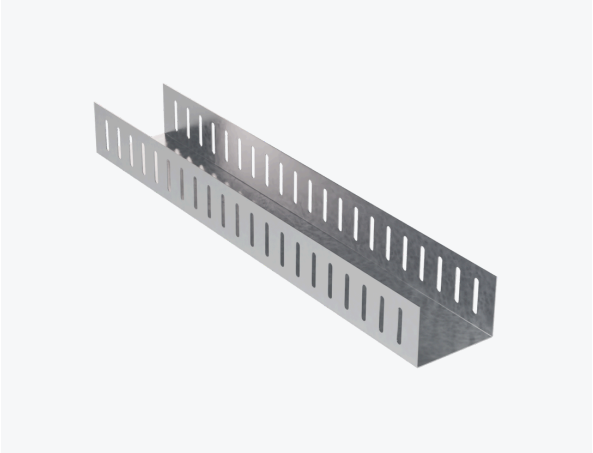
SLOTTED DEFLECTION TRACK

Head-of-wall track with slotted legs, so walls stay free while the structure above moves



PRODUCT 05 · STRUCTURAL FRAMING

Floors and roofs bend under load and move with temperature. A wall built tight against them can be crushed or cracked. Slotted deflection track is fixed to the structure above; its 2-1/2" legs have vertical slots, and the studs are screwed through the slots. The structure can then move up and down while the studs below stay where they are.

- 34 sizes, 2-1/2" to 12" wide
- 2-1/2" legs with slots along the full length of both legs
- Studs can sit at any spacing; no layout to match
- 18 to 97 mil, for interior walls and exterior curtain walls
- Standard 10' lengths

WIDTHS	LEG	SLOTS	MOVEMENT	THICKNESS	COATING
2-1/2" – 12"	2-1/2"	≈ 1-1/2" long	≈ ±3/4" typical	18 – 97 mil	G40 · G60

1 WHERE IT IS USED

- Head of interior partitions under floors and roofs that deflect
- Infill curtain walls between floor slabs
- Walls under long-span joists, steel deck and post-tensioned slabs
- Fire-rated walls, with a listed head-of-wall joint system
- Shaft and corridor walls that must not carry load from above

NOT A LOAD PATH

A slotted head keeps floor and roof load out of the wall. Load-bearing studs are seated in standard track instead (see DS-02).

2 PART NUMBER

600	ST	250	-54
WEB DEPTH	MEMBER	LEG	THICKNESS
1/100 in · 600 = 6"	ST = slotted track	1/100 in · 250 = 2-1/2"	mils · 54 = 0.054" min.

Width in 1/100 inch, ST for slotted track, leg length in 1/100 inch, thickness in mils. Example: 600ST250-54 is a 6" slotted track with 2-1/2" legs in 54 mil. Order by part number, length and quantity.

