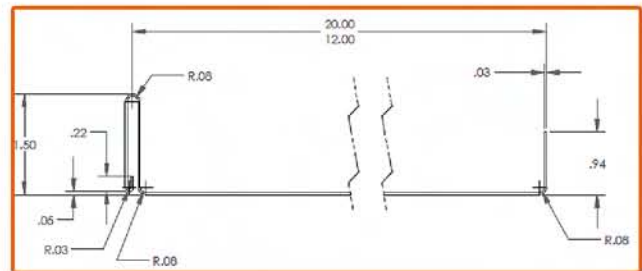


Snap Lock SL-150



Strip Width	12 to 24-in
Base Material	Steel
Thickness	.0128 to .027-in
Min Tensile	52-ksi
Min Yield	50-ksi
Coating	Painted / Galvalume



UL Construction Numbers: TGKX301, TGKX342A, TGKX388

The Snap Lock 1.5" (SL150) combines the architectural aesthetics and the structural performance, all in one panel that can be fabricated on site for all the substrates described in the UL Construction numbers mentioned above.

UL Performed Tests

- For Uplift Resistance of Roof Assemblies UL 580, CLASS 90
- For impact Resistance of Prepared Roof-Covering Materials UL2218, CLASS 4
- Fire Tests of roof Coverings UL 790, EXTERNAL FIRE EXPOSURE

Features

- 24ga Steel, or 26ga. Steel.
- Colors available on Standard, Premium and Metallic
- 12" to 24" o.c.
- On site or factory made
- Available in Smooth, Striated, Offset

Finish

- Kynar 500®, Galvalume®, Galvanized

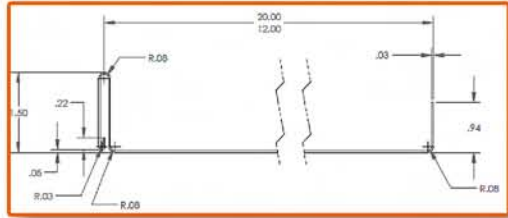
Requirements

- Open Framing, Solid substrate (Plywood, concrete, etc), rigid insulation
- Vapor barrier (When using rigid insulation or solid substrate)
- Bearing Plate (When using rigid insulation n top of metal decking)
- Minimum Roof Slope 3 1/2":12

Underwriters Laboratories Approval





Strip Width	12 to 24-in
Base Material	Steel
Thickness	.0128 to .027-in
Min Tensile	52-ksi
Min Yield	50-ski
Coatingd	Painted / Galvalume



UL Construction number	Panel Coverage (in)	Gauge	Clip	Max. Clip spacing	Roof Substrate	Impact Resistance UL-2218	Fire Rating UL-263	Uplift Resistance UL_580
301	12"-20"	24 min	Fix	1" - 6"	Plywood	Class 4	Class A	Class 90
342A	12"-20"	24 min	Fix	1" - 6"	Composite System	Class 4	Class A	Class 90
388	12"-20"	24 min	Fix	1" - 6"	Composite System	Class 4	Class A	Class 90

NOTES:

Test Procedures are in accordance with  Underwriters Laboratories Standard UL-580 under "Test for Uplift Resistance of Roof Assemblies".
 The panel qualifies for a Class A fire rating in compliance with  Underwriters Laboratories Standard UL-263 when installed over a non-combustible substrate and a Class C fire rating can be obtained as well.
 QM SL-150 Panels carry a Class 4 rating under UL-2218 "Test Standard for Impact Resistance"
 A detail method of installation is available for each Construction Number above that can be found in the UL Roofing Materials Directory.



UL Construction Number TGKX301

1. Metal Roof Deck Panels* – No. 24 MSG min coated steel panels, 20 in. wide or 12 in. wide, 1-1/2 in. high at female side rib. Panels continuous over three or more clips with no end laps. A bead of sealant may be used at panel side joints.

A. Metal Roof Deck Panels* – No. 24 MSG min coated steel panels, 19.5 in. max width 1-1/2 in. high at female side rib. Panels continuous over three or more clips with no end laps. A bead of sealant may be used at panel side joints.

2. Roof Deck Fasteners* (Panel Clips) – One piece assembly, 1-3/4 in. wide, 1-5/16 in. high. Min thickness 0.025 in. (No. 24 MSG). Clips spaced 18 in. OC fastened to plywood deck.

A. Roof Deck Fasteners* (Panel Clips) – One piece assembly, 2-1/4 in. wide, 1-1/8 in. high. Min thickness 0.025 in. (No. 24 MSG). Clips spaced 18 in. OC fastened to plywood deck.

