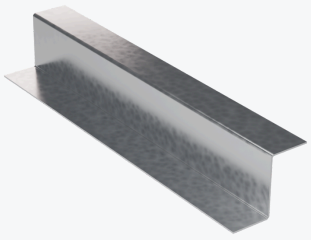
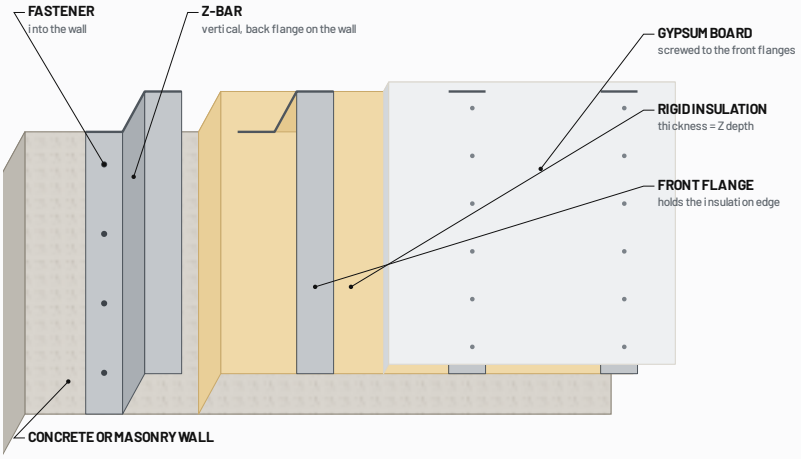
Z-BAR

Galvanized Z furring for insulated walls, exterior insulation and offsets · webs 1" to 6"



Z-BAR
1-1/4" flanges, 2" web shown



PRODUCT 25 · CUSTOM STEEL PROFILES

Saturn Metal Z-bar is a galvanized steel **Z-shaped furring** with a back flange, a web and a front flange. Fastened to a **concrete or masonry wall**, it keeps **rigid insulation** in position and gives a flat line of steel flanges for **gypsum board**, lath or cladding. The web depth matches the insulation, from **1" to 6"**. Also used for exterior insulation, offsets and continuous framing. A **perforated Z-bar** lets water drain in exterior and damp locations.

- Webs 1" to 6" in 1/2" steps, to suit the insulation
- Flanges 1" to 2"; thickness 18 to 54 mil
- 10' standard lengths, up to 20'; custom sizes on request
- G40 or G60 galvanized; G90 on request

WEBS	FLANGES	THICKNESS	LENGTHS	COATING	ALSO
1" to 6"	1" to 2"	18–54 mil	10' · up to 20'	G40 · G60	Perforated

1 FOUR NAMES, ONE PRODUCT

Z-bar
Our product name, from its shape: two flanges and a web like a Z.

Z furring
The name on drawings when it furs out a wall for board.

Z girt
A name used when it carries cladding over exterior insulation.

Z channel
Another site name for the same two-bend profile.

2 THE PARTS OF THE Z-BAR

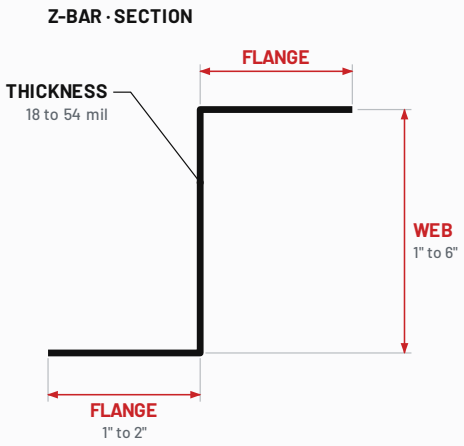
1. **Back flange.** fastened to the wall or substrate
2. **Web.** sets the depth: matches the insulation thickness
3. **Front flange.** holds the insulation edge and takes the board screws
4. **Galvanized steel.** G40 or G60 zinc coating; G90 on request

HOLDS INSULATION	FLAT LINE	11 DEPTHS	PERFORATED
Board edges under the flange	For board, lath, cladding	1" to 6"	Drains water

