

STEEL POOL WALLS, STEPS AND BENCHES

At the heart of our business are steel walls, steps and benches to create an attractive and durable foundation for a dream pool. Customization is key, and we are happy to work with you and your Customer to achieve the look and functionality desired.

Technology plays an important role in manufacturing pool panels and components. We invest in innovative technology — the kind of technology that enables us to engineer, bend, shape, and build the kind of pool systems that surprise and satisfy your Customers.



STEEL PANEL WALLS & FABRICATED PARTS

Cardinal's steel pool wall panels are made from the finest North American-sourced materials. Our manufacturing processes and computer design ensure that every panel is consistent and accurate every time, guaranteeing a perfect fit and easy assembly on the job site. Steel wall panels are made of 14-gauge galvanized steel or ZAM corrosion resistant steel and are engineered precisely for seamless installation. For extra strength where it counts, the wide top and bottom flanges are mitered at each corner to join the strength of the vertical side flanges. The horizontal and vertical flanges are then united by our unique toggle-locking system to join the two together. No welding is needed, therefore the integral protection of the galvanization is completely preserved.

Behind each panel are steel fabricated parts that support the pool system to keep it structurally stable and durable against harsh conditions. Our expertise in precise fabrication allows for complete customization including: linear & freeform shapes, specialty steps, benches, or sun-shelves. Our engineering brings almost any pool vision to life.

BRACES & SUPPORTS

A-FRAME BRACE - One of the several types of adjustable wall supports that ensure a straight square structure, with or without water.

VERSA DECK BRACE - Versa Deck Braces permit concrete or other decking material to be installed immediately after the pool is installed, without waiting for the back to settle. The inverted "A" shape transfers the weight of the deck to the base of the wall using the outward pressure of the water to equalize the stress on the wall.

SKIMMER SUPPORT - Designed to support the weight of the skimmer during and after backfilling, the skimmer support fits securely under the skimmer on the wall's bottom flange.

SHAPES FOR ANY SPACE

Cardinal's wide variety of pool shapes provides you the ability to give your Customers the right look for their environment.

Our CAD Team can take any drawing and transform it into a workable blueprint of your Customer's dream pool, with elegance and functionality at the forefront.

SOME STANDARD SHAPES AND SIZES

1. RECTANGLE

14' x 28' • 16' x 36' • 16' x 32' • 18' x 36' • 16' x 34' • 20' x 40'

2. GRECIAN

14.5' x 28.5' • 16.5' x 32.5' • 16.5' x 35.5' • 17' x 31' • 17' x 34' • 18' x 37' • 20' x 40'

3. ROMAN END

16' x 32' • 18' x 36' • 20' x 40'

4. DOUBLE ROMAN END

16' x 32' • 18' x 36' • 20' x 40'

5. TRUE ELL

16' x 32' • 12' x 26' • 18' x 40' • 30' x 12'

6. LAZY ELL

16' x 39' • 18' x 43' • 20' x 44'

7. KIDNEY

14' x 28' • 16' x 32' • 16' x 34' • 16' x 36' • 18' x 36' • 20' x 40'

8. OASIS

16' x 34' • 18' x 36' • 18' x 38'

9. MOUNTAIN POND

14' x 28' • 16' x 32' • 18' x 36'

10. LAGOON

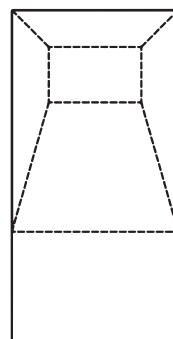
22' x 34' x 40' • 18' x 29' x 35'

11. CELEBRITY

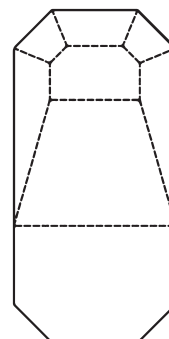
16' x 32' • 18' x 36' • 20' x 40'

12. OVAL

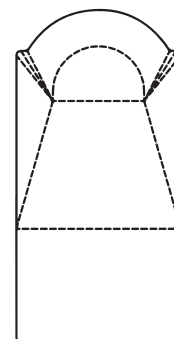
12' x 24' • 14' x 28' • 15' x 30' • 16' x 32' • 16' x 34' • 16' x 36' • 17' x 27' • 18' x 36'



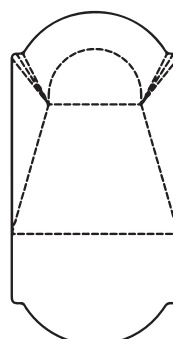
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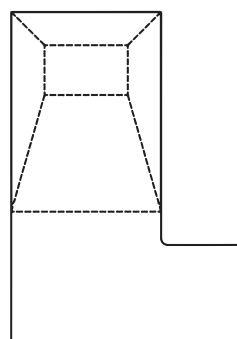
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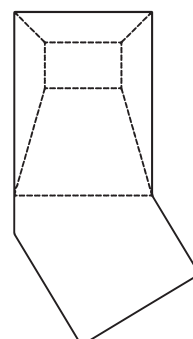
3. ROMAN END



