



SOLAR MOUNTING SYSTEMS

ENGINEERED STEEL FOR SOLAR.

Cold-rolled steel profiles and complete mounting systems for utility & commercial solar — fixed-tilt and tracker. 60+ years of steel expertise behind every structure.





WHO WE ARE

WE ENGINEER, ROLL & DELIVER **SOLAR STEEL.**

Three generations of cold-formed steel expertise, now focused on the structures that hold up solar. From a single rolled section to a fully engineered, coated and delivered mounting array — we own every step, under one roof.

1962 ESTABLISHED	60+ YEARS IN STEEL	1GW+ SOLAR STEEL SUPPLIED	1 SOURCE · COIL TO ARRAY
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HERITAGE

THREE GENERATIONS OF STEEL.

Founded in 1962, Yilmaz Sac Profil is a family-owned steel sheet-and-profile manufacturer based in the Kayseri Organized Industrial Zone. Six decades of cold-rolling and cold-forming gave us a deep, practical mastery of how steel behaves.

Y SOLAR is our solar arm — that expertise pointed squarely at the renewable-energy structures the world is building now. We bring the discipline of a precision steel mill to mounting systems: tight tolerances, consistent coatings, and lead times a project can plan around.

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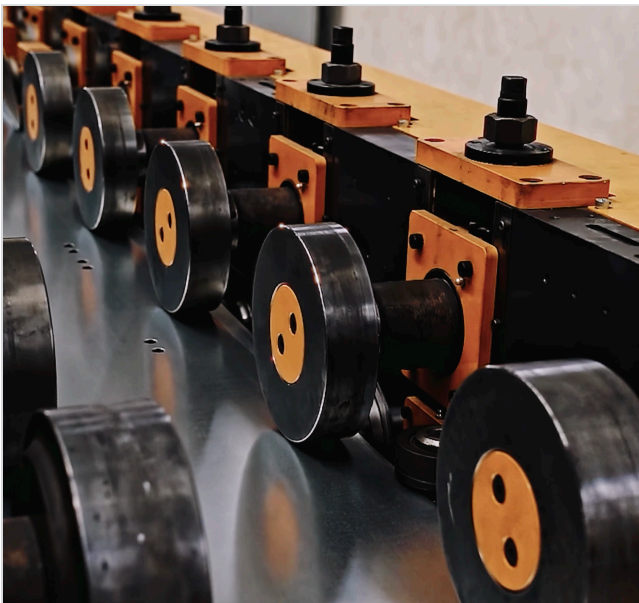
Generations, one discipline

Owned and operated by the founding family — continuity of standards from coil to delivered array.



MANUFACTURING

ROLLED IN-HOUSE, COIL TO **PROFILE.**



Pre-coated steel coil enters one end of the line; finished, bundled profiles leave the other. Every section is cold-roll-formed on our own lines — no outsourced forming, no surprises in the stack.

Our technical team designs and produces the roll-forming tooling in-house, so new sections move from drawing to production fast — and tolerances stay ours to control.

01 **Decoiling & leveling**

Pre-coated Zn-Al-Mg or galvanized coil is fed and flattened.

02 **Roll-forming**

Progressive stands cold-form the C, U, Sigma or hat section.

03 **In-line punching**

Mounting holes, slots and perforations stamped to the drawing.

04 **Cut-to-length & bundling**

Flying cut to exact length, then strapped and labeled for site.

CUSTOM ROLLFORMING

WE ROLL CUSTOM PROFILES TO YOUR SPEC.

Send us a cross-section and a coil grade. Because we build our own forming tooling, we turn bespoke sections into repeatable production runs.



- ✓ **Your geometry**
Bespoke C, U, Sigma, hat, omega or fully custom sections.
- ✓ **In-line punching**
Holes, slots and perforations formed in the same pass.
- ✓ **Up to 6 mm · 400 mm wide**
High-strength grades to S350GD and beyond.
- ✓ **Your coating**
Zn-Al-Mg or hot-dip galvanized, pre-coated coil.

