Installation Guide

General good practice for cold-formed steel framing

A checklist of good practice for installers and site supervisors. It does not replace the project drawings, the specification, the manufacturer's instructions or the governing code.

Before you start

- Check that member size, thickness (mil), yield strength and coating match the approved submittal and drawings.
- Confirm the wall height, spacing and deflection limit against the limiting-height table used for selection, and whether the wall is composite (gypsum on both faces) or non-composite.
- Check the substrate and the structure above: slab flatness, deflection of the floor or roof above, and required head-of-wall detail.
- Lay out walls from established control lines; mark door, window and service openings.

Interior non-structural walls (ASTM C754)

- Fasten floor and ceiling track at 24" o.c. maximum and within 2" of each end, with fasteners suited to the substrate (powder-actuated pins, concrete screws or screws to steel).
- Seat studs fully in the track with at least 1" end bearing. Attach studs to track where required by ASTM C754 or the assembly listing.
- Space studs as designed (12", 16" or 24" o.c.) and align punchouts for bridging and services.
- Where the structure above deflects, use a slip or deflection track and do not fasten studs to the upper track leg.
- Frame openings with doubled studs or as detailed; provide cripples, headers and backing for wall-mounted items.
- Use bracing or bridging when walls are taller than the unbraced condition of the selected table.

Structural and curtain walls (AISI S240)

- Follow the stamped shop drawings: member, thickness, spacing, connections, bridging and bracing are design items.
- Do not substitute thinner or lower-strength members, and do not cut flanges or lips unless detailed.
- Install bridging and bracing as shown, before applying load; respect the maximum unbraced length.
- Provide web stiffeners, clips or bearing plates where the design requires them.
- Use self-drilling screws per ASTM C1513 of the specified size and spacing; keep edge distances.
- Weld only where detailed, by qualified welders; touch up welds and cut ends with zinc-rich paint (ASTM A780).

Fastening tips

- Match screw point type to total steel thickness; use drill-point screws for 33 mil and heavier.
- Drive screws perpendicular, seat heads without stripping; replace stripped screws next to the failed location.
- For EQ members follow the screw and sheathing requirements in the product evaluation report.

Inspection before close-up

- Verify stud spacing, track fastening, bridging, bracing, head-of-wall clearance and opening framing.
- Check for damaged members, missing lips, incomplete end bearing and coating damage; replace or repair.
- Keep the approved submittal and limiting-height table on site for the inspector.