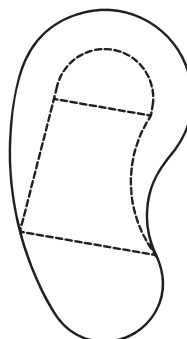
4. DOUBLE ROMAN END



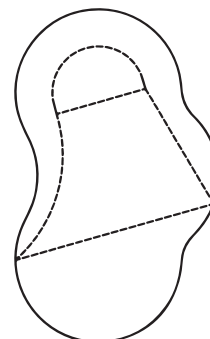
5. TRUE ELL



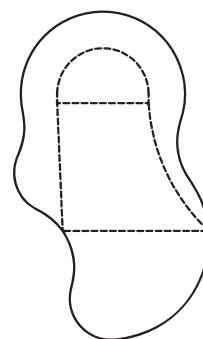
6. LAZY ELL



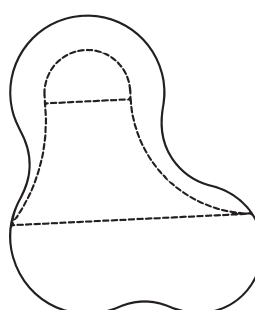
7. KIDNEY



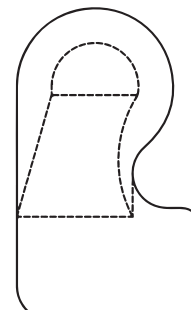
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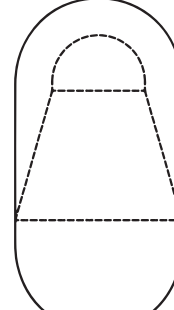
9. MOUNTAIN POND



10. LAGOON



11. CELEBRITY



12. OVAL



1. STEEL PANEL WALLS

The top, bottom, and vertical flanges, as well as panel stiffeners ("Z" braces) are secured using the toggle-lock fastening system. The result being a panel with maximum strength, minimal deflection, and a perfectly square structure, every time.

2. A-FRAME BRACE

One of the several types of adjustable wall supports that ensure a straight square structure, with or without water.

3. VERSA DECK BRACE

The use of versa deck braces permits concrete or other decking material to be installed immediately after the pool is installed, without waiting for the back to settle. The inverted "A" shape transfers the weight of the deck to the base of the wall using the outward pressure of the water to equalize the stress on the wall.



STEEL STEPS OPTIONS



Cardinal's steel steps, benches, and entryways create an attractive and durable foundation for any dream pool.

Whether choosing from our wide selection of standard steps or a completely custom idea, Cardinal stands ready with the most advanced manufacturing technology, design software, and handcrafted precision to ensure an accurate finished product, every time. All items are manufactured with **14-gauge steel or ZAM corrosion resistant steel**, and include **aluminum liner track** for easy liner installation. Every new model is thoughtfully designed to ensure a "perfect-fit" when installed on-site, as well as anticipate the visual appeal of a Cardinal Liner on top for a natural & elegant look in any pool.

Cardinal offers standard, open pour, and modular steps for new builds, and even drop-in step options for renovation projects. Our fully accessible Step Finder Library allows you to explore available step models at our Cardinal facility.

Quite simply, Cardinal steel steps and benches are unmatched for performance, function, and elegance.



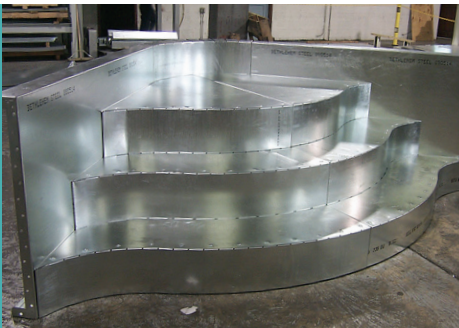
STANDARD STEPS

Cardinal offers over 150 standard steel step and bench models available in any 42 or 48" height, and practically any shape. Custom entry steps, benches, lounges, and sundecks are our specialty, and can be manufactured to fulfill almost any design.



OPEN POUR STEPS

We want YOU to have the flexibility to decide what is best for your Customer. Keep your options open and affordable with an Open Pour step, bench, or sundeck solution. Every step created by Cardinal is available as Open Pour, with step-by-step instructions for simple assembly on-site.



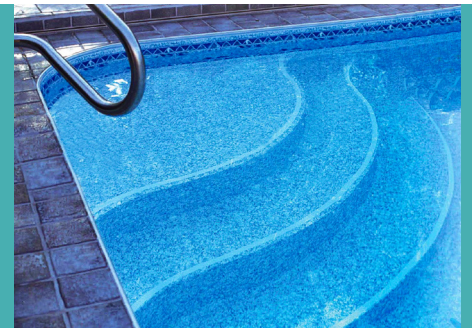
Precision Design

Our precise design process allows for custom steps that go together with ease.



Easy Installation

Easy in-field installation with confidence for a perfect fit.

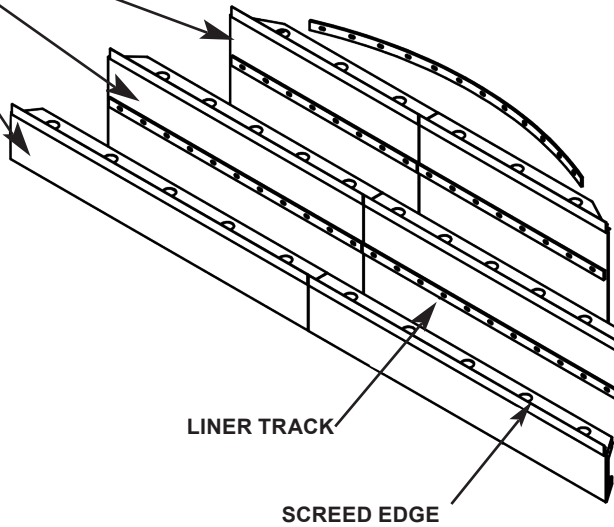


Beautiful Finish

Finished step creates a beautiful entrance to the completed pool.