MOVES WITH THE BUILDING

Studs stay put while the slab above goes up and down

STUDS ANYWHERE

Slots run the full length of both legs

ONE PIECE

No separate clip needed at each stud for most walls

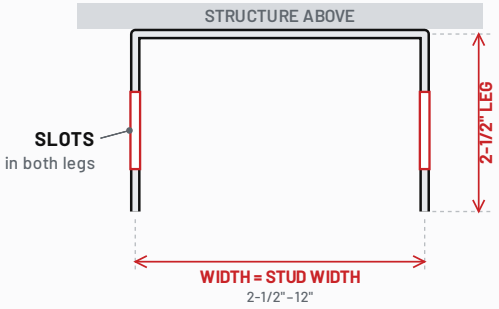
STEEL

Steel is a non-combustible material

PROFILE & SIZES

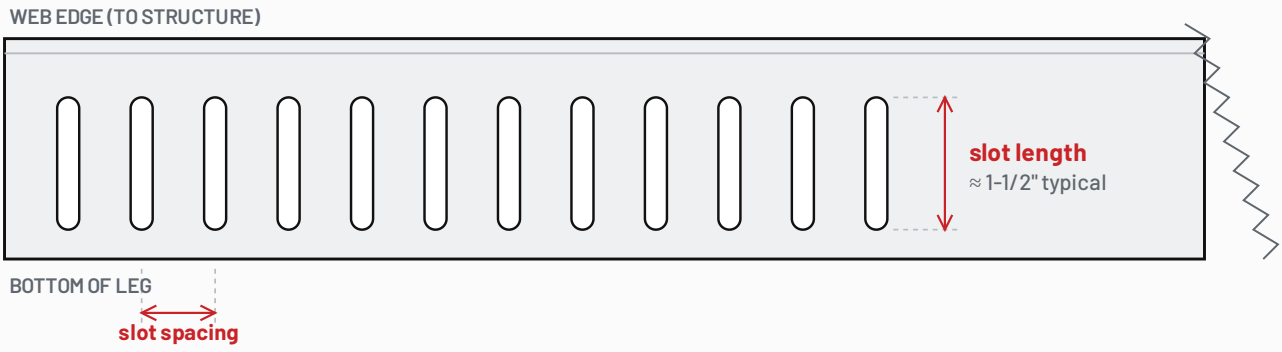
34 slotted track sizes · 2-1/2" legs · 18 to 97 mil

3 PROFILE



AT A GLANCE

SHAPE	U-track, no lips
WIDTHS	2-1/2" · 3-5/8" · 4" · 6" · 8" · 10" · 12"
LEG	2-1/2" · 63.5 mm
SLOTS	Vertical, in both legs, full length
THICKNESS	18 · 33 · 43 · 54 · 68 · 97 mil
LENGTH	10' standard
COATING	G40 (18 mil) · G60 (33 mil +)



Drawings not to scale. Slot length and spacing shown are typical; exact slot dimensions are available on request.

