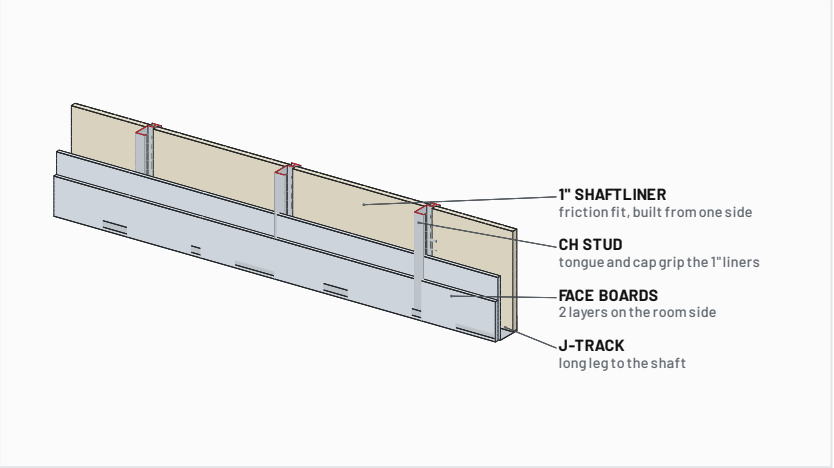
PRODUCT DATA SHEET · DS-09

SHAFTWALL J-TRACK

The runner, jamb strut and end closure of a one-side-built shaftwall





PRODUCT 09 · SHAFTWALL SYSTEM

J-track is the runner of a shaftwall. It has one long leg and one short leg: the long leg faces the shaft and backs up the 1" shaftliner panels, the short leg faces the room. CH studs (DS-08) friction-fit between the J-tracks at the floor and the structure above. The same track, with a 3" leg, frames openings and closes wall ends, so the whole enclosure is built from the room side with two framing parts.

- 10 sizes: 2-1/2", 4" and 6" wide, 18 and 33 mil
- Long leg 2-1/4" or 3"; short leg 1"
- Matches the CH stud of the same depth
- Fire and sound ratings come from the tested, listed assembly

WIDTHS	LONG LEG	SHORT LEG	THICKNESS	LENGTH	COATING
2-1/2" · 4" · 6"	2-1/4" · 3"	1"	18 · 33 mil	10'	G40 min.

1 WHERE IT IS USED

Floor and ceiling runners
The track the CH studs and shaftliner stand in, at the bottom and top of every shaftwall.

Jamb struts
The 3" leg track frames door and duct openings and stiffens the wall edge.

Wall ends, corners and abutments
J-track closes the end of a run and ties it to the next wall or to the structure.

Horizontal use
Runners for corridor ceilings and stair soffits built with CH studs, where the listing allows.

2 THE PARTS

1. **Long leg.** 2-1/4" or 3". Faces the shaft and backs up the 1" liner, so the liner cannot slide into the shaft. The 3" leg is used as a jamb strut.
2. **Short leg.** 1". Faces the room, behind the face boards.
3. **Web.** The flat back, as wide as the CH stud depth. It is fixed to the floor, the structure above, a jamb or an abutting wall.
4. **Tabs.** Optional fold-up tabs in the long leg hold the liner without screws. Where tabs are not used, the liner is screwed to the track.

TWO LEGS, TWO JOBS
Long leg backs the liner; short leg sits behind the boards

FLOOR AND CEILING
Holds the liners and studs top and bottom

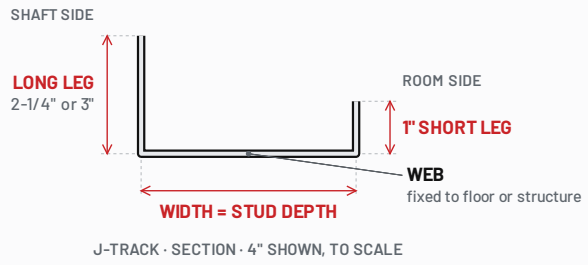
JAMB STRUT
The 3" leg track frames doors, ducts and wall ends

STEEL
Steel is a non-combustible material

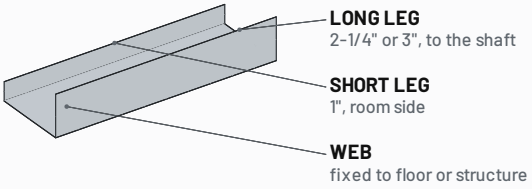
PROFILE & SIZES

10 sizes · 2-1/2" to 6" · 2-1/4" or 3" long leg · 18 and 33 mil

3 PROFILE



J-TRACK · SECTION · 4" SHOWN, TO SCALE



Drawn to scale on a 4" track. The short leg is 1"; the long leg is 2-1/4" or 3". Inside width matches the CH stud depth. Radii are typical.