STEEL STEP OPTIONS

TEK SCREW FLANGE TO
EXISTING POOL WALL



LINER TRACK

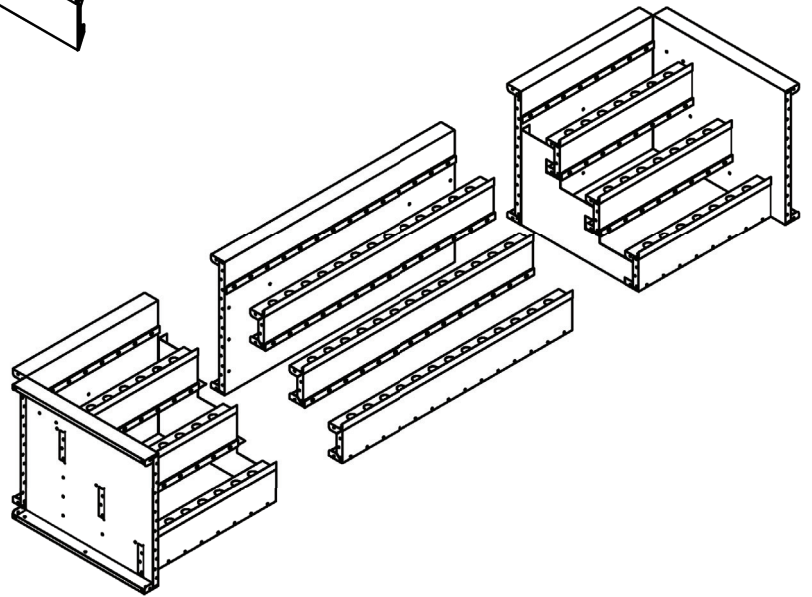
SCREED EDGE

DROP-IN STEPS

Ideal for pool renovation projects where a step needs to be added, Drop-Ins can be easily set during a replacement liner installation. New Drop-In designs are created as Open-Pour, while our stock Drop-Ins have availability in solid Standard steel.

MODULAR STEP SYSTEM

Knowing each pool is unique to its landscape and Customer, the Modular Step allows for an extended entryway to fit essentially any pool width. Customers choose a left, right, and appropriate quantity of middle sections to create an extended step module to fit the pool's specifications.



Check out the Cardinal Step Finder by
scanning the QR Code or visiting:
cardinalpools.com/products/steel-steps-entries/



PARADISE

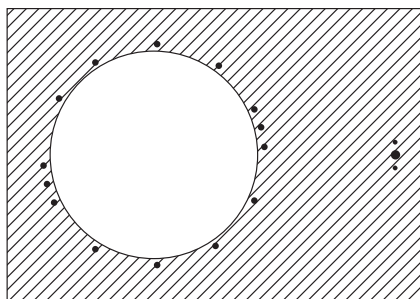
PANELS

REPAIR PANELS

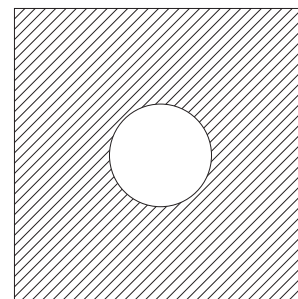
REPAIR PANELS	
ITEM NO.	DESCRIPTION
CSFIXBAD	20" x 25" Repair - Badu Jet
CSFIXJIF	18" x 18" Repair - Jiffy Lite
CSFIXLT	18" x 18" Repair - Light
CSFIXRT	18" x 18" Repair - Return
CSFIXSK	18" x 18" 1084 SKM Fix Panel
CSFIXSPA	18" x 18" Spa Bright Light Rep
CSFIXWS	18" x 24" 1085 SKM Fix Panel
CSFIXXX	18" x 18" Repair - Blank
CS-LIGHT DROP	Light Punch Drop

Used for renovations such as corrosion due to a leaky gasket. These panels pop-rivet to an existing panel.

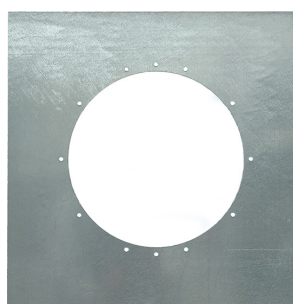
**Custom repair panels, available upon request.*



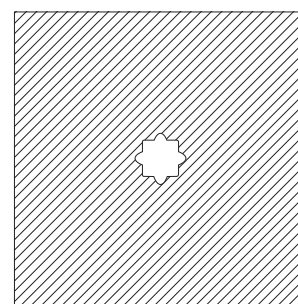
CSFIXBAD



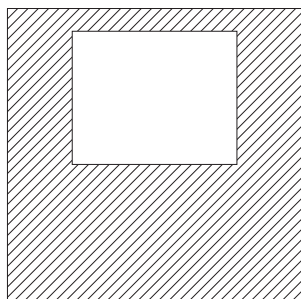
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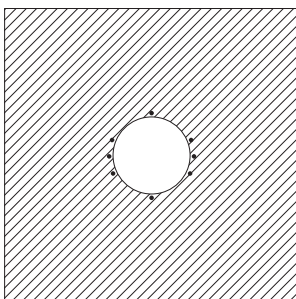
CSFIXLT