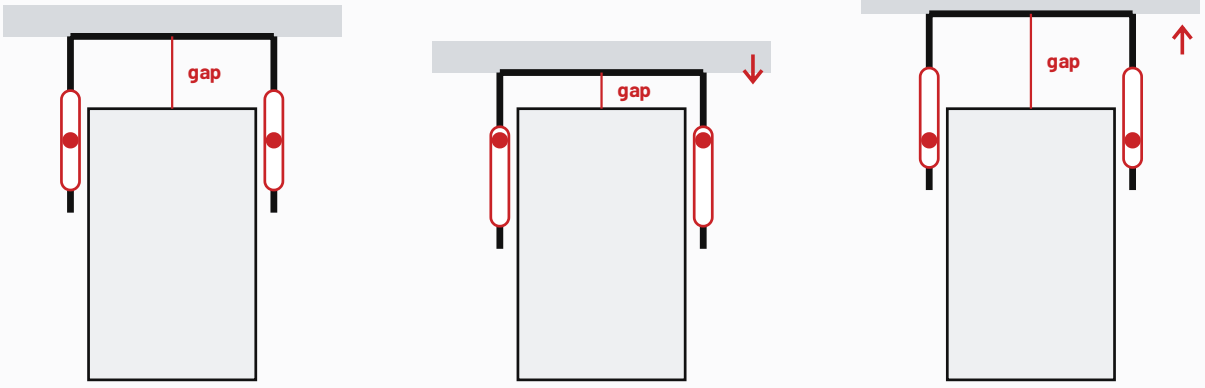
4 SIZES OFFERED

WIDTH	THICKNESS, MIL	PART NUMBERS
2-1/2"	18 · 33 · 43	250ST250-18 · 250ST250-33 · 250ST250-43
3-5/8"	18 · 33 · 43 · 54 · 68 · 97	362ST250-18 · 362ST250-33 · 362ST250-43 · 362ST250-54 · 362ST250-68 · 362ST250-97
4"	33 · 43 · 54 · 68 · 97	400ST250-33 · 400ST250-43 · 400ST250-54 · 400ST250-68 · 400ST250-97
6"	18 · 33 · 43 · 54 · 68 · 97	600ST250-18 · 600ST250-33 · 600ST250-43 · 600ST250-54 · 600ST250-68 · 600ST250-97
8"	33 · 43 · 54 · 68 · 97	800ST250-33 · 800ST250-43 · 800ST250-54 · 800ST250-68 · 800ST250-97
10"	33 · 43 · 54 · 68 · 97	1000ST250-33 · 1000ST250-43 · 1000ST250-54 · 1000ST250-68 · 1000ST250-97
12"	43 · 54 · 68 · 97	1200ST250-43 · 1200ST250-54 · 1200ST250-68 · 1200ST250-97

HOW IT WORKS

The stud stays still; the track moves with the structure

5 HOW THE SLOTS WORK



AT REST
screw at mid-slot

SLAB DEFLECTS DOWN
gap closes, stud stays put

SLAB MOVES UP
gap opens, stud stays put

Each stud is screwed through the middle of a slot in each leg. When the slab above comes down, the track slides down past the screws and the gap above the stud closes. When it goes back up, the gap opens again. The stud never carries the floor load. With about 1-1/2" slots and screws at mid-slot, about 3/4" of movement each way is typical.

6 SETTING THE GAP

- The design professional gives the movement to allow for, up and down
- Cut studs short so the gap at the top is at least the downward movement
- Put the screws at the middle of the slots, so the track can move both ways
- Keep the gap free of screws, board and sealant that would lock it

7 TRACK THICKNESS & SCREWS

- Track thickness is chosen by the design, often to match or exceed the stud
- Low-profile head screws, so board lies flat over the legs
- Track anchored to the structure at the spacing the design requires
- Near splices, jambs and heavy loads, a deflection clip may be needed

8 APPROXIMATE WEIGHT, LB/FT

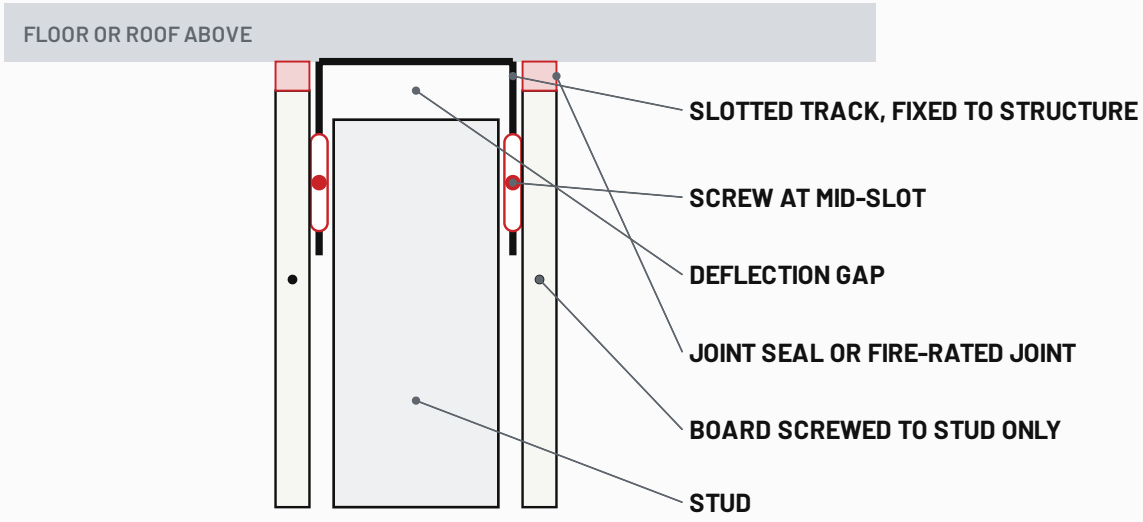
TRACK	18	33	43	54	68	97
250ST250	0.47	0.87	1.13	–	–	–
362ST250	0.55	1.00	1.30	1.63	2.05	2.89
400ST250	–	1.05	1.36	1.70	2.14	3.02
600ST250	0.70	1.28	1.67	2.09	2.62	3.71
800ST250	–	1.52	1.98	2.47	3.11	4.40
1000ST250	–	1.75	2.28	2.86	3.59	5.10
1200ST250	–	–	2.59	3.24	4.08	5.79

Approximate weights of the gross section from nominal dimensions, slots not deducted, base steel only. For handling and shipping estimates, not for design. 1 lb/ft = 1.488 kg/m.