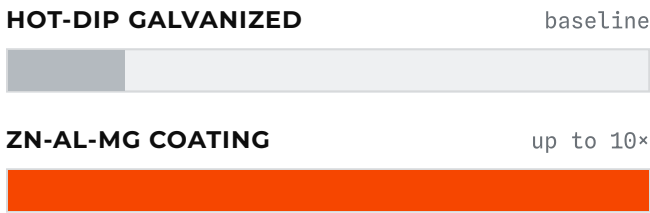
<p>01</p> <p>Drawing</p> <p>Section, tolerances, volumes.</p>	<p>02</p> <p>Tooling</p> <p>Roll-form tooling cut in-house.</p>	<p>03</p> <p>First-article</p> <p>Sample run, signed off to spec.</p>	<p>04</p> <p>Production</p> <p>Repeatable runs, short lead times.</p>
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COATING TECHNOLOGY

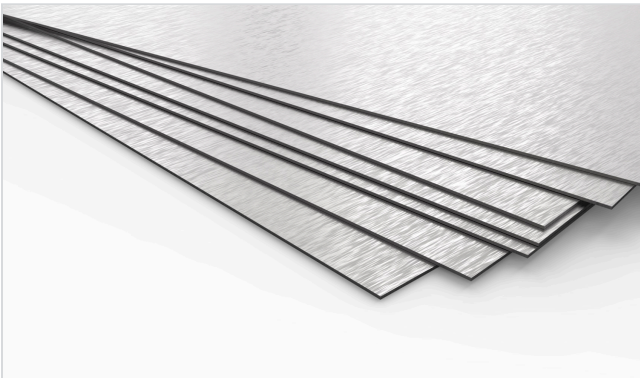
ZN-AL-MG. OUTLASTS GALVANIZED.

Our profiles roll from steel pre-coated with a magnesium-alloyed zinc-aluminium layer. The magnesium builds a dense, stable protective film that dramatically slows corrosion — and actively re-heals exposed cut edges.

RELATIVE CORROSION RESISTANCE



Salt-spray / chloride exposure · indicative, varies by environment



- ✓ **Self-healing cut edges**
A zinc-magnesium film re-forms over sheared and drilled edges that galvanizing leaves exposed.
- ✓ **Chloride & ammonia resistant**
Built for coastal, agricultural and high-humidity sites.
- ✓ **Longer service life**
Thinner coating, longer protection — lower lifetime cost.
- ✓ **Pre-coated, then formed**
Uniform coverage with no post-galvanizing bath required.

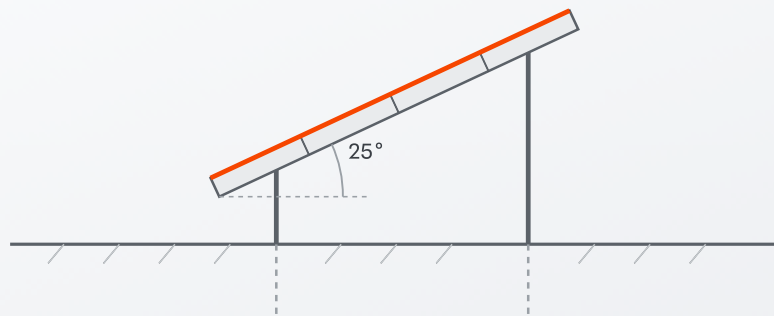
- Zn-Al-Mg (ZM)
- S350GD substrate
- HDG also available
- Self-repairing film

MOUNTING SYSTEMS · Y-FIX

FIXED-TILT SYSTEMS.

Driven steel piles carry rolled top-chords that hold modules at a fixed angle — fast to install, low to maintain, engineered to the site and built to outlive the plant.

SCHEMATIC · FIXED-TILT SIDE ELEVATION

Y-FIX


CONFIGURATION 1V · 2V portrait	TILT RANGE 10 - 35 deg	FOUNDATION Driven C / Sigma / W	TERRAIN Slope tolerant
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- ✓ **Pile-driven foundations**
No concrete needed on most soils — drive the pile, align the row and build the table.
- ✓ **Pre-punched assembly**
Bolted through in-line punched holes — no field drilling, faster and truer on site.
- ✓ **Zn-Al-Mg coated**
Pre-coated steel keeps sheared and driven edges protected for the life of the plant.