4 AT A GLANCE

SHAPE	J-section: unequal legs, no lips
WIDTHS	2-1/2" · 4" · 6"
LONG LEG	2-1/4" standard · 3" jamb strut
SHORT LEG	1"
THICKNESS	18 mil (25 ga) · 33 mil (20 ga)
TABS	Optional fold-up tabs in the long leg
LENGTH	10'
STEEL	ASTM A1003, 33 ksi
COATING	G40 minimum, ASTM A653
MEMBERS	ASTM C645 / AISI S220, non-structural

5 SIZES

WIDTH	THICKNESS, MIL	2-1/4" LEG	3" LEG
2-1/2"	◌ 18 ○ 33	250J225-18 · 250J225-33	250J300-18 · 250J300-33
4"	◌ 18 ○ 33	400J225-18 · 400J225-33	400J300-18 · 400J300-33
6"	○ 33	600J225-33	600J300-33

Width in 1/100 inch, J, leg code (225 or 300), thickness in mils. Example: 400J225-33 is a 4" J-track with a 2-1/4" long leg in 33 mil. Order by part number, length and quantity, to match the CH stud (DS-08).

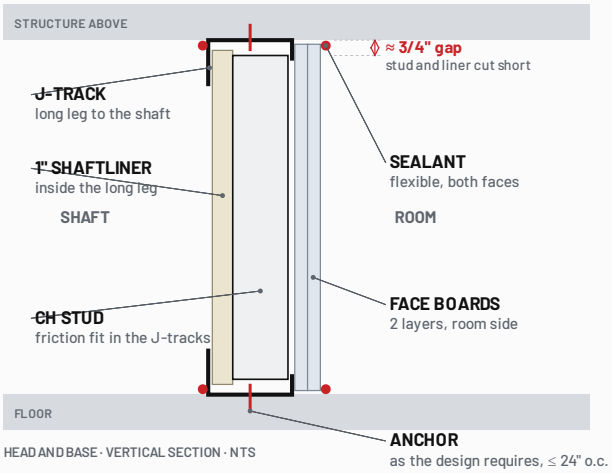
6 WHICH LEG?

LEG	WHERE	WHY
2-1/4"	Floor and ceiling runners on straight runs	Backs up the liner; the standard choice
3"	Jamb struts at doors and ducts, wall ends, abutments, corners	Extra leg to screw to, and a stiffer edge
Either	Head and sill of openings	As the detail shows; 3" where the opening frame needs it

HEAD, BASE & HOW IT WORKS

Long leg to the shaft, studs and liner friction-fit, sealed perimeter

7 HEAD AND BASE



HEAD AND BASE · VERTICAL SECTION · NTS

8 HOW THE J-TRACK WORKS

At the floor the J-track is fixed down with its long leg to the shaft. The first liner stands in it against the long leg, held by the fold-up tabs or a screw. Each CH stud, cut 3/4" short, drops into the track and friction-fits; it is not screwed to the track in a vertical wall.

At the structure above, the track is fixed up the same way, legs down, so the studs and liners are held top and bottom and the wall spans floor to structure as a simple span.

9 FIXING AND SEALING

- Fix the web to the floor and to the structure with fasteners suited to the base, at the spacing the design gives, commonly no more than 24" o.c.
- In steel-framed buildings, set the perimeter J-track before spray fireproofing goes on.
- Seal under and behind the track with a flexible sealant that stays soft, both faces.
- Where the structure above will deflect, the head detail must allow for it; the design professional and the listing set the detail.
- J-track that is not fixed to the structure is never spliced.

