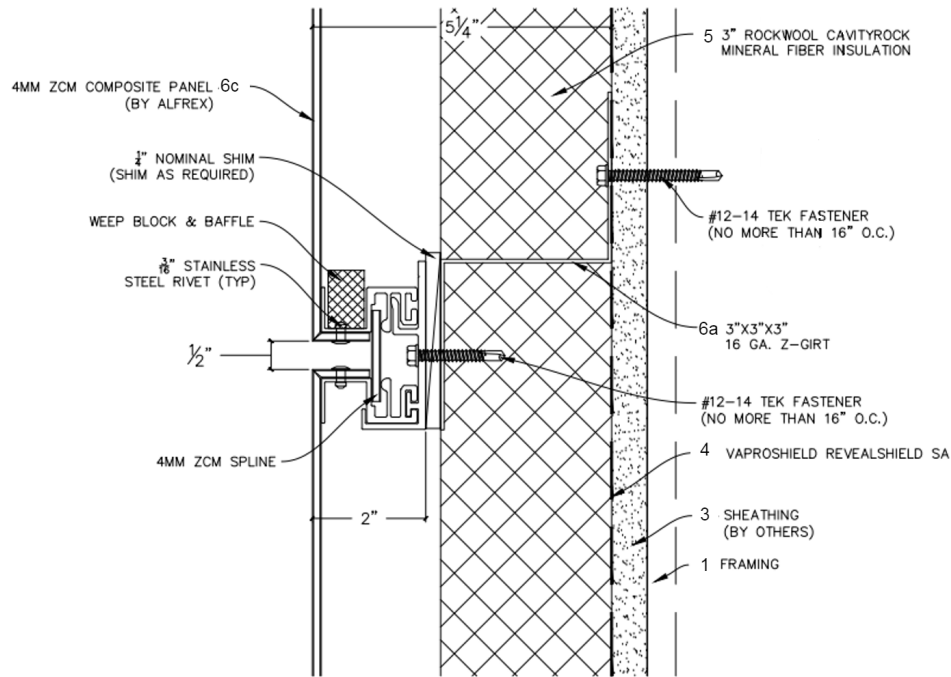
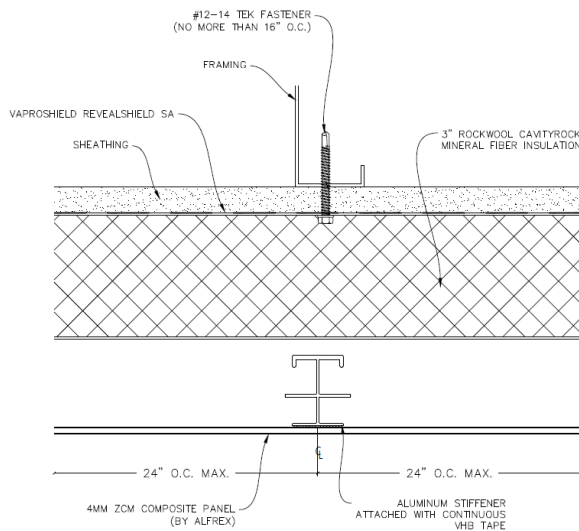


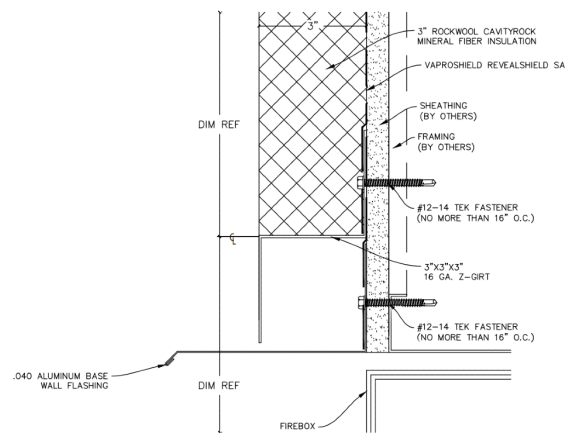
**Alfred, LLC**  
**Design No. UCL/MCMWP 30-02**  
**Exterior Wall Assembly**  
**Alfred FR ZCM Panel**  
**NFPA 285**  
**Rating: Meets Conditions of Acceptance**



