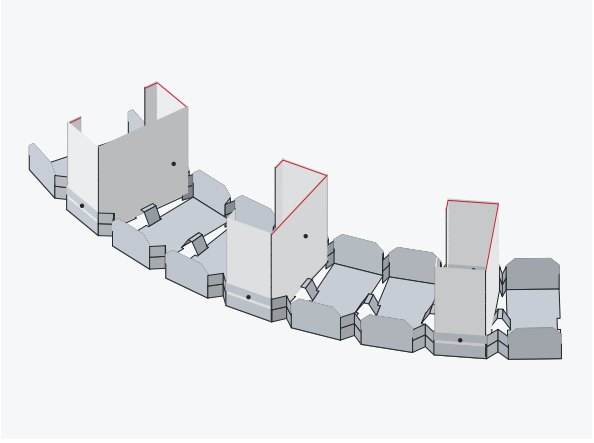
PRODUCT DATA SHEET · DS-06

FLEX TRACK

Bendable track for curved walls, arches, vaults and column wraps



PRODUCT 06 · FRAMING

Flex track is a bendable track for curved framing. It consists of short U-shaped segments, linked by folded pleats in the legs and a tab in the web, so a straight length can be bent by hand to a smooth curve. It is shaped on site to a line marked on the floor or wall, then fixed in place and used like standard track to hold the studs.

- Bends in plan for curved walls and columns
- Bends in elevation for arches, vaults and bulkheads
- 3 widths to suit 2-1/2", 3-5/8" and 6" studs
- Works with steel or wood studs
- For non-load-bearing framing only

WIDTHS	THICKNESS	YIELD	COATING	LENGTH	USE
2-1/2" · 3-5/8" · 6"	18 · 33 mil	33 ksi min.	G40 min.	8'	Non-structural

1 WHERE IT IS USED

Curved walls
Convex, concave and S-shaped partitions

Arches
Arched openings and door heads

Barrel vaults
Curved ceilings and vaulted soffits

Wavy ceilings
Flowing ceiling lines and clouds

Bulkheads
Curved drops and feature soffits

Columns
Round column wraps and enclosures

2 SIZES

WIDTH	THICKNESS	COLOUR	LENGTH	USE WITH
2-1/2"	18 mil	none	8'	2-1/2" studs, steel or wood
3-5/8"	18 mil	none	8'	3-5/8" studs, steel or wood
6"	33 mil	White	8'	6" studs, steel or wood

Order by width, thickness, length and quantity. Track width matches the stud depth. Curves are shaped on site; the track comes straight.

BENDS BY HAND
Shaped on site to the curve you mark

BOTH DIRECTIONS
Curves in plan and in elevation

STEEL OR WOOD STUDS
Holds the studs like standard track

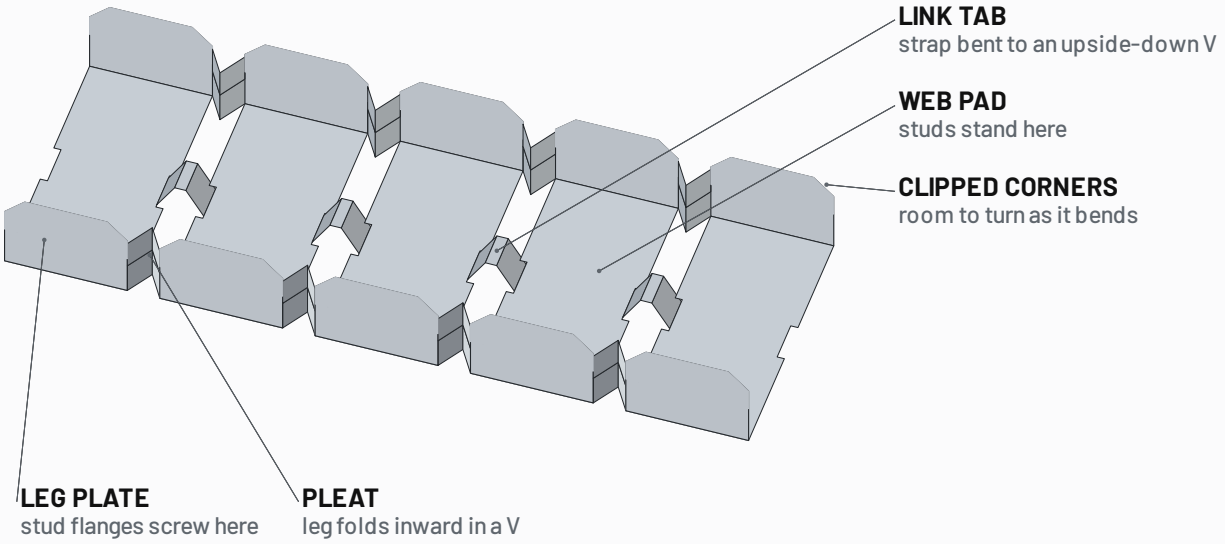
STEEL
Steel is a non-combustible material