3. Fasteners (Screws) – Fasteners used to attach panel clips (Items 2 and 2A) to plywood to be No. 10-12 by 1 in. long pancake head, No. 2 Phillips drive, A-point, coated steel screw. Min one fastener per clip to be used.

4. Underlayment – Underlayment used over plywood deck to be 30 lb organic felt. Sides overlapped min 2 in., end laps per manufacturer's instructions. Felt nailed to plywood deck with 1 in. long galv steel roofing nails, located per manufacturer's instructions. Nail spacing to be max 12 in. OC at the side lap and max 24 in. OC in interior rows.

5. Plywood Decking – Plywood decking to be graded per PS83 specifications, 19/32 in. thick, exposure 1, APA rated 20 in. OC, square edged. Butt ends not blocked. All butt and side joints to be sealed with a one part urethane caulk sealant applied with a caulking gun and feathered outward from the joint. (Note exception under Item 4, Alternate).

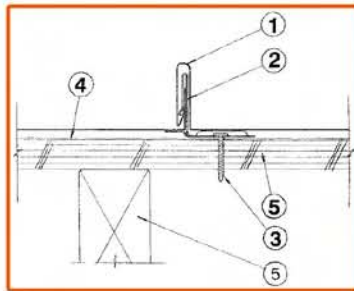
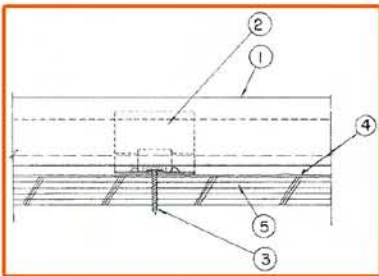
6. Supports – Spaced max of 24 in. OC. Any of the following types may be used to support the plywood decking:

- A. 2 by 6 in., min No. 2 grade A.F.P.A. 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.
- C. No. 22 MSG min cold formed coated steel (min yield to be 33,000 psi).

7. Plywood Fasteners – Fasteners used to attach the plywood deck to the supports to be as follows:

- A. For plywood-to-wood supports No. 8-18 by 1-7/8 in. long bugle-head steel screws with a No. 2 Phillips drive, a "Hi-Low" thread pattern and an "S-Point" .
- B. As an alternate to Item a, 8d by 2-1/2 in. long deformed shank common nails may be used.
- C. For plywood-to-steel supports for a steel thickness less than No. 20 MSG No. 7-19 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips head drive "Hi-Low" threads and an "S-Point" . For a steel thickness greater than No. 20 MSG to No. 16 MSG, No. 6-20 by 1-1/4 in. long bugle-head steel screws with a No. 2 Phillips drive and an S12 (TEKS/3®) point.

Spacing: Fastener spacing for all fastener types to be 6 in. O.C. at the plywood edges and 12 in. O.C. in the interior.





UL Construction Number TGKX342A

1. Metal Roof Deck Panels* – No. 24 MSG min gauge coated steel. Panel width may be 20 in. or 12 in. Panel ribs to be 1-1/2 in. high at female side. Panels continuous over three or more clips with no end laps.

A. Metal Roof Deck Panels* – No. 24 MSG min coated steel panels, 19.5 in. max width, 1-1/2 in. high at female side rib. Panels continuous over three or more clips with no end laps. A bead of sealant may be used at panel side joints.

2. Roof Deck Fasteners* (Panel Clips) – One piece assembly, 1-3/4 in. wide, 1-5/16 in. high min thickness 0.025 in. No. 24 MSG. Clips spaced 18 in. OC.

A. Roof Deck Fasteners* (Panel Clips) – One piece assembly, 2-1/4 in. wide, 1-1/8 in. high, min thickness 0.025 in. No. 24 MSG. Clips spaced 18 in. OC, fastened to plywood deck.

3. Gypsum Board* (Mineral Board) – Min thickness 1/2 in. Opposite side edges have a tongue and groove configuration. Butt (end) joints to be staggered and occur over steel deck crests. Wallboard installed perpendicular to steel deck corrugations.

4. Vapor Barrier – Single ply, used between the wallboard and metal roof deck panels to be a min 30 lb roofing felt.

5. Joint Tape – (Not shown) – All wallboard joints shall be taped with 2.5 in. wide joint tape supplied by the manufacturer.

