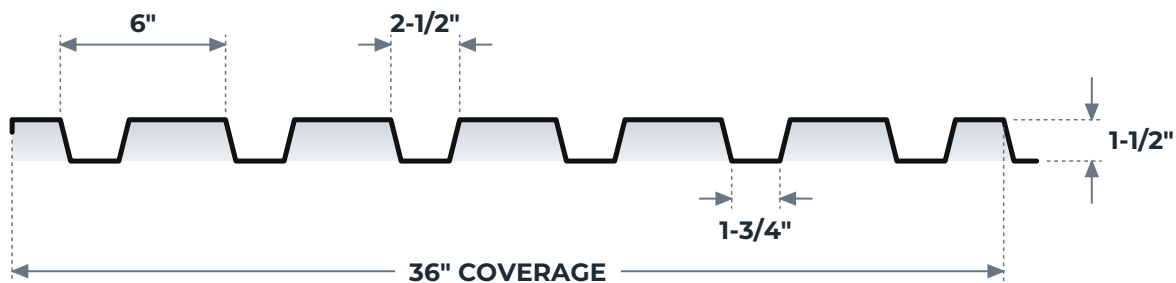




Type B Metal Roof Deck

GENERAL INSTALL GUIDE



Deck Overview

Profile: 1-1/2" deep wide rib, 6" rib spacing, 36" net coverage, 2-1/2" top rib opening, 1-3/4" bottom flange.

Gauges: 22, 20, 18 and 16 gauge.

Finishes: G60 or G90 galvanized; gray or white primer.

Sidelaps: Nestable sidelap.

Lengths: Cut to length.

Use: Roof deck over steel joists or structural steel, supporting rigid insulation and roofing.

This guide is a general reference. The project's structural drawings, the engineer of record's attachment pattern, and ANSI/SDI RD (Steel Deck Institute roof deck standard) govern. Where this guide conflicts with them, follow the drawings.

Job Site Safety

Deck work is work at height and must follow OSHA 1926 Subpart R (Steel Erection) and Subpart M (Fall Protection).

- Use fall protection at all leading edges and unprotected sides.
- Never walk on unattached sheets. Attach each sheet before stepping on it.
- Wear cut-resistant gloves, safety glasses and hard hats. Sheet edges are sharp.
- Do not overload joists with bundles. Land bundles directly over beams or main supports.
- Cover or guard openings immediately after they are cut.
- Stop work in high winds. Loose sheets can become airborne.

Delivery, Storage & Handling

- Check the delivery against the packing list for gauge, finish, length and quantity. Note any damage on the bill of lading.
- Store bundles off the ground on blocking, with one end raised so water drains off.
- Cover with a breathable tarp. Do not seal bundles in plastic, which traps condensation and causes white rust on galvanized deck.
- Lift bundles with spreader bars or nylon slings. Never lift by the banding.
- Do not drag sheets across each other, which scratches the coating.

Fasteners

Use only the fastener type, size and pattern shown on the structural drawings.

Attachment	Typical Fastener	Used For
Puddle weld	5/8" effective diameter; weld washers on 22 ga and lighter	Deck to steel supports
Self-drilling screw	#12 or #14 TEK screw	Deck to supports, sidelaps
Powder-actuated fastener	Pin rated for the support steel thickness	Deck to steel supports
Sidelap screw	#10 TEK screw	Sidelaps between supports
Button punch	Hand or pneumatic button punch tool	Sidelaps (where permitted)

Tools

- Chalk line and tape measure for layout and keeping coverage on module.
- Screw gun with depth control. Do not use an impact driver; it overdrives and strips fasteners.
- Welding equipment and AWS D1.3-certified welders for puddle welds.
- Plasma cutter or nibbler for cutting openings. Do not use an abrasive saw, which burns the coating.
- Deck clamps or locking pliers to hold sidelaps tight while fastening.