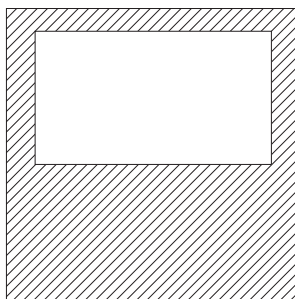
CSFIXRT



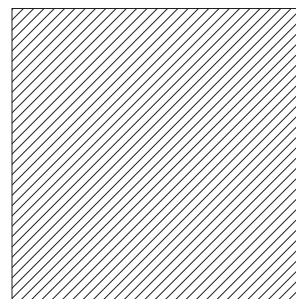
CSFIXSK



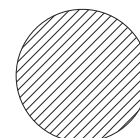
CSFIXSPA



CSFIXWS



CSFIXXX

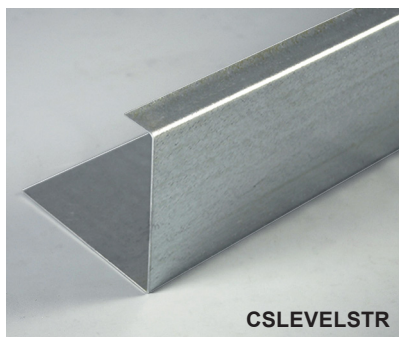


CS-LIGHT DROP

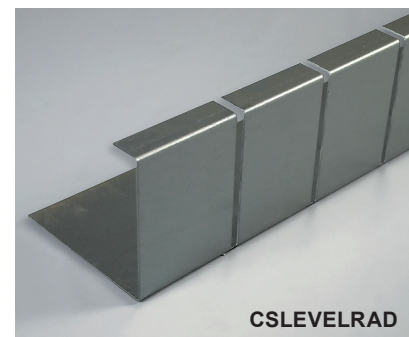
LEVELER PANELS

LEVELER PANELS	
ITEM NO.	DESCRIPTION
CSLEVELSTR	1" x Flange O.D. x 6" x 8' Cap
CSLEVELRAD	1" x Flange O.D. x 6" x 6' Cap

Used to re-level the top of a panel due to settling. The leveler panels pop-rivet onto the top face of an existing panel.



CSLEVELSTR

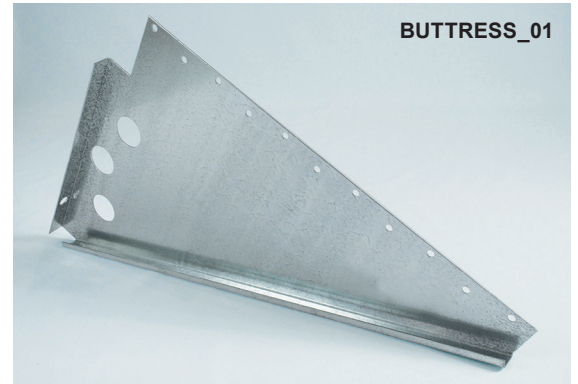


CSLEVELRAD

ABOVE GROUND BUTTRESSES

ABOVE GROUND BUTTRESSES	
ITEM NO.	DESCRIPTION
BUTTRESS_01	Above Ground Buttress - ST
BUTTRESS_02	48" Above Ground Buttress - ST

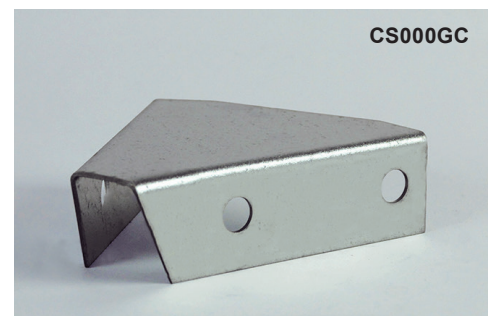
For above ground pool applications. Replaces the 3 and 4 piece A-frame used on the inground frame.



GRECIAN CORNER CAP

GRECIAN CORNER CAPS	
ITEM NO.	DESCRIPTION
CS000GC	Grecian Corner Cap - 6 1/2"

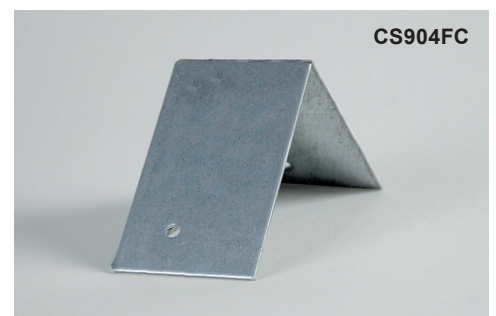
This piece ties corners together on a Grecian pool to give more rigidity on the top of the panels. This 45° angle helps keep the panels from pushing out and locks them into place.



SMALL INSIDE CORNER CAP

SMALL INSIDE CORNER CAPS	
ITEM NO.	DESCRIPTION
CS904FC	Small Inside Corner Cap

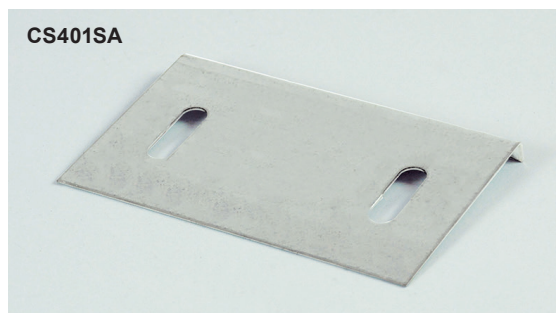
This piece ties corners together on a 90° angle on pool panels and helps keep the panels from pushing out and locks them into place.