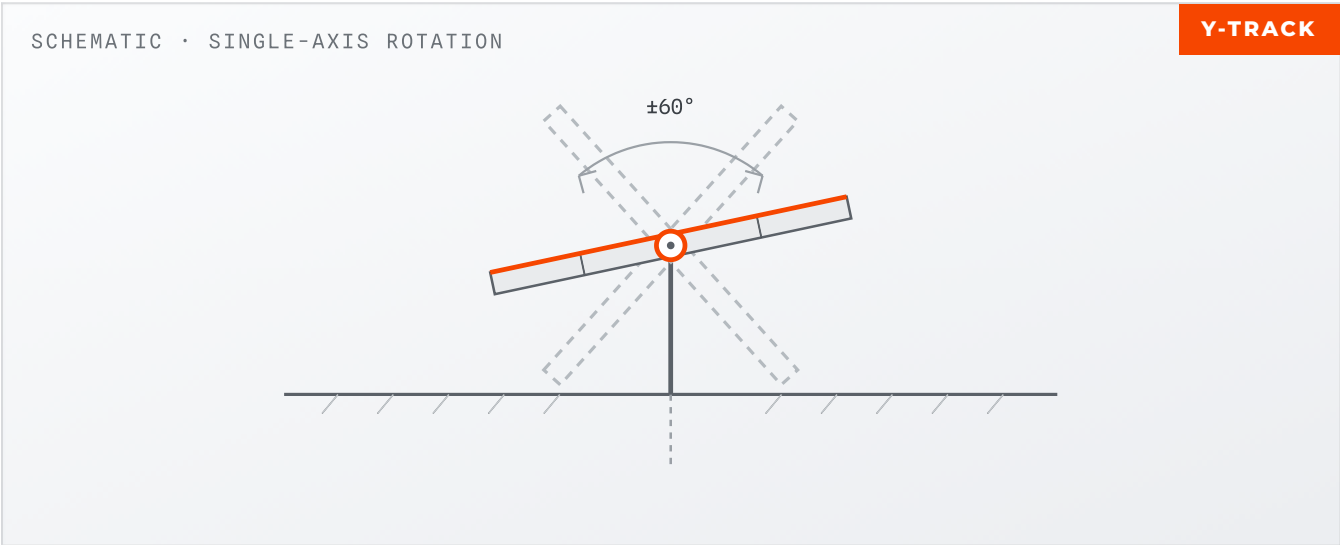
No motors, no maintenance

A fixed array has nothing to drive, power or service — set the rows, bolt them down, and the structure simply stands and produces for the life of the plant.

SINGLE-AXIS · Y-TRACK

TRACKER STRUCTURES, ENGINEERED.

More than steel supply — we engineer the structural package for your tracker platform: posts, bearing supports, rails and brackets, calculated to your site loads and rolled to spec.



<p>ARCHITECTURE</p> <p>Horizontal single-axis</p>	<p>ROTATION</p> <p>+/- 60 deg typ.</p>	<p>SCOPE</p> <p>Posts, rails, brackets</p>	<p>COATING</p> <p>Zn-Al-Mg / HDG</p>
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- ✓ **Drilled & driven posts**
High-section piles sized for tracker wind loads.
- ✓ **Bearing & damper supports**
Formed, punched brackets to platform spec.
- ✓ **Module rails**
Light, stiff rolled sections for the table.

✓ **Every system ships engineered**
 Static report (Eurocode / ASCE 7) · GA drawings & BOM · pull-out test · installation manual — from one plant in Kayseri.

ENGINEERING & SITE ADAPTATION

DESIGNED TO THE SITE.

Every structure is verified against the real environment it will stand in. We engineer to Eurocode and EN 1090, then roll the exact sections the calculation calls for.

<p>01</p> <p>Wind</p> <p>Site wind zone and gust loads drive section, gauge and pile embedment.</p>	<p>02</p> <p>Snow</p> <p>Ground snow load and drift checked across span and tilt.</p>	<p>03</p> <p>Corrosion</p> <p>Atmospheric class sets the coating — Zn-Al-Mg for harsh sites.</p>
<p>04</p> <p>Seismic</p> <p>Connection detailing for ground acceleration where required.</p>	<p>05</p> <p>Soil & terrain</p> <p>Pull-out tests size the pile to the ground it's driven into.</p>	<p>06</p> <p>Tolerance</p> <p>Pre-punched holes keep the array true across long rows.</p>

- EN 1090 ready
- Eurocode design
- Pile pull-out testing
- Project calculations



1:1 **One calculation per project**
 No generic load tables — every plant gets its own static report, sized to its wind zone, snow load, soil class and seismic demand, then matched to the exact rolled sections.

