FWFO.EWS0054 - Exterior Wall Systems

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See General Information for Exterior Wall Systems

System No. EWS0054

April 14, 2020

Exterior Wall System
1. **Steel Studs** — Min 3-5/8 in. (92 mm) deep, formed of min 20 ga. galv steel spaced max 24 in. (610 mm) OC.

1A. **Alternate Base Walls** — (Optional, Not Shown) — Cast concrete walls or concrete masonry units (CMU) concrete walls may be used in lieu of Items 1 through 3.
2. **Interior Gypsum Board (CKNX)** — Min 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide, attached to steel studs with 1-1/4 in. (32 mm) long, Type S steel screws spaced max 8 in. (203 mm) OC. Joints oriented vertically and covered with paper tape and joint compound. Screw heads covered with joint compound. See Gypsum Board (CKNX) Category for names of Classified Companies.

3. **Exterior Gypsum Sheathing (CKNX)** — Exterior-grade glass mat sheathing gypsum board. Minimum 1/2 in. (12.7 mm) thick, attached to steel studs with 1-1/4 in. (31 mm) long, Type S steel screws spaced max 8 in. (203 mm) OC in the field and max 12 in. (304 mm) OC on the perimeter. Joints oriented horizontally. See Gypsum Board (CKNX) Category for names of Classified Companies.

4. **Exterior Wall System Component (FWFX)** — Foamed Plastic Stud Cavity Insulation - Spray applied foamed plastic insulation installed in the stud cavity, onto the interior surface of exterior gypsum board (Item 3). Maximum 2 lb/ft³ (32 kg/m³) density, applied to a thickness for partial or full stud cavity fill. When installed for partial stud cavity fill, the air gap between the insulation and interior gypsum board (Item 2) shall be maximum 1-5/8 in. (41 mm). Empty stud cavity also permitted. CARLISLE SPRAY FOAM INSULATION — SealTite PRO Closed Cell Winter, SealTite PRO OCX, SealTite PRO One Zero Regular, Foamsulate HFO Regular, Foamsulate OCX

5. **Exterior Wall System Component (FWFX)** — Foamed Plastic Insulation - Spray applied foamed plastic insulation installed onto the exterior surface of the exterior gypsum board (Item 3) and between z-girts. Maximum 2 lb/ft³ (32 kg/m³) density, applied at a maximum thickness of 3-1/2 in. (89 mm). Vertical z-girts (Item 7A) are installed prior to insulation and secured to steel studs. CARLISLE SPRAY FOAM INSULATION — SealTite PRO Closed Cell Winter, SealTite PRO One Zero Regular, Foamsulate HFO Regular

5A. **Batts and Blankets (BKNV)** (Optional) — Alternate Stud Cavity Insulation - Faced or unfaced glass fiber or mineral wool batt insulation. May be used to partially or completely fill the stud cavity. See Batts and Blankets (BKNV) Category for names of Classified Companies.

6. **Exterior Wall System Component (FWFX)** — Intumescent Coating - Spray applied intumescent coating applied at a nominal 16 mil wet thickness directly onto the exterior foamed plastic insulation (Item 5). Topcoat paint then spray applied to completely cover dry intumescent coating. INTERNATIONAL FIREPROOF TECHNOLOGY INC — DC315 Intumescent Coating

7. **Mounting System** — The following combination of items shall be installed prior to exterior cladding (Item 8):
   7A. **Z-Girts and Window Channel** — 4-1/4 in. (108 mm) deep, 22 ga steel C channel with 1-3/8 in. legs installed around the perimeter of the window opening and secured through the exterior sheathing to the steel studs. 4 in. deep, 20 ga steel z-girts with 2 in. legs secured through exterior sheathing to studs, 24 in. O.C. Vertically installed Z-Girts are to be used in conjunction with Hat Channels (Item 7B). As an alternate installation method, Z-Girts may be installed in the same manner and spacing but oriented horizontally, without the use of Hat Channels.

   7B. **Hat Channels** — Used in conjunction with Z-Girts and window channel (Item 7A), 1 in. deep, 3-7/8 in. tall, 22 ga steel hat channels fastened at 24 in. O.C. horizontally to the vertical z-girts.

8. **Exterior Cladding** — Aluminum or steel panels measuring minimum 0.030 in. (0.76 mm) thick, 16 in. (406.4 mm) wide and 18 ft (5.48 m) high. Vertical cladding edges are bent to interlock together such that all edges and fasteners are concealed after installation. 2-1/4 in. (57.2 mm) leading edge of panel is fastened directly to hat channels, while the next panel's 5/8 in. (15.9 mm) trailing edge is inserted into previous panel’s interlocking hem.

9. **Exterior Finishing** — (Not Shown) — The following items may be used as exterior finishing for the wall system in lieu of Exterior Cladding (Item 8):
   A. **Exterior Veneer** — Brick — Nom 4 in. (102 mm) thick clay brick veneer offset to provide a max 2 in. (51 mm) air gap between exterior wall insulation (Item 7) and brick veneer with standard type veneer anchors, spaced a max 24 in. (610 mm) on center.

B. **Concrete** — Min 2 in. (51 mm) thick with max 2 in. (51 mm) air gap between exterior wall insulation (Item 7) and concrete.

C. **Concrete Masonry Units** — Min 2 in. (51 mm) thick with max 2 in. (51 mm) air gap between exterior wall insulation (Item 7) and concrete masonry units.

D. **Stone Veneer** — Min 2 in. (51 mm) thick natural stone veneer with any standard non-open joint installation technique.

E. **Terracotta Cladding** — Min 1-1/4 in. (32 mm) thick with any standard non-open joint installation technique such as ship lap.

F. **Stucco** — Min 3/4 in. (19 mm) thick exterior cement plaster lath.

10. **Mineral Wool** — (Not Shown) — Minimum 4 pcf (64 kg/m³), 4 in. (102 mm) thick mineral batt insulation installed within stud cavity at floor line locations. Insulation installed filling full depth of stud cavity for the full depth of the floor line.

11. **Window Flashing** — Minimum 0.030 in. (0.76 mm) thick aluminum to cover all inner surfaces of window perimeter, overlapping a minimum of 3 in. onto the exterior surface of wall at the jambs and sill, and a minimum of 7/8 in. onto the exterior surface of wall at the header.

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

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