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PROFILE

Short U-shaped segments linked by pleats and tabs, delivered straight

3 PROFILE



Drawn from the product photos, schematic and not to scale; 3-5/8" track shown. Segment length, leg height and tab shape vary by size.

4 PARTS

1. **Web pad.** The flat bottom of each segment. Studs stand on it; it is fixed to the floor or structure.
2. **Link tab.** A narrow strap folded into an upside-down V across the gap at the centre of the web. The segments pivot on it, and the V lets it give as the track bends.
3. **Leg plate.** The side of each segment. Stud flanges are screwed to it.
4. **Pleat.** A folded link joining the leg plates. It opens or closes as the track bends.
5. **Chamfered corners.** Clipped leg corners give the plates room to turn without clashing.

5 AT A GLANCE

SHAPE	U-track of short linked segments
LINKS	Folded pleat in each leg, tab in the web
WIDTHS	2-1/2" · 3-5/8" · 6"
THICKNESS	18 mil (2-1/2", 3-5/8") · 33 mil (6")
STEEL	ASTM A1003, 33 ksi minimum yield
COATING	G40 minimum, ASTM A653
LENGTH	8'
MEMBERS	ASTM C645, non-structural

6 HANDLING TIPS

Bend gradually
Work from one end, a few segments at a time, so every pleat takes a share of the curve.

Bend once
Avoid bending the same length back and forth; it can work-harden or crack the links.