PRODUCT RANGE

FOUR CORE PROFILES, ONE **SYSTEM.**

Driven piles and structural beams that build the whole array — plus any custom section you need.

C-PILES



Lipped C-section foundation pile — the array's primary driven post.

S350GD+ZM · page 12

U-PILES



Open channel pile for lighter loads and compact ground frames.

S350GD+ZM · page 13

SIGMA PILES



Stepped sigma section — extra stiffness for deeper embedment.

S350GD+ZM · page 14

W-BEAMS



Wide-flange / double-hat structural beam for top chords and rafters.

Grade 50-65 · page 15



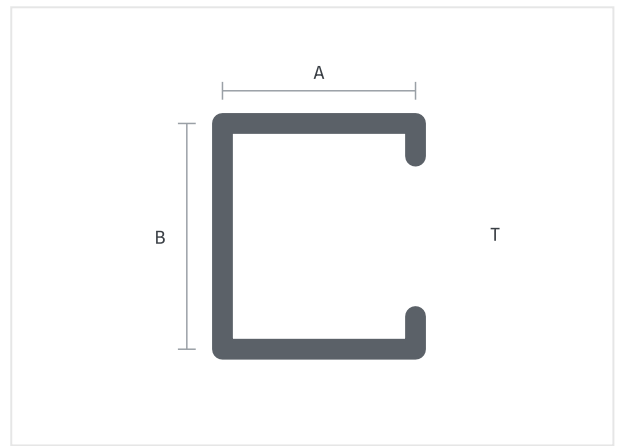
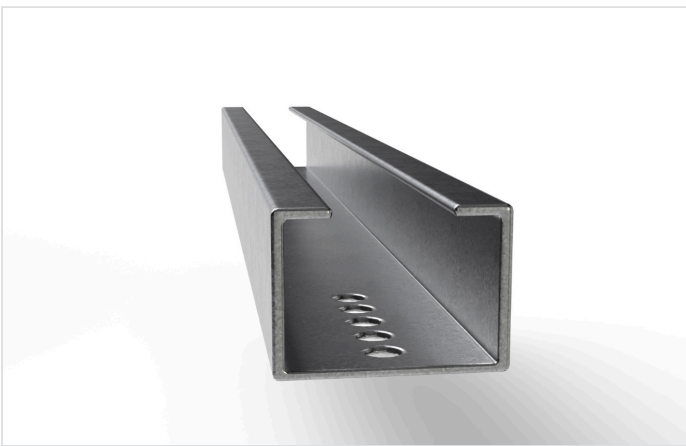
Custom sections

Any profile you can draw, we can roll — see page 05. Catalogue parts are just the start.

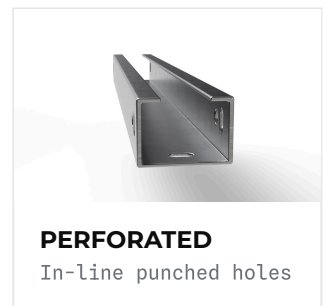
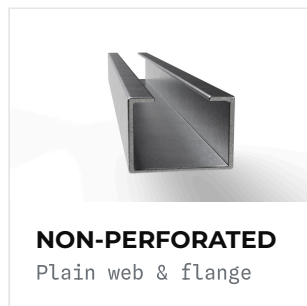
FOUNDATION PILE

C-PILES

The primary driven pile for ground-mount arrays. The lipped C-section gives high bending stiffness for its weight and an open face that takes rails and brackets anywhere along its length.