SKIMMER SUPPORT ANGLE

SKIMMER SUPPORT ANGLE	
ITEM NO.	DESCRIPTION
CS401SA	7" Skimmer Support Angle

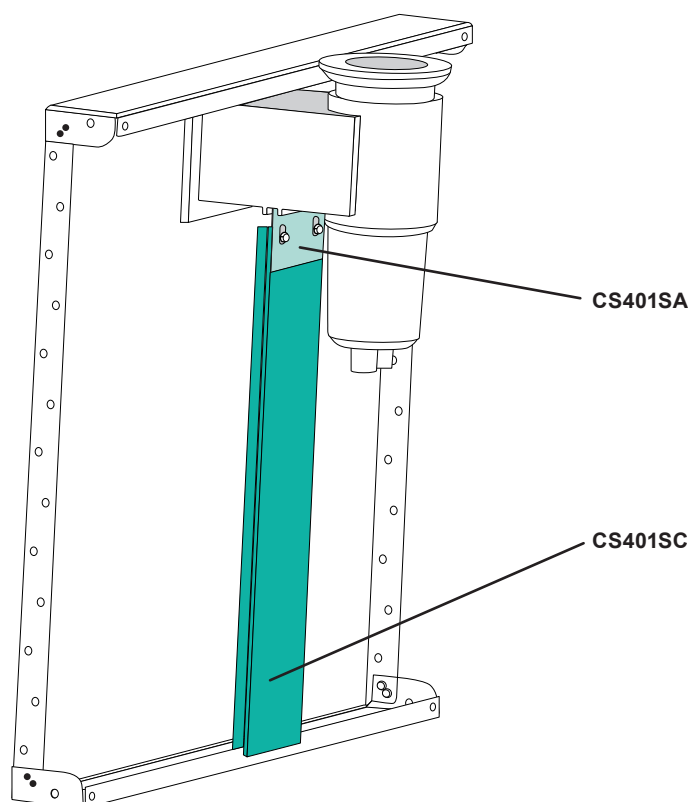
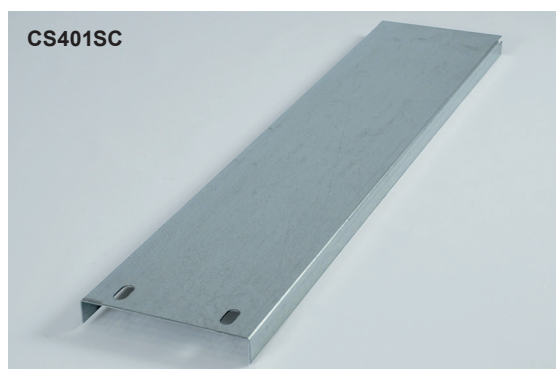
The skimmer support angle and channel both work together to support the skimmer. The angle is the top adjustable bracket.



SKIMMER SUPPORT CHANNEL

SKIMMER SUPPORT CHANNEL	
ITEM NO.	DESCRIPTION
CS401SC	32" Skimmer Support Channel
CS448SC	Skim Support Chan/48" Panel

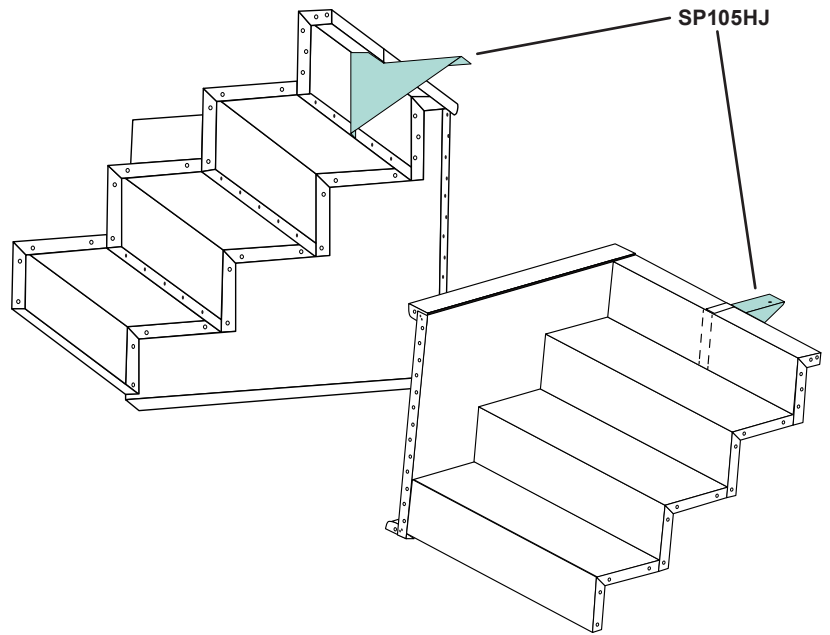
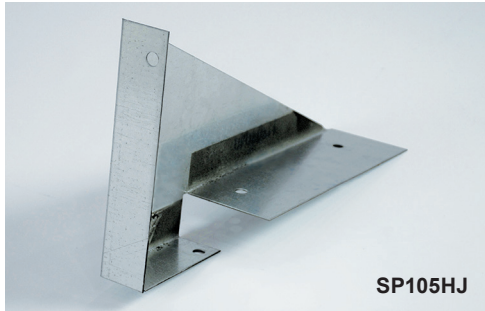
The skimmer support channel supports the skimmer to prevent cracking at the neck location due to settling. The channel clips to the flange.



HANDRAIL JIG

HANDRAIL JIGS	
ITEM NO.	DESCRIPTION
SP105HJ	Handrail Jig

Allows for attachment of handrail sockets.

