGTHE BUILDING(S) AND EQUIPMENTFORTHEIR FUTURE USEFULNESS. Client or agent authorization of the scope of work contained in the bid and signing of this document constitutes acceptance of this agreement, the fees charged and authorizes Residential Engineering Services, LLC dba Everstead ("Everstead"). and its representatives to disclose information, within the reports, to sellers, agents, lenders, and insurers intimate to this transaction for the purposes of clarification or facilitation of repairs. Areas/Items not in the report or stated not observed/not applicable were not inspected, inaccessible, or otherwise totally disclaimed.

3. REPORT

It is important to understand that predicting future changes in the condition of the building or its components is impossible. The report is intended to provide an overview of existing conditions only and should not be used as an indicator or predictor of future performance. No expressed or implied warranty or guarantee of any kind of any future performance, condition or suitability is given.

The written report constitutes the sole representations by the Engineer and any discussions that may have occurred during or after the review shall be considered informal in nature and shall be superseded by this report. The review is not an exhaustive technical or comprehensive engineering evaluation and, unless otherwise mentioned in the report, includes no detailed engineering design work, calculations, or soil tests. An exhaustive technical or comprehensive engineering evaluation which may include design, calculations, elevation readings, invasive testing, subsurface exploration, laboratory testing and analysis of soils, and evaluation of contractor bids and proposals to perform corrective work, can be provided but would be done under a separate scope of services and fee agreement.

4. LIEN

Company retains all right to file an engineer lien pursuant to relevant statutes, including, without limitation, those liens provided for under Chapter 429 RSMO.

5. INDEMNITY

This report is intended for the exclusive use of the client only and is not intended to benefit any third parties, including the current owner (seller) of the home, unless the seller is our client. By signing these terms, the client agrees to hold Everstead and its representative harmless, and indemnified and defended, from and against ANY AND ALL claims, loss, liability or expense, including legal fees, arising out of the services provided by this review and subsequent report. No review will be made nor will warranties or guarantees, either expressed or implied, be given for (a) a services provided by Company. Warranties can be obtained from various sources. Everstead recommends you consult with your realtor or legal counsel regarding the availability and purchase of any warranties.

6. ARBITRATION CLAUSE

Any dispute, controversy, interpretation or claim including claims for, but not limited to, breach of contract, any form of negligence, fraud or misrepresentation, arising out of, from or related to, this contract or arising out from or related to the services provided shall be submitted to final and BINDING arbitration under the Rules and Procedures of the AAA. The decision of the Arbitrator appointed there under shall be final and binding and judgment on the award may be entered in any Court of Competent jurisdiction.

To the extent allowed by law, it is understood and agreed by and between the parties hereto that the Engineer's/Engineering Company's and it officers', agents' or employees LIMITATION OF LIABILITY for errors or omissions in the services provided is limited and fixed to a refund of the fee paid for the services provided. This limitation of liability is specifically negotiated and by signing this agreement Client is entitled to a \$100 credit against the cost of the services rendered.

Any arbitration, legal action, or proceeding of any kind, including those sounding in tort or contract, against the engineer/engineering company's and its officers', agents' or employees must be brought within one (1) year from the date the services were rendered will be deemed waived and forever barred. Any costs for attorneys, legal fees, and/or court costs to defend the engineer/engineering company, its officers, agents or employees will be the responsibility of the Client. Any costs of arbitration are the responsibility of the client until such time as determined by the arbitrator that the engineer should be responsible. Time is expressly of the essence herein.