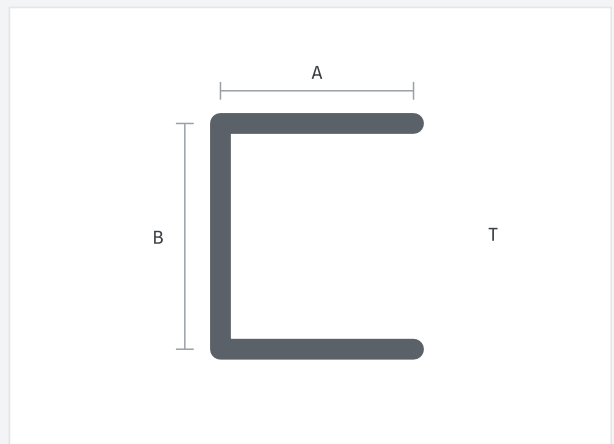
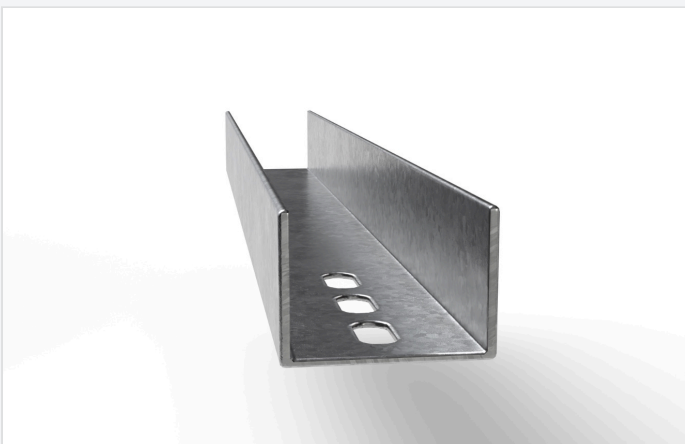
PROPERTY	VALUE
Section	Lipped C / cold-formed
Thickness	2.0 - 6.0 mm
Width (A)	up to 400 mm
Material	S350GD / S235JR
Coating	Zn-Al-Mg (ZM) / HDG
Length	cut-to-length



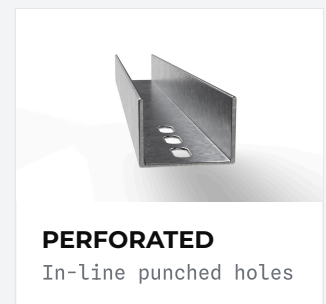
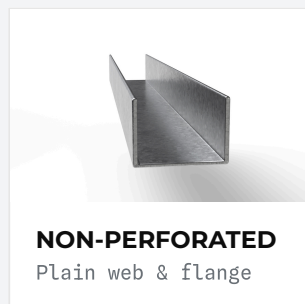
FOUNDATION PILE

U-PILES

An open channel pile for lighter loads and compact ground frames. Economical where a full C-section isn't needed, with a clean open face for fast bracket and rail connections.



PROPERTY	VALUE
Section	Open U channel
Thickness	2.0 - 6.0 mm
Width (A)	up to 400 mm
Material	S350GD / S235JR
Coating	Zn-Al-Mg (ZM) / HDG
Length	cut-to-length

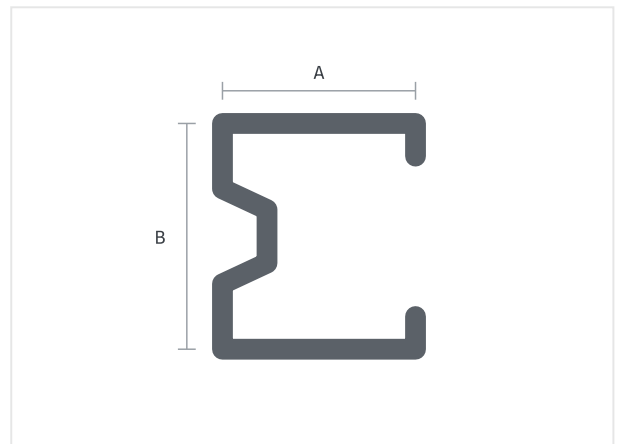




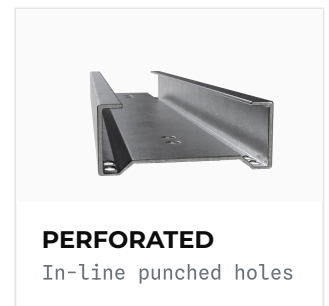
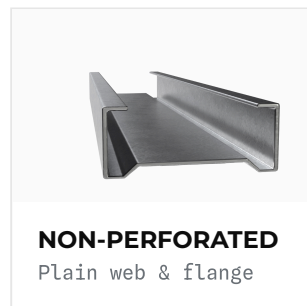
FOUNDATION PILE

SIGMA PILES

A stepped sigma section with a rolled-in stiffening rib — more bending capacity and grip for deeper embedment in softer ground, while staying light enough to drive fast.