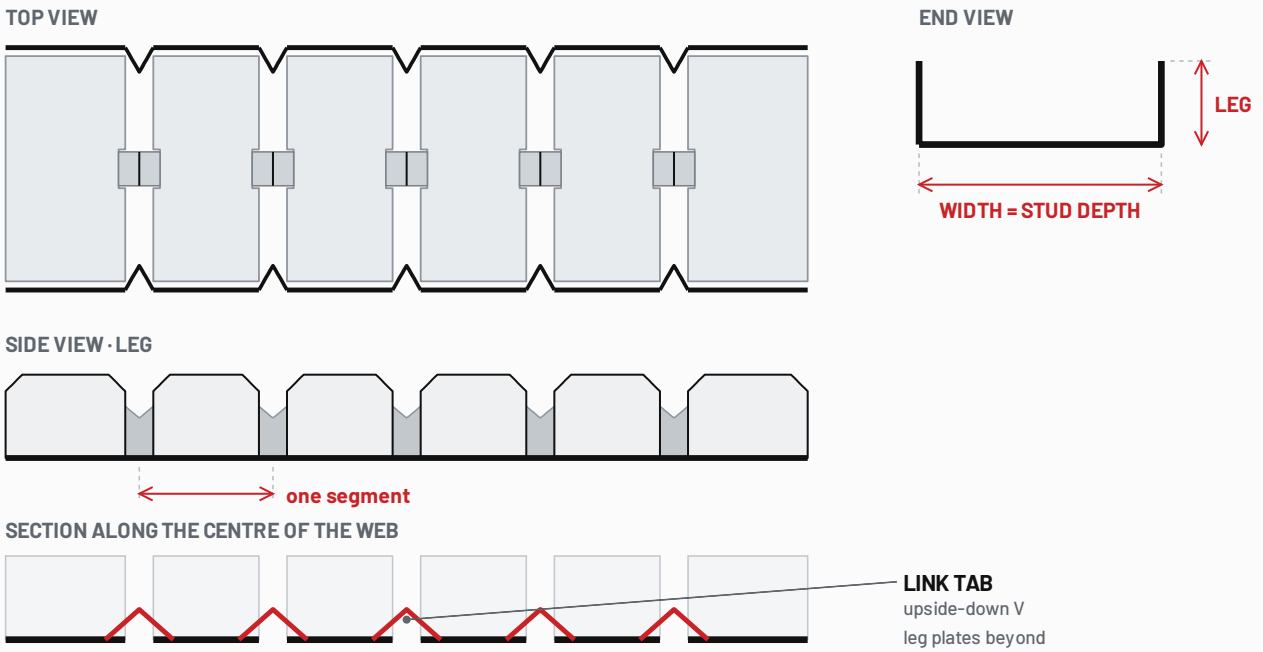
Fix before studs
Fasten the track to the line first, then set the studs, so the curve does not drift.

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HOW IT BENDS

Pleats open and close, segments pivot on their tabs

7 VIEWS

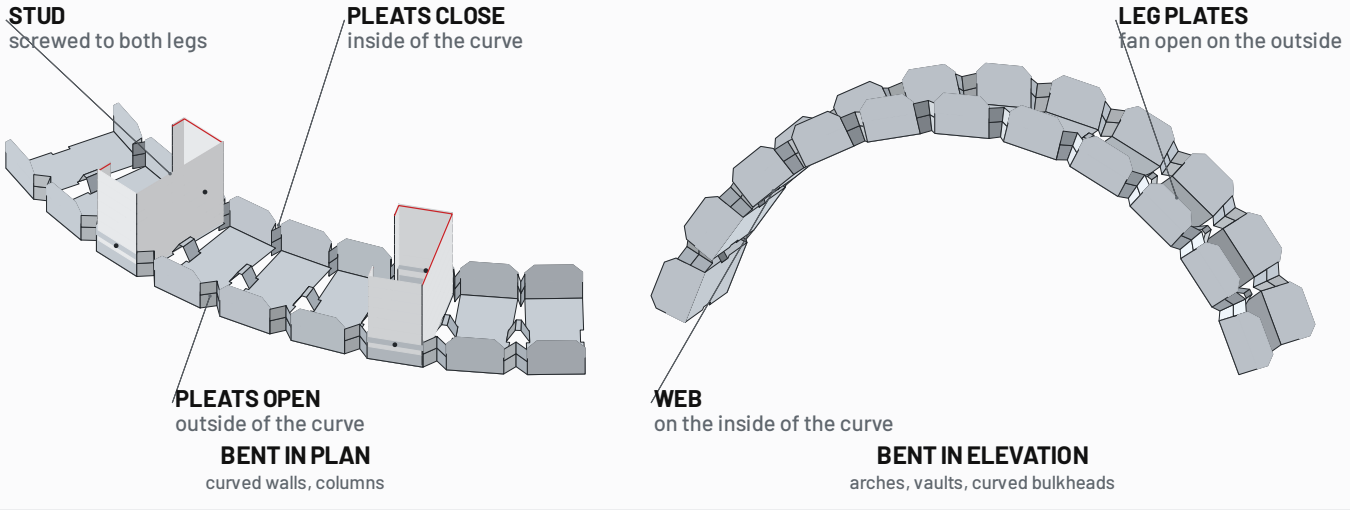


8 HOW IT WORKS

When any track bends, one edge gets longer and the other gets shorter. Solid standard track cannot do that, so it has to be cut and kerfed. Flex track consists of short segments instead: the pleats in the legs open on the outside of the curve and close on the inside, while the segments pivot on the link tabs in the web.