6. Foamed Plastic – (Rigid Insulation) – (Optional) – Expanded polystyrene supplied in 4 by 8 ft sheets, min thickness 13/16 in., min density 1.0 pcf or (Rigid Insulation) Polyisocyanurate supplied in 4 by 8 ft sheets or (Rigid Insulation) Phenolic supplied in 4 by 8 ft sheets. All end joints to be staggered with respect to adjoining rows. All joints to be offset from joints in mineral board (Item 3).

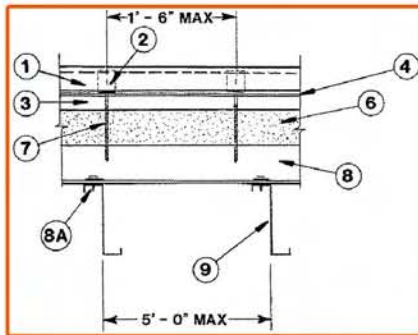
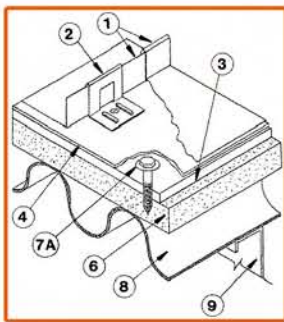
7. Fasteners – For attaching panel clips to steel deck to be min one 0.140 in. diam threaded shank Phillips, bugle or trumpet head, self-drilling, self-tapping corrosion resistant coated steel screws supplied by roof deck manufacturer. Screws shall penetrate steel deck min 1/2 in.

A. Fasteners – For attaching wallboard to steel deck (Item 8) to be min 0.140 in. diam threaded shank Phillips, bugle or trumpet head, self-drilling, self-tapping, corrosion resistant coated steel screws supplied by the manufacturer. Screws are installed into top corrugations of steel deck through nom 3 by 3 in. corrosion resistant steel roof deck plates, spaced in a pattern as determined by the pitch of the steel deck with the min density of 21 fasteners per 4 by 8 ft sheet of gypsum board (Item 3).

8. Steel Deck – Fabricated to various profiles, min yield strength 33,000 psi. Steel deck profile, thickness, support spacing and method of positioning (end and side laps) and fastening deck to supports to be per deck manufacturers requirements for uplift loading.

A. Deck Fasteners – Steel deck panels to be fastened to structural supports and at laps using ARC spot welds with weld washers or screw fasteners per deck manufacturer's requirements for uplift loading.

9. Purlins – 16 MSG min gauge steel (min yield strength 50,000 PSI) or min Type H open web joists.





UL Construction Number TGKX388

- 1. Metal Roof Deck Panels*** — No. 24 MSG min coated steel, 20 in. wide or 12 in. wide, 1-1/2 in. high at female side rib. Panels continuous over three or more clips with no end laps. A bead of sealant may be used at panel side joints.
- 2. Roof Deck Fasteners* (Panel Clips)** — One piece assembly, 1-3/4 in. wide, 1-5/16 in. high. Min thickness 0.025 in. (No. 24 MSG). Clips spaced 18 in. OC, fastened to liner panel (Item 7).
- A. Roof Deck Fasteners* (Panel Clips)** — One piece assembly, 1-3/4 in. wide 1-1/4 in. high. No. 24 MSG min thickness. Clips spaced 18 in. OC, fastened to liner panel (Item 7).
- 3. Fasteners (Screws)** — Fasteners used to attach the panel clips to the liner panel (Item 7) to be No. 14-13 steel screw with a No. 3 Phillips drive, modified truss-head with an offset drill type, self-drilling point. Length to be 1 in. longer than overall thickness of deck (insulation plus liner panel). One fastener used per clip.
- 4. Bearing Plate** — 4 in. by 4 in., Fabricated from No. 22 MSG coated steel. (Yield strength to be 33,000 psi.)
- 5. Foamed Plastic (Rigid Insulation)** — Optional — Max thickness 6 in. Density to be min of 2 pcf.
- 6. Asphalt Underlayment** — Any UL Classified underlayment applied in one layer per manufacturer's recommendations.
- 7. Liner Panel** — Min No. 22 MSG coated steel, min depth 1-1/2 in., max pitch 6 in., fabricated to various profiles. (33000 psi min yield strength) Fastened to supports (Item 8) with fastener type and spacing per liner panel manufacturer's specifications for uplift loading.
- 8. Supports** — (Not Shown) — Used to support liner panels to be cold formed or hot rolled sections. Gauge, yield strength, and spacing to be per liner panel manufacturer's specifications for uplift loading.