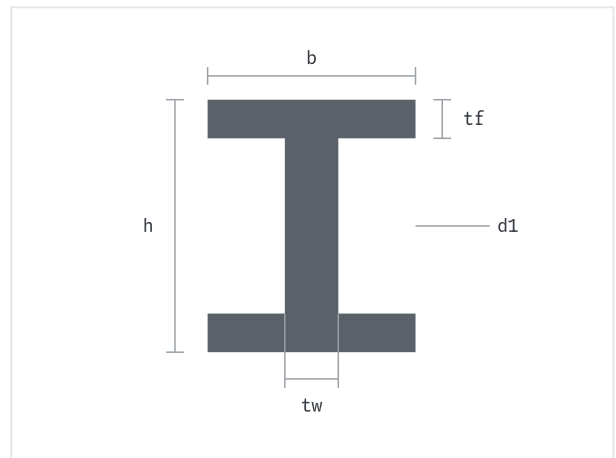
PROPERTY	VALUE
Section	Stepped sigma
Thickness	2.0 - 6.0 mm
Width (A)	up to 400 mm
Material	S350GD / S235JR
Coating	Zn-Al-Mg (ZM) / HDG
Stiffening	Rolled-in rib



STRUCTURAL BEAM

W-BEAMS

Wide-flange structural beams for top chords, rafters and main spans where a pile alone won't carry the load. Supplied plain or with custom slotting for fast, adjustable connections.



PROPERTY	VALUE
Section	Wide-flange beam
Sizes	W6 · W8 · W10 · W12
Material	Grade 50 – Grade 65
Coating	Hot-dip galvanized
Fabrication	Laser / milled slotting

- ✓ **Custom slotted**
Slots laser-cut at your connection points for tolerance and speed.
- ✓ **Top chords & rafters**
Carries purlins across long, unsupported spans.
- ✓ **Cut & drilled to drawing**
Delivered ready to bolt — no field fabrication.

TECHNICAL REFERENCE

SECTIONS & SPECS.

Indicative ranges — final sections are sized to each project's load calculation.

PILE SECTIONS

PROFILE	DEPTH	WIDTH	THICKNESS	MATERIAL	COATING
C-Pile	100 - 240 mm	up to 400 mm	2.0 - 6.0 mm	S250 - S450GD	ZM / Z
U-Pile	80 - 200 mm	up to 400 mm	2.0 - 6.0 mm	S250 - S450GD	ZM / Z
Sigma	120 - 240 mm	up to 400 mm	2.0 - 6.0 mm	S250 - S450GD	ZM / Z

BEAMS

SIZE	NOMINAL DEPTH	FLANGE	MATERIAL	COATING	FABRICATION
W6	152 mm	100 - 152 mm	Gr. 50 - 65 / A572	HDG	Slotted / plain
W8	203 mm	102 - 205 mm	Gr. 50 - 65 / A572	HDG	Slotted / plain
W10	254 mm	102 - 260 mm	Gr. 50 - 65 / A572	HDG	Slotted / plain
W12	305 mm	102 - 310 mm	Gr. 50 - 65 / A572	HDG	Slotted / plain

MATERIAL GRADES — EN 10346 COLD-FORMED

S250GD 250 MPa MIN. YIELD	S350GD 350 MPa STANDARD	S420GD 420 MPa HIGH-STRENGTH	S450GD 450 MPa MAXIMUM LOAD
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COATINGS

+ZM · ZN-AL-MG	Magnelis · ZM120 - ZM430
+Z · HOT-DIP GALV.	Z275 - Z600 zinc

STANDARDS — EU & US

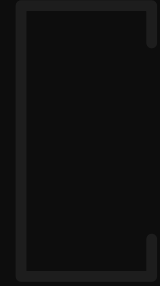
■ EN 1090	■ EN 10346	■ Eurocode 3
■ ISO 9001	■ ASTM A572	■ ASTM A653
■ AISC 360	■ ASCE 7	



LET'S BUILD IT

SEND US YOUR DRAWING.

Catalogue profiles, custom sections, or a complete mounting package — engineered, rolled and delivered with precision since 1962.



C-PILE



SIGMA



W-BEAM

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C-PILES . U-PILES . SIGMA . W-BEAMS . CUSTOM

Est. 1962 . Kayseri