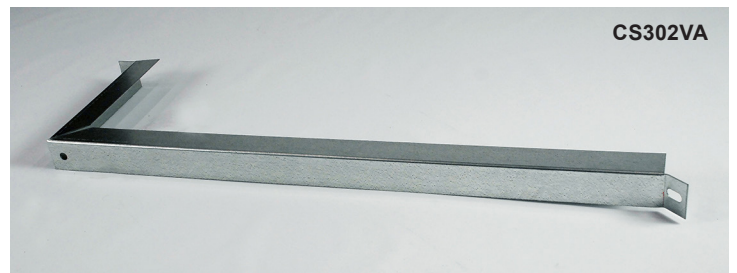


VERTICAL LADDER JIG

VERTICAL LADDER JIGS - 42"	
ITEM NO.	DESCRIPTION
CS302VA	Vertical Ladder Jig

VERTICAL LADDER JIGS - 48"	
ITEM NO.	DESCRIPTION
CS348VA	Vert PC/Ladder Jig/48" Panel

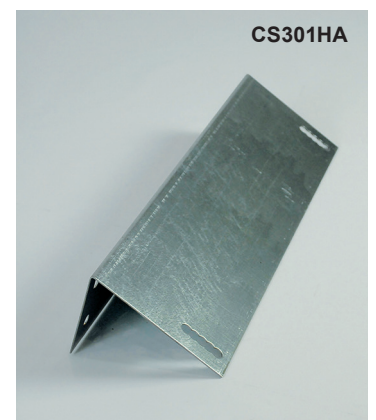
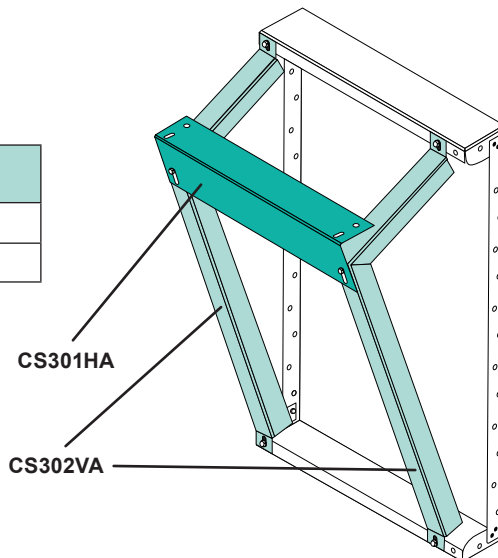
Allows for easy attachment of ladders to the deck.



HORIZONTAL LADDER JIG

HORIZONTAL LADDER JIGS	
ITEM NO.	DESCRIPTION
CS301HA	Horizontal Ladder Jig

Allows for easy attachment of ladders to the deck.



TURNBUCKLES

ONE PIECE TURNBUCKLE

ONE PIECE TURNBUCKLE	
ITEM NO.	DESCRIPTION
CS600OPT	1 pc. Turnbuckle A-Frame
CS608DH	18" Drive Stake w/ Holes

* The 1 pc. Turnbuckle A- Frame integrates a turnbuckle and notched short angle as one unit. The bottom of the turnbuckle is crimped to allow it to bend on the A-Frame Assembly.

THREE PIECE TURNBUCKLE

THREE PIECE TURNBUCKLE	
ITEM NO.	DESCRIPTION
CS600TA	Turnbuckle Assembly
CS606ES	Notched Short Angle
CS608DH	18" Drive Stake w/ Holes

The 3 pc. Turnbuckle requires a turnbuckle and notched short angle that function as separate units. It also needs an 18" or 24" drive stake to be inserted into the notched short angle and used to support the Turnbuckle Assembly.

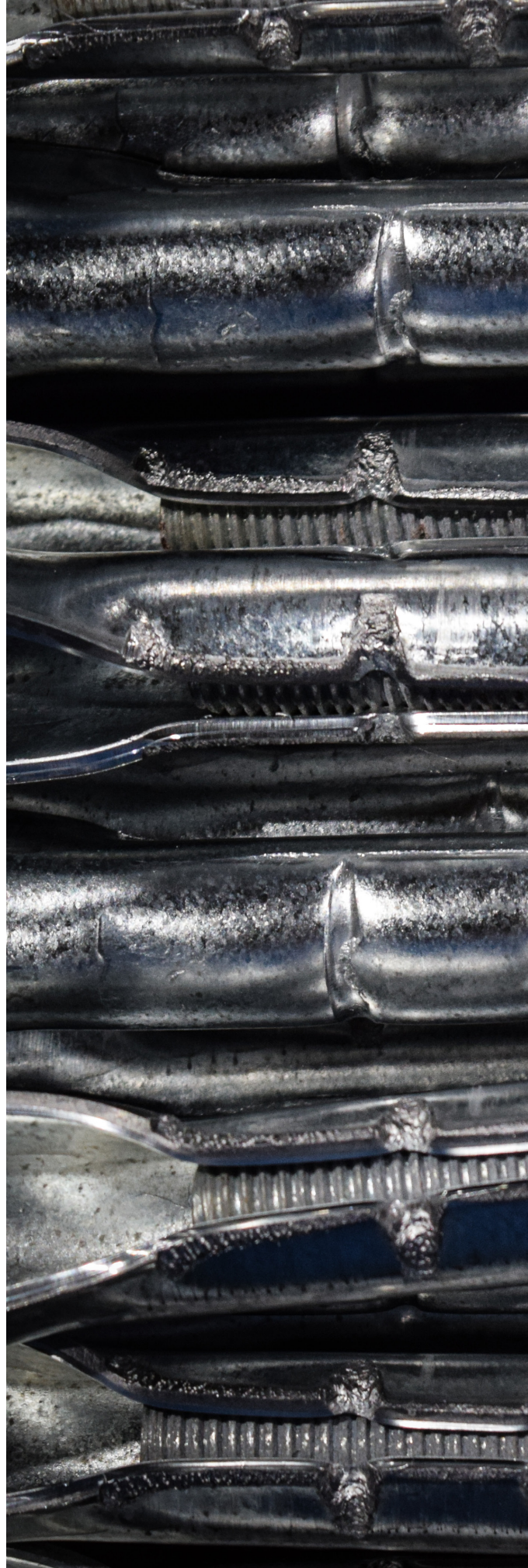
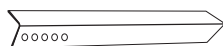
*CS600OPT