DETAILS & OPTIONS

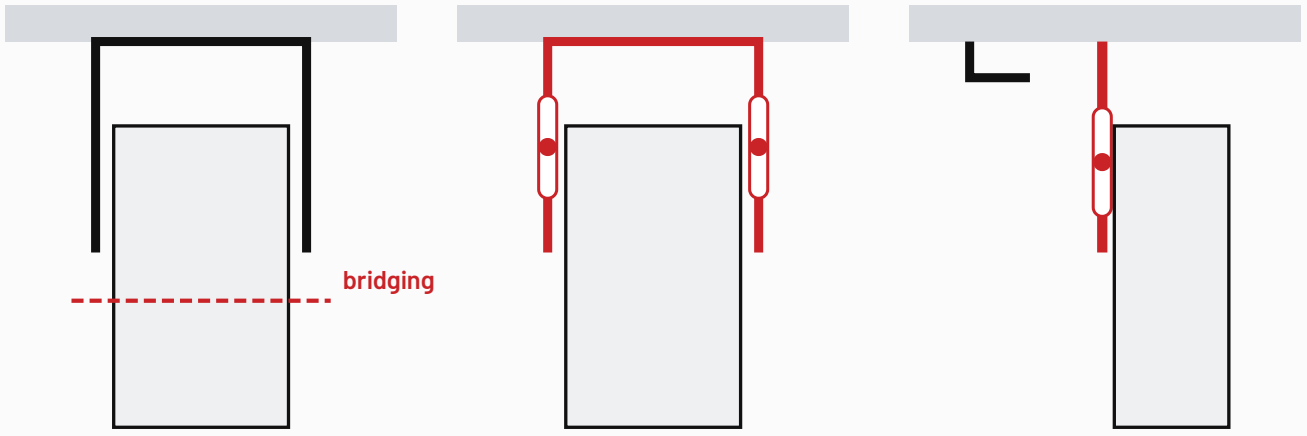
The head of wall, and how slotted track compares with other options

9 HEAD OF WALL



Board is screwed to the studs only, never into the track, so it moves with the wall and not with the slab. The joint at the top of the board is left open and sealed with a flexible sealant or, in fire-rated walls, a listed fire-resistive joint system.

10 THREE WAYS TO LET THE HEAD MOVE



DEEP-LEG TRACK
stud not screwed to track

SLOTTED TRACK
screws ride in slots

DEFLECTION CLIP
at each stud, heavier loads

Deep-leg track. Studs sit inside long legs with no screws into the track; bridging near the top holds them in line. Simple, for light interior walls.

Slotted track. Screws through the slots hold each stud in line and still let the track move. One part for most interior and curtain walls.

Deflection clips. A slotted clip at each stud, for heavier wind loads, jambs and studs near track splices. See our clip range, Product 22.

FIRE-RATED WALLS

In a fire-rated wall the head-of-wall gap must be filled with a fire-resistive joint system tested to CAN/ULC-S115 or ASTM E1966 and listed for the wall type, movement and gap width. Build the joint exactly as the listing shows.

INSTALLATION & STANDARDS

General guidance for installers and design professionals

11 TYPICAL INSTALLATION

1. Lay out the wall and fix the slotted track to the structure above, as the design requires.
2. Fix the bottom track to the floor.
3. Cut each stud to leave the design gap at the top.
4. Set the stud in both tracks and screw it to each slotted leg through the middle of a slot.
5. Screw the board to the studs only, keeping clear of the track and the gap; seal the head joint as specified.