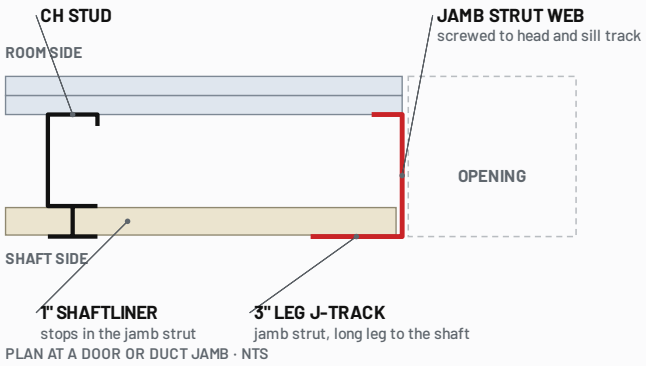
RATINGS BELONG TO THE ASSEMBLY

Fire and sound ratings come from a tested, listed assembly that names the liner, boards, stud, track and fastening. Build the listed assembly exactly and confirm it with the authority having jurisdiction.

OPENINGS, ENDS & PLAN

The 3" leg track as jamb strut and end closure; the wall in plan

10 JAMB STRUT AT AN OPENING

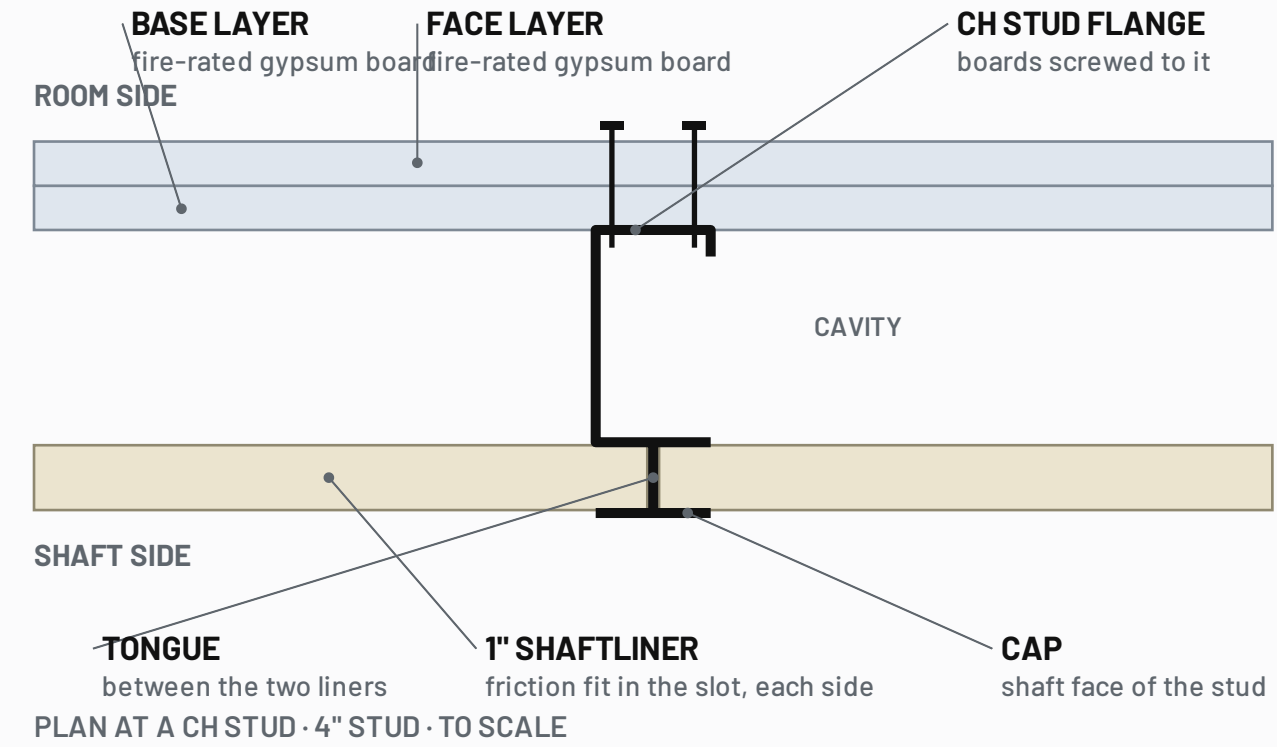


PLAN AT A DOOR OR DUCT JAMB · NTS

11 OPENINGS, ENDS AND CORNERS

1. **Doors and ducts.** Frame the opening with 3" leg J-track: a jamb strut each side, screwed to head and sill track, with pan-head screws at every intersection. The liner and boards stop in the strut.
2. **Independent support.** Elevator door frames, ducts and equipment need their own structural support; the shaftwall does not carry them. Rated assemblies are tested without openings.
3. **Wall ends and abutments.** End the run in a J-track screwed to the abutting wall or structure, with sealant at the joint.
4. **Inside corner.** Screw a J-track to the first wall where the second wall will meet it, before the second wall is boarded.
5. **Outside corner.** J-track at the end of the liner; the face boards wrap the corner with corner bead.
6. **Control joints.** Limit a continuous run to about 30 feet and line joints up with the structure's joints where possible; use a listed joint detail in rated walls.

