

TGKX.216B – Roof Deck Constructions

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.

Roof Deck Constructions

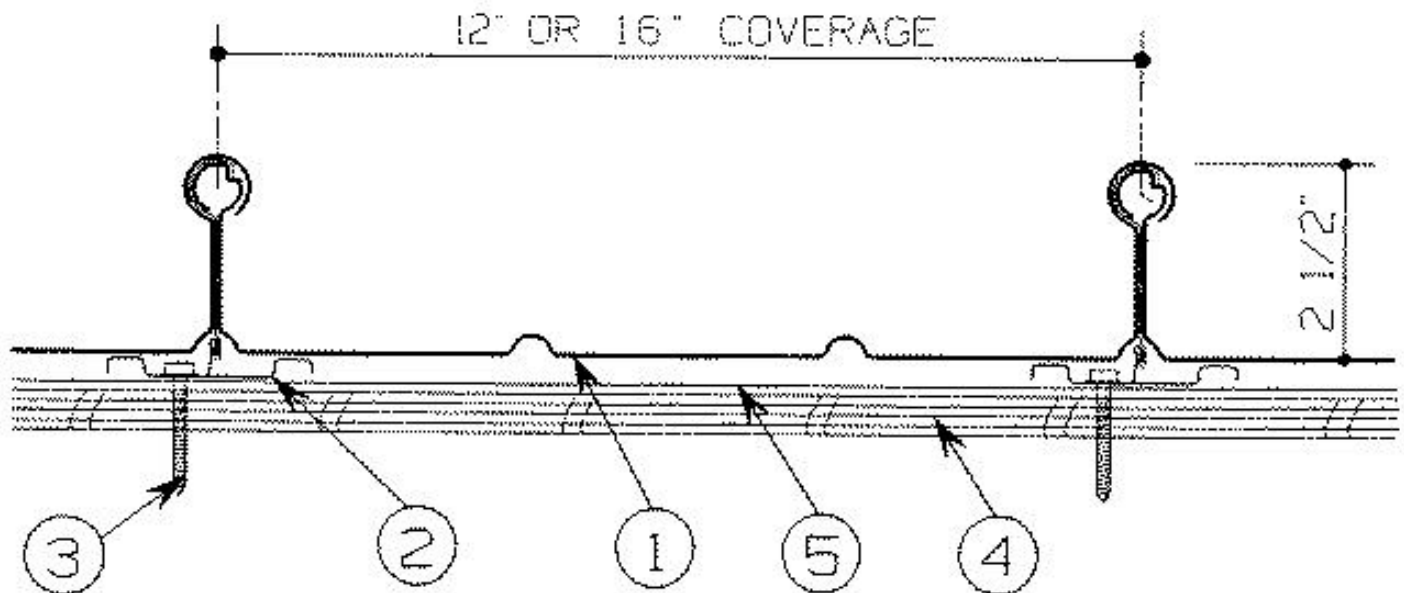
[See General Information for Roof Deck Constructions](#)

Construction No. 216B

September 16, 2015

Uplift — Class 90

Fire Not Investigated



1. Metal Roof Deck Panels* — Min 0.032 in. thick Aluminum, zinc or min 24 MSG coated steel, or min 0.022 in. thick copper, 12 in. or 16 in. wide, 2-1/2 in. high at the side ribs. Panels continuous over two or more spans. Side joints to be seamed continuously with a special seaming tool. End laps 8 inches with adjacent end laps staggered. Seaming process to include panel clips (item 2). **KALZIP INC** ([View Classification](#)). — "Kalzip 65/305", "Kalzip 65/400"

MERCHANT & EVANS INC ([View Classification](#)). — .032 in. & .040 in. x 12 in. Zip Rib; .032 in. & .040 in. x 16 in. Zip Rib; 24 & 22 gage x 12 in. Zip Rib; 24 & 22 gage x 16 in. Zip Rib

MORIN CORP ([View Classification](#)). — "MorZip/SRR"

2. Roof Deck Fasteners (Panel Clips) — Two piece assembly with a base section measuring 2-7/8 in. wide by 4-1/2 in. long fabricated from .047 in. thick galv or stainless steel. Upper piece measuring 2-1/2 in. wide by 1-3/4 in. high fabricated from No. 20 MSG stainless steel. Base to have three 1/4 in. diam guide holes. Maximum spacing 24 in.

MERCHANT & EVANS INC ([View Classification](#)). — #2080 Clip

2A. Roof Deck Fasteners* (Panel Clips) — Two part assembly; Base section approximately 2-7/8 in. wide and 4-1/2 in. long. Fabricated from No. 18 MSG min thickness coated steel. Three 1/4 in. diameter guide holes in base. Upper part 2-1/2 in. wide by approximately 3 in. high. Fabricated from 0.040 in. thick stainless steel. Clips spaced max 24 in. OC.

3. Fasteners (Screws) — Fasteners used to attach panel clips (Items 2 or 2A) to plywood deck (Item 4) to be No. 14-10 self tapping stainless or plated steel screws with or without washers. Fasteners used at endlap to be a blind rivet type with an aluminum sleeve having an 11/16 diam cap and with a 1/4-20 by 1-7/16 in. long stainless steel bolt. Spacing at end lap to be 4 in. O.C. beginning 2 in. from side ribs. Fasteners used to attach the plywood deck to supports (Item 6) to

be No. 8-18 by 2-1/2 in. long bugle head screws with a No. 2 Phillips drive bugle head, fasteners spaced 6 in. O.C. at butt joints and 12 in. O.C. in the field.

4. **Plywood Decking** — Plywood decking to be graded per PS83 specifications, 15/32 in. (nom 1/2 in.) thick, exposure 1, APA rated sheathing, 40/20 square edged. Butt ends not blocked.

5. **Underlayment** — Underlayment used over plywood deck to be 15 lb, type 30 organic felt. Sides and end laps 4 in. Fastened to plywood decking with staples in a random spacing.

6. **Supports** — Spaced max of 24 in. O.C. Any of the following types may be used to support the plywood decking.

a. Nom 2 by 6 min, No. 2 grade AFPA, S-P-F Hemlock Fir, Douglas Fir, or Southern Pine, or equivalent.

b. Wood trusses with a nom 2 by 4 in. upper chord of the same grade as item a.
Refer to general information Roof Deck Constructions for items not evaluated.

*** 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 2015-09-16

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