PROFILE, SIZES & SPECIFICATIONS

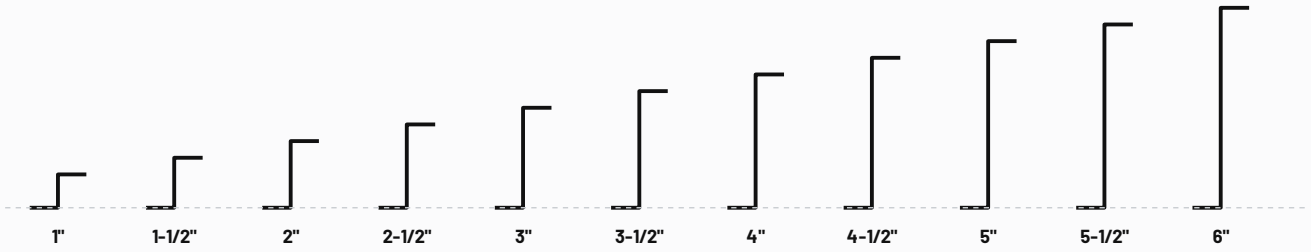
Webs, flanges, thicknesses, lengths and coatings

3 THE PROFILE



SECTION TO SCALE (1-1/4" × 2" × 1-1/4", 33 mil)

4 ELEVEN WEB DEPTHS



WEB DEPTHS 1" TO 6" · DRAWN TO SCALE · MATCH THE WEB TO THE INSULATION THICKNESS

5 SPECIFICATIONS

PROFILE	Z: back flange, web, front flange
WEBS	1", 1-1/2", 2", 2-1/2", 3", 3-1/2", 4", 4-1/2", 5", 5-1/2", 6"
FLANGES	1", 1-1/4", 1-1/2", 1-3/4", 2"
THICKNESS	18, 33, 43 and 54 mil (0.018", 0.033", 0.043", 0.054" minimum)
LENGTHS	10' standard, up to 20'; custom lengths on request
COATING	G40 or G60; G90 on request
PERFORATED	1-1/4" flanges; perforated webs for drainage (all webs except 1")
STEEL	ASTM A653 / A1003; ASTM C645; CSA S136

6 WEIGHT, 1-1/4" FLANGES (LB/FT)

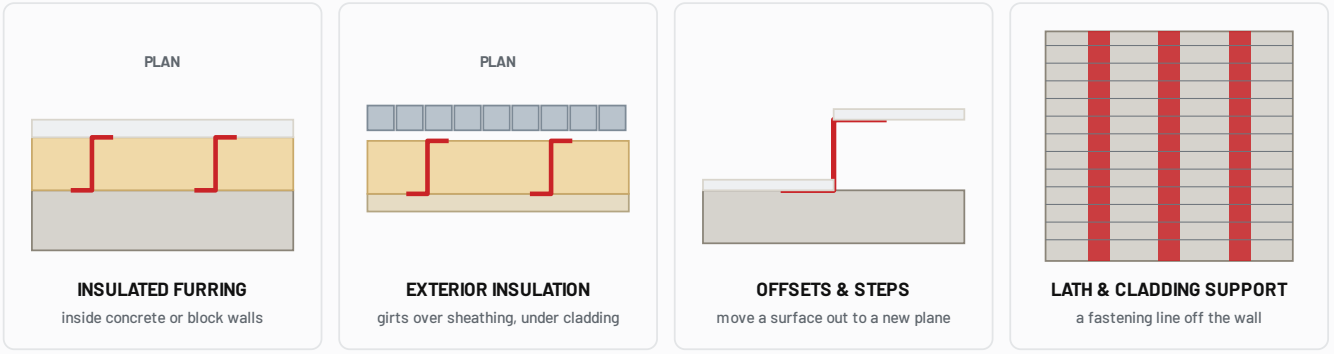
WEB	18 MIL	33 MIL	43 MIL	54 MIL
1"	0.222	0.404	0.523	0.652
2"	0.285	0.522	0.677	0.845
3"	0.349	0.639	0.830	1.038
4"	0.413	0.757	0.984	1.230
5"	0.477	0.875	1.137	1.423
6"	0.541	0.993	1.291	1.615

Calculated from the developed width and design thickness; coating not included.