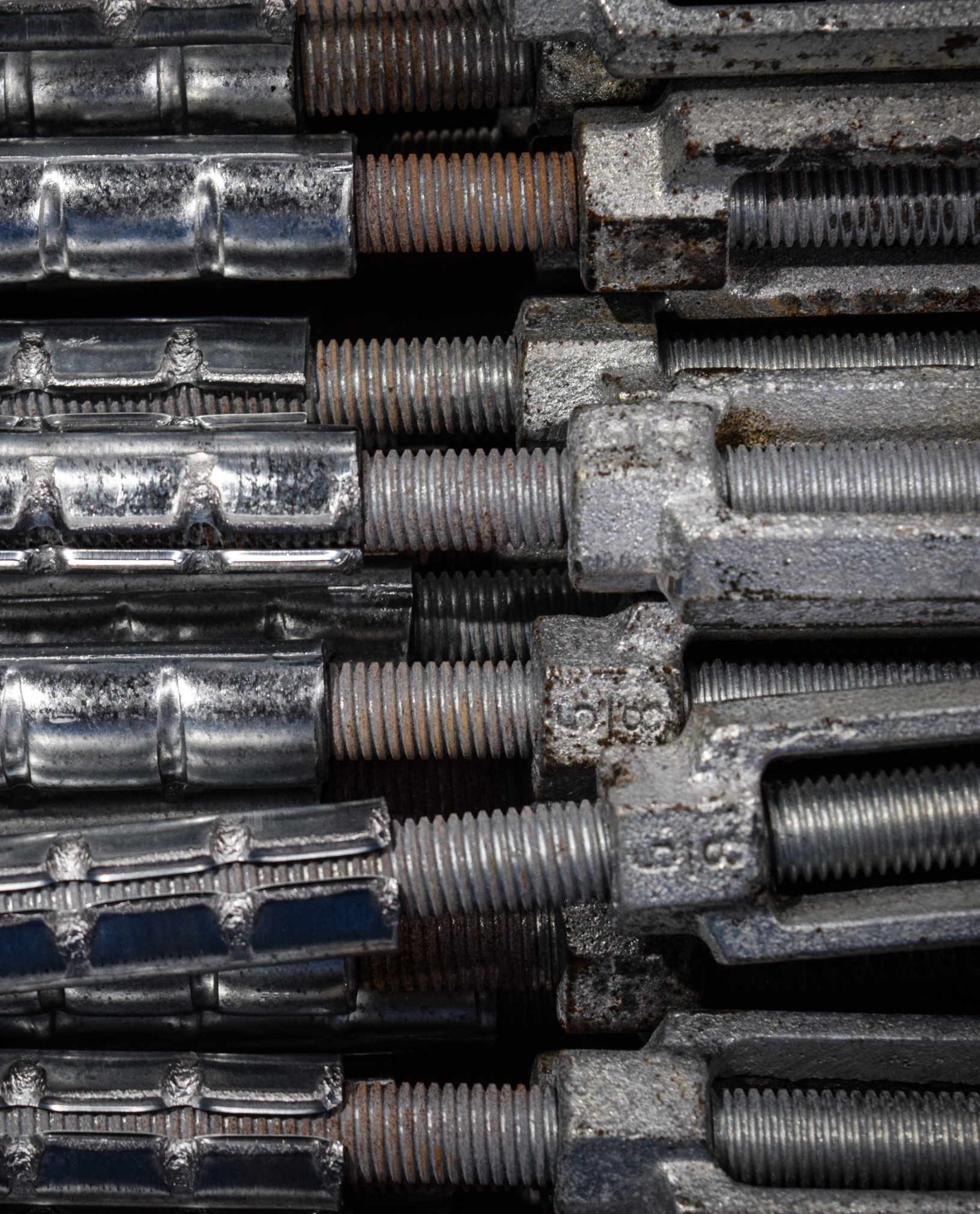


CS606ES



CS608DH





THREADED RODS

THREE PIECE THREADED ROD

THREE PIECE THREADED ROD	
ITEM NO.	DESCRIPTION
CS602TR	Threaded Rod/ Bracket/ Nuts Assembled
CS606ES	Notched Short Angle
CS608DH	18" Drive Stake w/ Holes