7. DEFAULT

EVERSTEAD | ENGINEERING & DESIGN

It is understood and agreed to by the client, that in the event legal action or the filing of liens and/or other means of collections is necessary by Everstead, the cost for outside services (legal fees and/or collections services) are the responsibility of the client or recipient of this report and the time involved by Everstead staff will also be charged to the client. Everstead time, if applicable, will be charged at the rate of \$150 per hour for professional staff and \$50 per hour for office staff. Non-payment of invoices within 30 days without written approval otherwise by Everstead staff will be cause for immediate collections action by Everstead. Interest on unpaid invoices will be charged at the rate of 2% compounded monthly. Charges which may be assessed may include but not limited to the following: clerical time, travel time, court fees, attorney fees, collection agency fees, file review time or any other time necessary for Everstead personnel to collect money owed for services rendered to the client. It is illegal to pass a check with insufficient funds. In the event a check is returned due to insufficient funds, Everstead will contact the client by telephone, and provide the client verbal notice that no more than 48 hours will be allowed to make payment to Everstead. Payment will include any of the above mentioned fees, but will be no less than \$50. In the event payment by cash or cashier's check is not received by Everstead, the client understands that Everstead will prosecute to the fullest extent allowed by law.

Acceptance of the written report shall constitute acceptance of the above terms and conditions.



Design/System/Construction/Assembly Usage Disclaimer

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

<u>See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances</u>

Design No. U336

December 4, 2024

Exposed to fire from separation Wall side only

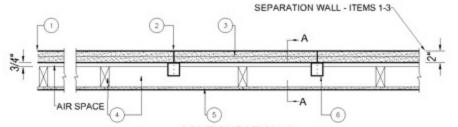
Nonbearing Wall Rating — 2 Hr (Separation Wall, See Items 1, 2 and 3)

Bearing Wall Rating – 2 Hr (Protected Wall, See Items 4 and 4A)

Nonbearing Wall Rating – 2 Hr (Protected Wall, See Item 4B)

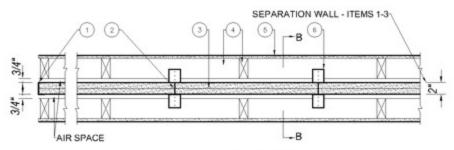
Finish Rating — 120 Min

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

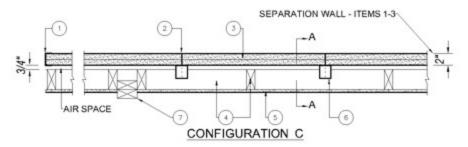


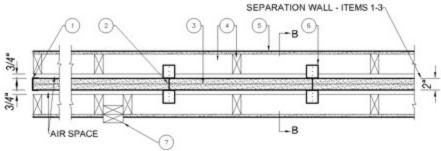
CONFIGURATION A

EXPOSED TO FIRE FROM AREA SEPARATION WALL ONLY

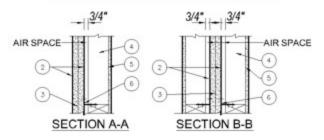


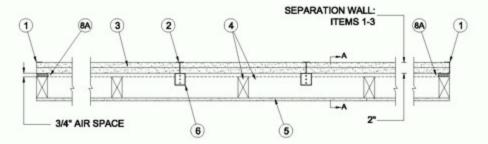
CONFIGURATION B EXPOSED TO FIRE FROM EITHER SIDE