WHERE IT GOES & HOW IT WORKS

Insulated furring, exterior insulation, offsets and lath support

7 WHERE IT GOES



INSULATED FURRING
inside concrete or block walls

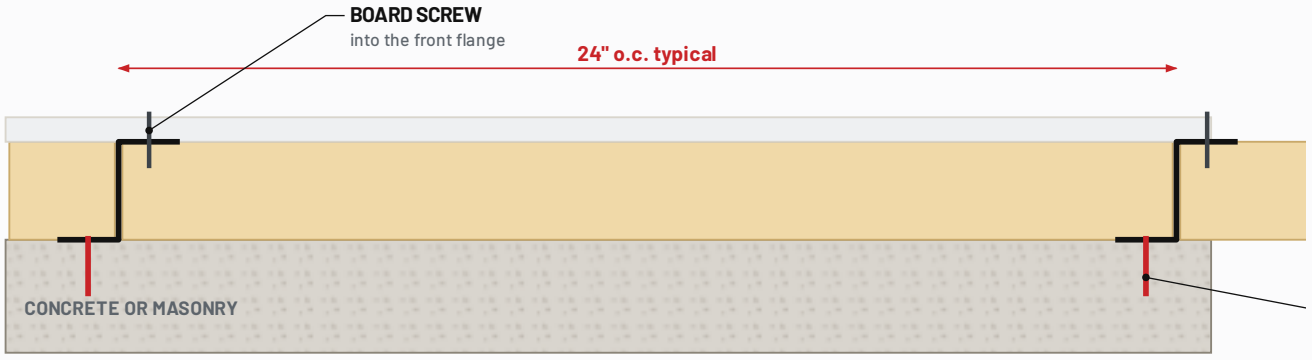
EXTERIOR INSULATION
girts over sheathing, under cladding

OFFSETS & STEPS
move a surface out to a new plane

LATH & CLADDING SUPPORT
a fastening line off the wall

SKETCHES · RED = Z-BAR

8 A FURRED, INSULATED WALL, IN PLAN



The Z-bars run **vertically** with the back flange fastened to the wall. Each insulation board fills the space between two webs: one edge sits under the **front flange** of the Z-bar beside it, so the next Z-bar locks it in place. Gypsum board is then screwed to the front flanges, **parallel or across** the Z-bars; metal lath runs **across** them.

9 WHICH Z-BAR FOR THE JOB

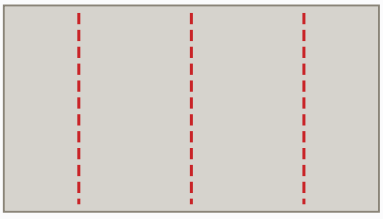
JOB	Z-BAR	NOTES
Insulated furring inside concrete or block walls	Web = insulation thickness	Board screwed to the front flanges
Exterior insulation under cladding	Perforated Z-bar, G60 or G90	Drainage and coating suited to the exposure
Offsets and steps in a wall plane	Web = the offset	Fasten both flanges as the design shows
Metal lath on a solid wall	Shallow Z, lath across the Zs	Lath runs square to the Z-bars

INSTALLATION, STEP BY STEP

Lay out, fasten, insulate, lock, board and finish

10 SIX STEPS TO AN INSULATED WALL

1 Lay out



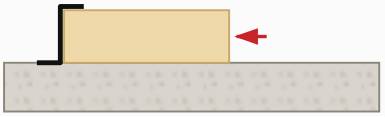
Mark vertical lines on the wall at the Z-bar spacing: to suit the insulation board width, commonly 24" o.c., or as the design shows.

2 First Z-bar



Start at a corner or wall end. Fasten the back flange to the wall with concrete screws, powder-actuated pins or anchors, at the spacing the design shows.

3 Insulation



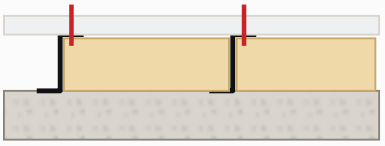
Slide the first insulation board in so its edge sits tight against the web and under the front flange.

4 Next Z-bar



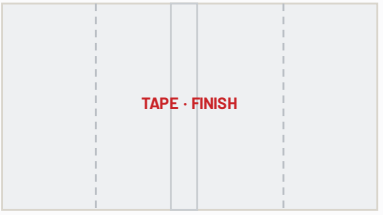
Set the next Z-bar tight to the other board edge, so its front flange holds the board; fasten it. Repeat across the wall.