The track is flexible only until it is fixed. Once fastened to the floor, the structure or the studs, it holds the curve and works like standard track.

9 TWO WAYS TO BEND IT



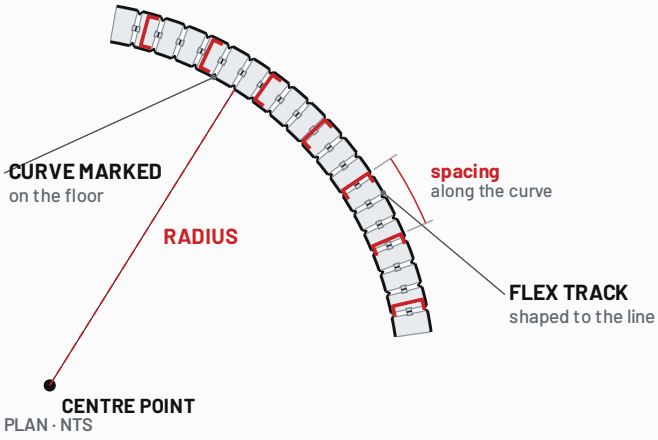
In plan. The web lies flat and the track curves in its own plane, for curved walls and columns. Bend top and bottom track to the same curve.

In elevation. The track curves in the plane of its legs, for arches, vaults and curved bulkheads.

LAYING OUT A CURVE

Centre point, radius, and how much track and how many studs

10 SETTING OUT A CURVE



PLAN · NTS

1. Fix a centre point on the floor from the drawings.
2. Swing the radius with a tape or trammel and mark the curve.
3. Transfer the curve to the structure above with a plumb bob or laser, so top and bottom match.
4. Mark stud positions along the curve, measuring around the curve, not straight across.
5. Bend the track to the line and fix it.

WHICH FACE?

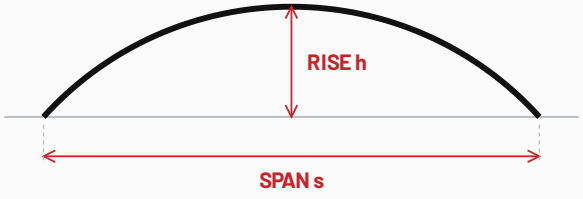
Set out to the face the drawings dimension, usually the finished face. The two faces of a curved wall have different radii; the difference is the wall thickness.

11 WORKING OUT LENGTHS

Arc length = radius × angle in degrees × π ÷ 180

Radius from span and rise = (span² ÷ 4 + rise²) ÷ (2 × rise)

Studs on a curve = arc length ÷ spacing, rounded up, + 1



12 WORKED EXAMPLES

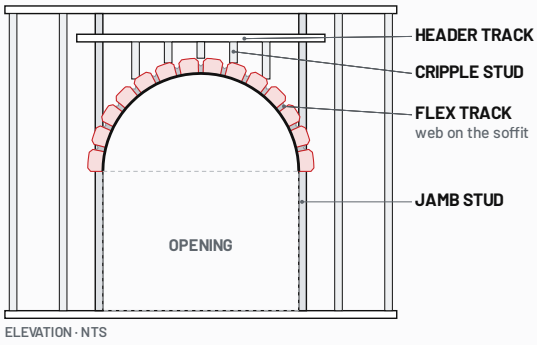
EXAMPLE	GIVEN	WORKING	RESULT
Quarter-circle wall	radius 6'-0"	π ÷ 2 × 72" = 113.10"	**9'-5-1/8"** of track per run; 9 studs at 16" along the curve
Segmental arch	span 3'-0", rise 8"	r = (18² + 8²) ÷ (2 × 8) = 24.25"	radius **2'-0-1/4"**; arc length **3'-4-9/16"**
Half-round arch	span 3'-0"	π × 18" (radius = half the span)	**4'-8-9/16"** of track
Column wrap	diameter 2'-0" to the track	π × 24"	**6'-3-3/8"** per ring

Lengths measured along the centre of the track, rounded to the nearest 1/16" at the end. Add for laps, trimming and waste. Stud count excludes extras at ends, openings and corners.