**Figure 1 – Wall Assembly**



**Figure 2 – Stiffener Spacing**



**Figure 3 – Flashing Profile**



1. **STEEL FRAMING:** Install nominal 2 x 6, 20 GA steel studs spaced 24 in. on center (oc). Attach steel studs to 20 GA top and bottom steel tracks using #8 x 1/2 in. pan-head framing screws. Installation requires a vertical framing member behind each vertical joint.
2. **INTERIOR GYPSUM:** (Not Shown) Install one layer of 5/8 in. thick, Type X gypsum board to the interior side of the steel framing with the long dimension perpendicular to the steel studs. Fasten using #6 x1-1/4 in. self-drilling, zinc-plated, bugle-head screws spaced 8 in. oc around the perimeter and 12 in. oc in the field.
3. **EXTERIOR GYPSUM:** Install one layer of 5/8 in. thick, DensGlass® Gold Exterior Sheathing to the exterior side of the steel framing with the long dimension parallel to the steel studs. Fasten using #6 x1-1/4 in. self-drilling, zinc-plated, bugle-head screws spaced 8 in. oc around the perimeter and 12 in. oc in the field.
4. **WEATHER BARRIER:** Adhere a single layer of Vapro Shield® Reveal Shield self-adhered barrier over the exterior gypsum, with the long dimension oriented horizontally on the wall.
5. **INSULATION:** Install 3 in. thick Rockwool Cavity Rock mineral wool insulation (6.2 pcf outer layer and 4.1 pcf inner layer) between the Weather Barrier and the Exterior Veneer. Use 3 in. long insulation pins around the perimeter of the insulation to secure it in place.
6. **EXTERIOR VENEER:**  
  
**CERTIFIED PRODUCT:** 4mm Alfrex FR ZCM Panel  
  
Install the panels using the following components:
  - A. **Z-GIRTS** – 3 in. x 3 in. x 3 in., 16 GA steel z-girts oriented horizontally. The first z-girt is installed 24 in. above the window opening, and at 30 in. thereafter. Z-girts are fastened using #12-14 TEK screws.
  - B. **PRE-INSTALLED ALUMINUM EXTRUSIONS** – 2 in. x 3 in. 6063 T5 aluminum extrusions are riveted into the panel on each corner using 3/16 in. stainless steel rivets.
  - C. **COMPOSITE PANEL** – Secure the 4mm Alfrex FR ZCM panels to the z-girts using 12 x 1-1/2 in. 410 stainless steel, hex-head, self-drilling screws spaced every 24 in. oc through the pre-installed aluminum extrusions clips (2 in.) around the perimeter of the panels. The panels are installed in a manner to leave a 1/2 in. gap between panels edges, vertically and horizontally. A 4mm ZCM spline is installed within the extrusion. A weep block and baffle may be installed above the joint.
  - D. **STIFFENERS** – Adhere 6063 T5 aluminum stiffeners to the backside of the ZCM panels every 24 in. oc vertically using VHB tape (See Figure 2).
7. **INTUMESCENT STRIP:** (Not Shown) Adhere a 2 in. wide x 1/4 in. thick piece of Tenmat Firefly 102 intumescent strip horizontally to a 16 GA z-girt over the insulation in areas where the story concrete slabs are located.
8. **FLASHING:** (Figure 3) Fasten 0.040 in. thick aluminum base wall flashing with a nominal width of 10-1/2 in., and containing a 5/8 in. drip edge to the exterior side of the window openings. The width of the flashing must be adjusted as required to meet the overall wall thicknesses.



- 9. FLOORLINE FIRESTOPPING:** (Not Shown) Install min. 4 pcf mineral wool in each stud cavity at each floorline.

*Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.*

*Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.*