5 Gypsum board



Screw the board to the front flanges with drywall screws into the steel, parallel or across the Z-bars. Do not screw into the wall.

6 Finish



Tape and finish the board joints as usual. The board also covers the insulation, as the building code requires for foam plastics.

Sharp edges and dust. Cut ends are sharp: put on gloves. Drilling into concrete and masonry creates silica dust; follow the site's dust controls and eye protection rules.

11 BEFORE YOU START

Tools

Hammer drill or powder-actuated tool, screw gun, snips, level, chalk line, gloves and eye protection.

Materials

Z-bar with the web sized to the insulation, fasteners for the wall, rigid insulation, gypsum board and screws.

Wall

Sound, clean and reasonably flat; mark high spots and openings before you start.

TIPS, TROUBLESHOOTING & CARE

Corners, openings, exterior use, common problems and fixes

12 TIPS BY SITUATION

SITUATION	WHAT TO DO
Inside corner	Run a Z-bar into the corner on each wall, or use angle where the board needs a fastening line
Outside corner	Set a Z-bar at the corner so both boards land on steel
Openings	Frame around windows and doors with Z-bar or track so board edges are supported
Base and top	Add a horizontal Z-bar or track where the board needs a fastening line
Exterior or damp	Use perforated Z-bar and the heavier coating for drainage and corrosion protection

13 TROUBLESHOOTING

YOU SEE	LIKELY CAUSE	FIX
Wavy board surface	Wall out of plane under the Z-bars	Shim behind the back flange; check with a straightedge
Gaps at insulation edges	Z-bar not set tight to the board	Set each Z-bar tight to the board edge
Screws spinning	Screw missed the flange or wrong type	Use drywall screws for steel into the front flange
Wrong depth	Web not matched to insulation	Order the web to the insulation thickness

14 DO & DON'T

DO	Match the web depth to the insulation thickness.
DO	Run Z-bars vertically, back flange on the wall.
DO	Store bundles flat and dry, off the ground and covered.
DON'T	Screw the board through to the wall; screw only into the front flange.
DON'T	Leave foam insulation uncovered; cover it as the code requires.

QUESTIONS, ORDERING & NOTICE

Common questions, how to order, standards and a specification guide

15 COMMON QUESTIONS

Which web depth do I order?
The insulation thickness: 1" insulation takes a 1" web, 2" takes 2", up to 6".

Which way does it go?
Vertically, with the back flange on the wall. Board can go parallel or across; lath goes across.

What spacing?
To suit the insulation board width, commonly 24" o.c., or as the design shows.

When do I use perforated Z-bar?
Exterior and damp locations where water must drain through the web. It has 1-1/4" flanges.

How long are the lengths?
10' standard, up to 20'; custom lengths on request.

Can I get other sizes?
Yes. We offer custom webs, flanges and lengths on request (see DS-30).

16 HOW TO ORDER

Give the **web**, the **flange**, the **thickness**, the **coating**, the **length** and the quantity, and say if you need **perforated** Z-bar. Example: Z-bar 2" web × 1-1/4" flanges, 33 mil, G60, 10'.

17 STANDARDS

ASTM A653	Steel sheet, zinc-coated (galvanized) by the hot-dip process
ASTM A1003	Steel sheet for cold-formed framing members
ASTM C645	Non-structural steel framing members
CSA S136	Design of cold-formed steel structural members

18 SPECIFICATION GUIDE

Z furring: Saturn Metal galvanized steel Z-bar, ASTM A653 / A1003, [web] web × [flange] flanges, [18] [33] [43] [54] mil, [G40] [G60] [G90] coating, [perforated where shown]. Install vertically at [24"] o.c., back flange fastened to the substrate as shown, rigid insulation held between Z-bars under the front flanges, gypsum board screwed to the front flanges.

Related: DS-11 7/8" furring channel · DS-14 Angle/L-Track · DS-22 metal lath · DS-24 flat stock · DS-30 custom bent profiles
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. Z-bar size, spacing, fasteners into the substrate, insulation and fire protection of foam plastics must follow the project specification and the building code. 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 belong to their owners. Saturn Metal is a metal products manufacturer and/or supplier; this sheet does not mean the product is manufactured by Saturn Metal. © Saturn Metal