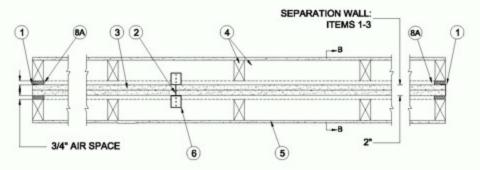


CONFIGURATION D EXPOSED TO FIRE FROM EITHER SIDE

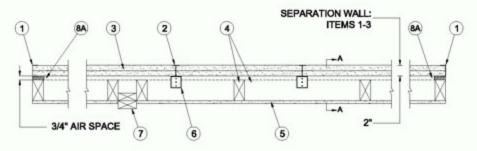




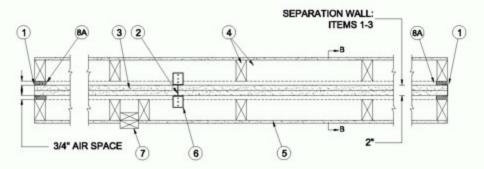
CONFIGURATION A EXPOSED TO FIRE FROM AREA SEPARATION WALL ONLY



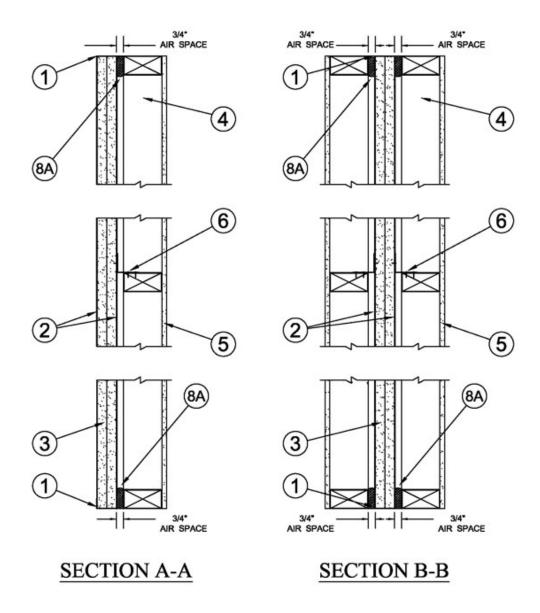
CONFIGURATION B EXPOSED TO FIRE FROM EITHER SIDE



CONFIGURATION C EXPOSED TO FIRE FROM AREA SEPARATION WALL ONLY



CONFIGURATION D
EXPOSED TO FIRE FROM EITHER SIDE



SEPARATION WALL: (Max Height - 66 ft)

- 1. Floor, Intermediate or Top Wall 2 in. wide channel shaped with 1 in. long legs formed from No. 25 MSG galv steel, secured with suitable fasteners spaced 24 in. OC.
- 2. **Metal Studs** Steel members formed from No. 25 MSG galv steel having "H" -shaped flanged spaced 24 in. OC; overall depth 2 in. and flange width 1-3/8 in.
- 3. **Gypsum Board*** Two layers of 1 in. thick gypsum board liner panels, supplied in nom 24 in. widths. Vertical edges of panels friction fitted into "H" -shaped studs. **CGC INC** Type SLX

UNITED STATES GYPSUM CO — Type SLX

USG BORAL DRYWALL SFZ LLC — Type SLX

USG MEXICO S A DE C V − Type SLX

PROTECTED WALL: (Bearing or Nonbearing Wall). When Bearing, Load Restricted for Canadian Applications — See Guide <u>BXUV7</u>.

- 4. **Wood Studs** Nom 2 by 4 in. max spacing 24 in. OC. Studs cross braced at mid-height where necessary for clip attachment. Min 3/4 in. separation between wood framing and fire separation wall.
- 4A. Steel Studs (As an alternate to Item 4, Not Shown) For Bearing Wall Rating Corrosion protected steel studs, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min 3-1/2 in. wide, min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, cold formed, shall be designed in accordance with the current edition of the Specification for the Design of Cold-Formed Steel Structural Members by the American Iron and Steel Institute. All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs, shall be as specified by the steel stud designer and/or producer, and shall meet the requirements of all applicable local code agencies. The max stud spacing of wall assemblies shall not exceed 24 in. OC. Studs attached to floor and ceiling tracks with 1/2 in. long Type S-12 steel screws on both sides of studs or by welded or bolted connections designed in accordance with the AISI specifications. Top and bottom tracks shall consist of steel members, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, that provide a sound structural connection between steel studs, and to adjacent assemblies such as a floor, ceiling, and/or other walls. Attached to floor and ceiling assemblies with steel fasteners spaced not greater than 24 in. O.C. Studs cross-braced with stud framing at midheight where necessary for clip attachment. Min 3/4 in. separation between steel framing and area separation wall. Finish rating has not been evaluated for Steel Studs.