General information only, not installation instructions. Install to ASTM C754 or C1007 as applicable, the drawings and specifications, any listed fire or joint system, and applicable codes.

12 DO & DON'T

DO

- Screw at mid-slot
- Leave the full gap
- Keep slots clear of debris
- Use the same width as the studs

DON'T

- Screw board into the track
- Screw the stud to the track web
- Fill the gap with rigid material
- Let studs bear on the track

13 STANDARDS

- ASTM C645 · non-structural members
- ASTM C955 · structural members
- ASTM A1003 · A653 · steel & coating
- ASTM C754 · C1007 · installation
- CSA S136 · design
- CAN/ULC-S115 · fire-resistive joints

14 MATERIAL

- 18–43 mil: 33 ksi minimum yield
- 54–97 mil: 50 ksi minimum yield
- 18 mil: G40 coating
- 33 mil and up: G60 coating
- Thickness colour code as our studs

15 STORAGE

Store bundles dry, off the ground and under ventilated cover. Slotted legs are easier to bend than plain legs; lift and stack with care. Edges are sharp: use gloves and appropriate PPE.

16 COMMON QUESTIONS

How much movement does it allow?
About 3/4" each way is typical when screws sit at mid-slot. The movement a wall needs is set by the design professional.

Can I use it at the bottom of the wall?
Slotted track is meant for the head of wall. Bottom track is normally standard track fixed to the floor.

Do the studs need to line up with the slots?
No. Slots run along the full length of both legs, so studs can go at any spacing.

What about fire-rated walls?
Use a listed head-of-wall joint system for the rating, gap and movement, and build it exactly as listed.

SPECIFYING & NOTICE

Checklist, submittals, specification guide and certification

17 BEFORE YOU ORDER: CHECKLIST

- Track width to match the studs
- Thickness from the drawings or specification
- Movement to allow for, up and down
- Lengths and quantities from the takeoff
- Bottom track, studs and screws
- Deflection clips at jambs and splices, if required
- Head-of-wall seal or fire-rated joint system

18 TYPICAL SUBMITTALS

- Product data for track, studs, clips and fasteners
- Shop drawings showing the head-of-wall detail and gap
- Listing of the fire-resistive joint system, where rated
- Material test reports, when requested
- Proof of certification for the framing members

19 SPECIFICATION GUIDE

Head-of-wall track: slotted deflection track with 2-1/2" legs and vertical slots in both legs, width to match the studs, thickness as shown on the drawings, steel to ASTM A1003, G40 (18 mil) or G60 (33 mil and heavier) coating to ASTM A653; members to ASTM C645 or C955 as applicable; Saturn Metal DS-05. Studs screwed through the slots at mid-slot with the deflection gap shown on the drawings; board fastened to studs only; head joint sealed or fire-rated as specified.

Certification: our cold-formed framing members are product certified by CISC to CSSBI 61:24. Certification covers only the members named in our current Product Scope Listing; confirm the status of a specific member with us before relying on it.
Related: interior steel studs DS-01 · load-bearing studs DS-02 · track Product 04 · clips and connectors Product 22.
Technical questions and quotes: +1 (416) 746-8000 · Sales@SaturnMetal.ca · www.SaturnMetal.ca

IMPORTANT NOTICE

This data sheet gives general product information only. It is not engineering, design or installation advice. A qualified design professional must review every application, and the building code and project documents always govern. It does not give load capacities. Drawings are schematic and not to scale; dimensions are nominal and subject to standard tolerances. Values marked typical, approximate or commonly specified are for reference only. Standards are referenced by name for identification; always use the edition required by the governing code. Saturn Metal may change products and information without notice; confirm current data before ordering or specifying. Warranties and remedies, if any, are only those in Saturn Metal's written terms of sale. Names of standards bodies and certification programs belong to their owners. Saturn Metal is a manufacturer and/or supplier of metal products; this data sheet does not mean that the product shown is manufactured by Saturn Metal. © Saturn Metal