DETAILS

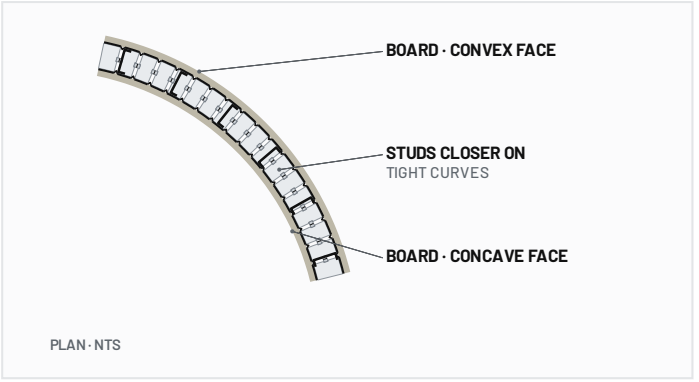
Arches, curved walls, column wraps and vaults

13 TYPICAL DETAILS



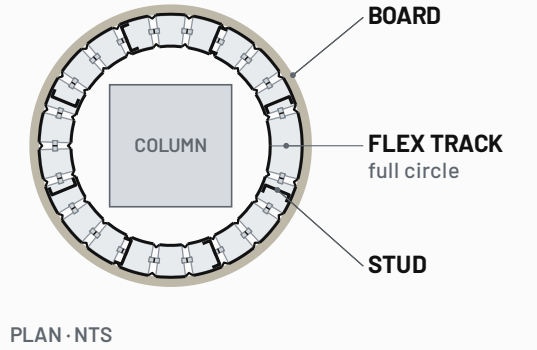
ARCHED OPENING

Flex track bent to the arch and screwed to the jamb studs at each side. Short cripple studs between the header track and the arch hold its shape.



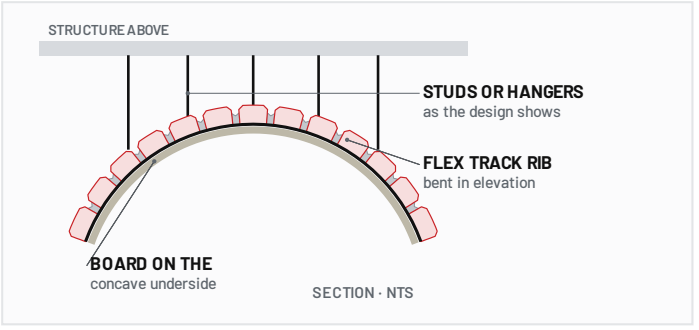
CURVED WALL

Top and bottom flex track on matching curves, with studs set closer on tight curves. Board goes across the studs, with the long edges horizontal.



ROUND COLUMN WRAP

A full ring of flex track at the floor and at the top, studs around the ring, and board bent around the outside.



BARREL VAULT OR CURVED BULKHEAD

Flex track bent in elevation forms curved ribs, hung from the structure on studs or hangers. Furring or framing between the ribs carries the board, as the design shows.

GYPSUM BOARD ON CURVES

The board, not the track, usually sets the tightest curve. Follow the board maker's minimum bending radius and stud spacing for the board type and thickness, and ASTM C840. Tight curves may call for thinner flexible board, two layers, or dampened board where the board maker allows.