Pre-Installation Checks

- ☐ Structural steel is plumbed, bolted and inspected.
- ☐ Joist bridging is installed.
- ☐ Support spacing is within the deck's allowable span for the specified gauge.
- ☐ Supports provide at least 1-1/2" of bearing at sheet ends.
- ☐ Approved deck layout, fastening pattern and opening locations are on site.
- ☐ Welders are certified to AWS D1.3 for sheet steel.

Installation Steps

1. **Lay out.** Snap a chalk line square to the supports as a reference for the first sheet. Start at the end shown on the deck layout, usually away from prevailing wind.
2. **Place the first sheet.** Set it with ribs perpendicular to the supports, aligned to the chalk line. Check that it is square before attaching.
3. **Attach the first sheet.** Fasten to every support in the specified pattern before placing the next sheet.
4. **Place the next sheet.** Nest its sidelap over the previous sheet's edge rib, tight with no gap. Check coverage every few sheets so the run does not creep off the 36" module.
5. **Lap the ends.** Lap sheet ends at least 2" over a support, or butt them over a support if the drawings allow. Fasten through both sheets.
6. **Continue the run.** Attach each sheet to the supports as it is placed, keeping ribs aligned across end laps.
7. **Fasten the perimeter.** Add edge fasteners along walls and roof edges at the spacing shown on the drawings.

Support Fastening Patterns

The attachment pattern is written as coverage/number of fasteners. The two most common Type B patterns are shown below. Use the pattern on your structural drawings.

36/4 Pattern — 4 attachments per 36" sheet



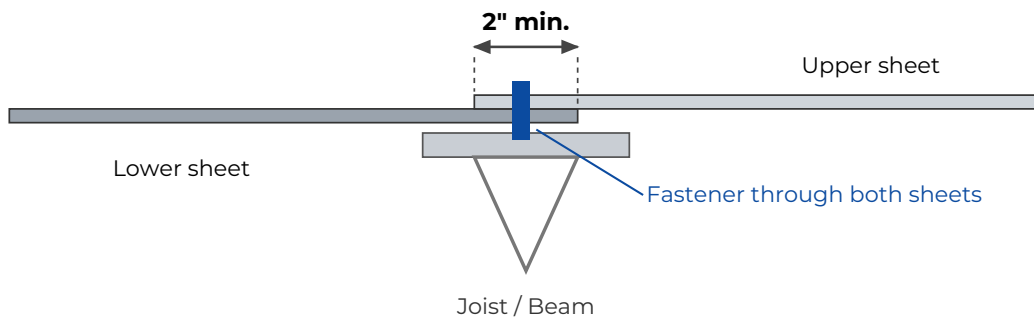
36/7 Pattern — 7 attachments per 36" sheet



● = weld, screw, or pin at support (pattern per structural drawings)

End Laps

End laps must fall over a support. Lap the upper sheet at least 2" over the lower sheet and fasten through both layers into the support.



Sidelap Fastening

Fasten sidelaps between supports at the spacing on the drawings, typically 12" to 36" on center. Sidelap fasteners let the deck act as a structural diaphragm, so do not skip them or space them wider than specified.

Openings

- Small openings (under about 6") usually need no reinforcement; confirm with the engineer of record.
- Larger openings for drains, vents and rooftop units need framing or reinforcing plates per the drawings.
- Cut openings after the deck is fastened, and frame them before loading.
- Guard every opening immediately after cutting.

Final Inspection

- ☐ Every sheet is attached at every support per the pattern.
- ☐ Sidelaps are fastened at the specified spacing.
- ☐ End laps are at least 2" and fall over supports.
- ☐ Welds show full fusion, with no burn-through or undersized welds.
- ☐ Screws are fully seated, not stripped or overdriven.
- ☐ Openings are framed and guarded.
- ☐ Damaged coating is touched up with zinc-rich or matching primer.
- ☐ Deck is clean of debris before insulation goes down.