4B **Steel Studs** — As an alternate to Items 4 and 4A, for use in Configuration B only, Not Shown) — For Nonbearing Wall Rating – Channel shaped, fabricated from min 25 MSG corrosion-protected steel, min 3-1/2 in. wide, min 1-1/4 in. flanges and 1/4 in. return, spaced a max of 24 in. OC. Studs to be cut 3/8 to 3/4 in. less than assembly height. Top and bottom tracks shall be channel shaped, fabricated from min 25 MSG corrosion-protected steel, min width to accommodate stud size, with min 1 in. long legs, attached to floor and ceiling with fasteners 24 in. OC max. Studs cross-braced with stud framing at midheight where necessary for clip attachment. Min 3/4 in. separation between steel framing and area separation wall. Finish rating has not been evaluated for Steel Studs.

- 5. **Gypsum Board** Classified or Unclassified Min 1/2 in. thick, 4 ft wide, applied either horizontally or vertically. Gypsum board attached to studs with 1-1/4 in. long steel drywall nails spaced 8 in. OC. Vertical joints located over studs. (Optional) Joints covered with paper tape and joint compound. Nail heads covered with joint compound.
- 5A. **Plywood Sheathing or OSB (Not Shown) As an alternate to Item 5**, min 1/2 in. thick plywood or OSB applied horizontally or vertically to wood or steel studs. Vertical joints located over studs. Horizontal joints shall be butted tight to form a closed joint. Fastened to studs with nails or screws of sufficient length, spaced 12 in. OC. Joint and fastener heads are not required to be treated. Aluminum clips shall be spaced as described in Item 6.

- 5B. **Batts and Blankets* (Not Shown)** As an alternate to Items 5 and 5A, glass fiber or mineral wool insulation, min. 3-1/2 in. thick, placed to completely fill the wood or steel stud cavities. When Batts and Blankets are used in place of Items 5 and 5A, the max height is 44 ft. and the aluminum clips (Item 6) shall be spaced a max of 5 ft. OC vertically. Min 3/4 in. separation between insulation and area separation wall. See Batts and Blankets (BKNV) category in the Building Materials Directory and Batt and Blankets (BZJZ) category in the Fire Resistance Directory for name of classified Companies.
- 6. **Attachment Clips** Aluminum angle, 0.063 in. thick, 2 in. wide with 2 in. and 2-1/4 in. legs. Clips secured with Type S screws 3/8 in. long to "H" studs and with Type W screws 1-1/4 in. long to wood framing through holes provided in clip.
- 6A. Clip placement (Item 6) for separation walls up to 23 ft high. Space clips a max of 10 ft OC vertically between wood framing and "H" studs.
- 6B. Clip placement (Item 6) for separation walls up to 44 ft high. Space clips as described in Item 6A for upper 24 ft. Remaining wall area below requires clips spaced a max 5 ft OC vertically between wood framing and "H" studs.
- 6C. Clip placement (Item 6) for separation walls up to 66 ft high: Space clips as described in Item 6A for upper 24 ft. Space clips as described in item 6B for next 20 ft. below the upper 24 ft. Remaining wall area below requires clips spaced a max of 40 in. OC vertically between wood framing and "H" studs.
- 7. Non-Bearing Wall Partition Intersection (Optional) Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the wall.
- 8. Caulking and Sealants* (Optional Intended for use as an air barrier Not evaluated as fireblocking) A bead of sealant applied around the partition perimeter, and at the interface between wood or steel framing and gypsum board panels to create an air barrier.

 KNAUF INSULATION LLC Type ECOSEAL™ Plus
- 8A. Caulking and Sealants* (Optional Intended for use as an air barrier Not evaluated as fireblocking) A bead of sealant applied around the partition perimeter in the 3/4 in. air space between wood framing (Item 4) and shaftliner panels (Item 3) to create an air barrier.

 DUPONT DE NEMOURS, INC. Great Stuff Gaps & Cracks, Great Stuff Pro Gaps & Cracks, Great Stuff Pro

Window & Door

ICP CONSTRUCTION INC— Fireblock, Window & Door, Insulating Foam Sealant, Multi-Purpose, HC Sealants, Black Foam Sealant, Extreme, Window & Door Extreme, Fast Foam, Gun Foam, and Straw Foam

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

Last Updated on 2024-12-04

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