14 QUICK SELECTOR

APPLICATION	BEND	WHERE THE FLEX TRACK GOES	ALSO NEEDED
Curved wall	In plan	Top and bottom, on matching curves	Studs, board for the radius
Column wrap	In plan	Full rings at floor and top	Studs around the ring, board
Arched opening	In elevation	Along the arch, between jamb studs	Header track, cripple studs, corner bead for arches
Barrel vault	In elevation	Curved ribs across the vault	Hangers or studs, furring between ribs
Curved bulkhead	In plan or elevation	Along the curved edge	Studs or framing to the structure

INSTALLATION & STANDARDS

General guidance for installers and designers

15 TYPICAL INSTALLATION

1. Mark the curve on the floor and transfer it to the structure above.
2. Bend the bottom track by hand to the line, working from one end.
3. Fix it to the floor at close spacing so it holds the curve, with fasteners suited to the floor.
4. Bend and fix the top track the same way, plumb over the bottom track.
5. Set studs at the marked points and screw them to both legs, top and bottom.
6. Hang the board across the studs, starting at one end of the curve.

General information only, not installation instructions. Install to ASTM C754 and C840, the drawings and specifications, the board maker's instructions, and applicable codes.

16 DO & DON'T

DO

- Match track width to the studs
- Bend gradually to a smooth curve
- Fix the track before setting studs
- Space studs to suit the board

DON'T

- Use flex track in load-bearing walls
- Kink it into sharp corners
- Bend it back and forth repeatedly
- Leave it unfixed between studs

17 STORAGE

Store flat, dry, off the ground and under ventilated cover. Keep lengths straight until use so segments do not bend out of line. Cut edges are sharp: use gloves and appropriate PPE.

18 STANDARDS

- ASTM C645 · non-structural members
- ASTM A1003 · steel
- ASTM A653 · coating
- ASTM C754 · framing installation
- ASTM C840 · gypsum board application
- National Building Code of Canada

19 FIRE-RATED WALLS

A fire rating belongs to a tested, listed assembly, not to the track. Before using a curved wall where a rating is required, check that the listing covers it, or confirm with the authority having jurisdiction.

20 COMMON QUESTIONS

What is the tightest curve?
It depends on the width and thickness of the track and on the board. Ask us for the size you plan to use.

Can flex track carry load?
No. It is for non-load-bearing framing. Curved load-bearing walls need a design by a qualified professional.

Does it work with wood studs?
Yes. The studs sit between the legs and are fastened through them, as with steel studs.

Can I use it straight?
It can run straight between curves, but standard track is stiffer and is the usual choice on straight runs.

SPECIFYING & NOTICE

Checklist, submittals, specification guide and certification

21 BEFORE YOU ORDER: CHECKLIST

- Track width to match the studs
- Thickness: 18 mil (2-1/2", 3-5/8") or 33 mil (6")
- Radius and length of each curve, top and bottom
- Track quantity from the arc lengths, plus waste
- Studs at the spacing the board needs
- Fasteners for the floor, structure and studs
- Board type and thickness for the radius

22 TYPICAL SUBMITTALS

- Product data for flex track, studs and fasteners
- Shop drawings showing curve radii, centre points and stud spacing
- Board maker data for the bending radius used
- Material test reports, when requested

23 SPECIFICATION GUIDE

Section 09 22 16, Non-Structural Metal Framing. Curved framing: flexible steel track of linked U-shaped segments, bendable by hand, width to match the studs; 18 mil for 2-1/2" and 3-5/8" studs and 33 mil for 6" studs, or as shown; steel to ASTM A1003, 33 ksi minimum yield, G40 minimum coating to ASTM A653; members to ASTM C645; Saturn Metal DS-06. Track shall be bent to the radii shown, fixed to hold the curve before studs are set, and installed to ASTM C754. Stud spacing on curves shall suit the gypsum board maker's requirements for the radius.

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 · 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. Flex track is for non-load-bearing framing and the sheet does not give load capacities. Drawings are schematic and not to scale; dimensions are nominal and subject to standard tolerances. Worked examples show the method only; check every length against the project drawings. 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