12 PLAN AT A STUD

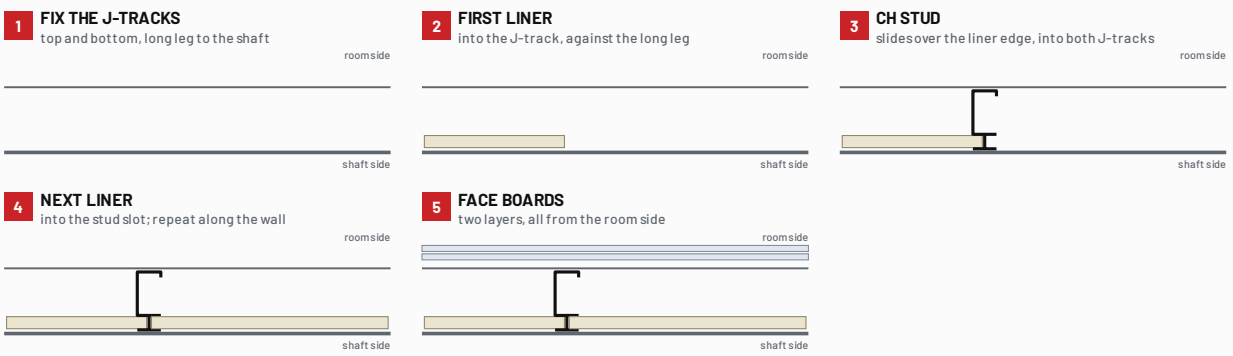


PLAN AT A CH STUD · 4" STUD · TO SCALE

SEQUENCE & HORIZONTAL USE

The track goes in first; corridor ceilings and stair soffits

13 BUILDING THE WALL, STEP BY STEP



Plan views, schematic. The J-track goes in first and sets the line of the wall; everything else follows from it. The CH stud is covered in detail on DS-08.

14 HORIZONTAL USE

Where the listing and the design allow, J-track and CH studs can frame a corridor ceiling or a stair soffit. The J-track is fixed along the corridor walls or stair stringers at no more than 24" o.c., liners go in against the long leg, and each CH stud end is screwed to both flanges of the J-track with #8 pan-head screws. Spans and board requirements come from the listed assembly.

NO LOAD ON A HORIZONTAL ASSEMBLY

A horizontal shaftwall assembly carries its own weight only: no live load, no mechanical equipment, no storage, no hangers from above. Anything else needs its own support.

WEIGHTS, MATERIAL & FASTENERS

Approximate weights for handling, the steel, typical fasteners and takeoff

15 APPROXIMATE WEIGHT, LB/FT

TRACK	18	33
250J225 · 2-1/2" × 2-1/4"	0.37	0.68
250J300 · 2-1/2" × 3"	0.42	0.76
400J225 · 4" × 2-1/4"	0.46	0.85
400J300 · 4" × 3"	0.51	0.94
600J225 · 6" × 2-1/4"	–	1.09
600J300 · 6" × 3"	–	1.18

Approximate weights from the nominal developed width and design thickness, base steel only. For handling and shipping estimates, not for design. 1 lb/ft = 1.488 kg/m.

ESTIMATING A LOAD

Weight ≈ lb/ft × length × pieces. Example: 40 pieces of 400J225-33 at 10' = 400 ft × 0.85 lb/ft ≈ **341 lb** (155 kg). Add packing and allow for tolerance.

16 MATERIAL

MILS	GAUGE REF.	MIN. THICKNESS	DESIGN THICKNESS	COLOUR	MIN. YIELD	COATING
18	25	0.018" · 0.46 mm	0.0188" · 0.48 mm	None	33 ksi	G40 min.
33	20	0.033" · 0.84 mm	0.0346" · 0.88 mm	White	33 ksi	G40 min.

Steel to ASTM A1003, coating to ASTM A653. Minimum thickness is 95% of design thickness. Yield and coating shown are the minimums commonly specified; the material certificate governs. Gauge is a reference only; order by mils.

17 FASTENERS, TYPICAL

- Track to concrete: powder-actuated fasteners or anchors, as the design requires
- Track to steel: self-drilling screws
- Track to track at openings: #8 pan-head screws, 1/2" min.
- Liner to track where tabs are not used: Type S screws, 12" o.c.
- Type S screws into 18 mil framing, Type S-12 into 33 mil

18 TAKEOFF

Runners: twice the wall length (floor and ceiling), in 10' pieces. Add a 3" leg strut for each jamb and wall end, and head and sill pieces for each opening.

INSTALLATION & STANDARDS

General guidance for installers and design professionals

19 TYPICAL INSTALLATION

1. Set out the wall line on the floor and transfer it to the structure above.
2. Fix the floor J-track, long leg to the shaft, with sealant under it, fasteners at the design spacing.
3. Fix the ceiling J-track plumb above it, legs down, the same way.
4. At each opening, wall end and corner, fix 3" leg J-track as jamb strut or closure, screwed to head and sill track.
5. Stand the first liner against the long leg; bend out the tabs or screw it.
6. Set CH studs and liners along the wall (DS-08), then the face boards.
7. Seal the perimeter and all penetrations.

General information only, not installation instructions. Install to ASTM C754 and C840, the listed assembly, the drawings and specifications, and applicable codes.

20 DO & DON'T

DO

- Long leg to the shaft
- Set track before fireproofing
- Seal under the track
- Use 3" leg at jambs

DON'T

- Splice a free track
- Screw studs to the track on a straight run
- Hang doors or ducts from it
- Change the listed assembly

21 STORAGE

Store bundles dry, off the ground and under ventilated cover. Keep the long legs from being bent in handling. Edges are sharp: use gloves and appropriate PPE.

22 STANDARDS

- ASTM C645 · AISI S220 · members
- ASTM A1003 · steel
- ASTM A653 · coating
- ASTM C754 · installation
- ASTM C840 · gypsum board
- CAN/ULC-S101 · ASTM E119 · fire tests
- ASTM E90 · sound tests
- National Building Code of Canada

23 COMMON QUESTIONS

Which way round does it go?

Long leg to the shaft, every time. It is the backstop that keeps the liner from sliding into the shaft.

When do I need the 3" leg?

At door and duct jambs, wall ends, abutments and corners, and wherever the detail calls for a stiffer edge or more leg to screw to.

Do the studs get screwed to it?

Not in a vertical wall; CH studs friction-fit. Screw them only at openings and in horizontal (ceiling) use, as the detail shows.

Can I splice it?

Only where it is fixed to the structure along its length. A track that is not fixed, such as a jamb strut, is one piece.

SPECIFYING & NOTICE

Checklist, submittals, specification guide and certification

24 BEFORE YOU ORDER: CHECKLIST

- Width to match the CH stud
- Thickness from the listing and the design
- 2-1/4" leg for runners; 3" leg for jambs, ends and corners
- Lengths: twice the wall length, plus struts, heads and sills
- Fasteners to concrete and steel
- Sealant and fire-stopping
- CH studs, liner and boards from the listed assembly

25 TYPICAL SUBMITTALS

- Product data for J-track and CH studs
- The listed fire-resistive assembly and sound test, where required
- Shop drawings showing openings, jamb struts, corners, control joints and head details
- Material test reports, when requested
- Proof of certification for the framing members

26 SPECIFICATION GUIDE

Section 09 21 16, Gypsum Board Shaft Wall Assemblies. Shaftwall runners: cold-formed steel J-track, width to match the CH studs, thickness as shown on the drawings and as required by the listed assembly, with a 2-1/4" long leg and 1" short leg, and 3" long leg at jambs, wall ends, abutments and corners; steel to ASTM A1003, 33 ksi minimum, G40 minimum coating to ASTM A653; members to ASTM C645 / AISI S220; Saturn Metal DS-09. Installed with the long leg toward the shaft, fixed to the floor and structure at the spacing shown, perimeter sealed with flexible sealant; CH studs (DS-08) friction-fit; installed to ASTM C754 and C840.

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: shaftwall CH stud DS-08 · track DS-04 · slotted deflection track DS-05.
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 limiting heights, spans, fire or sound ratings; those belong to the listed assembly and the design. Drawings are schematic and not to scale unless noted; 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