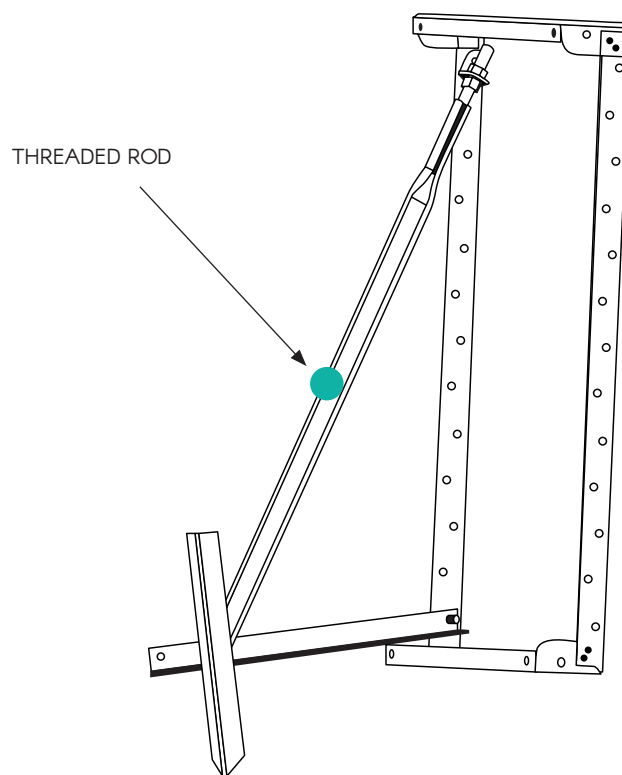
Use to plumb panels.

MISC.	
ITEM NO.	DESCRIPTION
CS619RB	18" Rebar 3/8" x 18" #3 Grade
CS624-12DH	24" Drive Stake w/ holes 12G
CS601TA	Threaded Rod
CS603TB	Threaded Angle Bracket
BP858HN	5/8" Hex Nut

Use to plumb panels.

Threaded Rod A-Frame Assembly

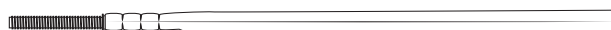
*Threaded rod, notched short angle, and drive stake make up 3 pc. Threaded Rod A-Frame.



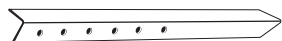
CS619RB



CS601TA



CS624-12DH



CS603TB

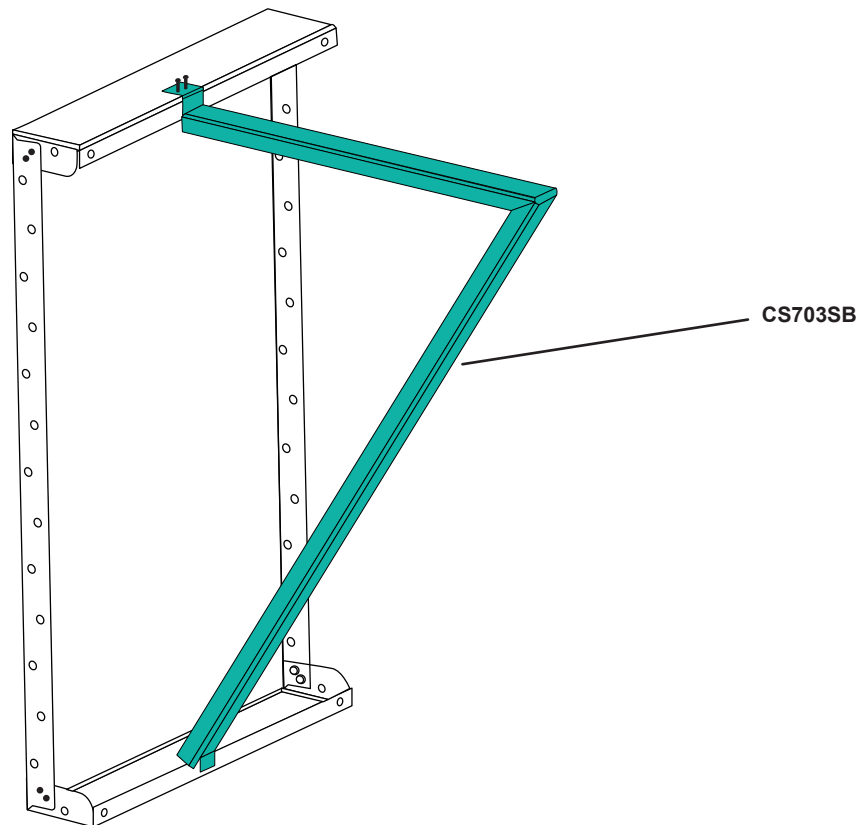
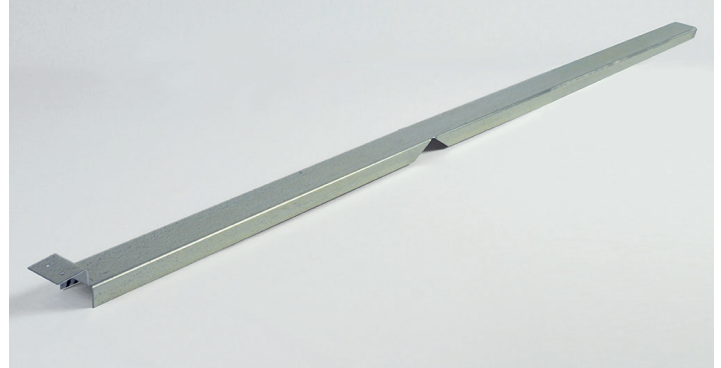


ONE PIECE VERSA BRACE

ONE PIECE VERSA BRACE - 42"	
ITEM NO.	DESCRIPTION
CS703SB	One Piece Versa Deck Brace Angle
BP000TS	#12 Hex Tek Screw - 110 per box

ONE PIECE VERSA BRACE - 48"	
ITEM NO.	DESCRIPTION
CS703SB-48	One Piece Versa Brace Deck Angle/48"
BP000TS	#12 Hex Tek Screw - 110 per box

Does not require bolt locations. Tek screws at the top and clips at the bottom.



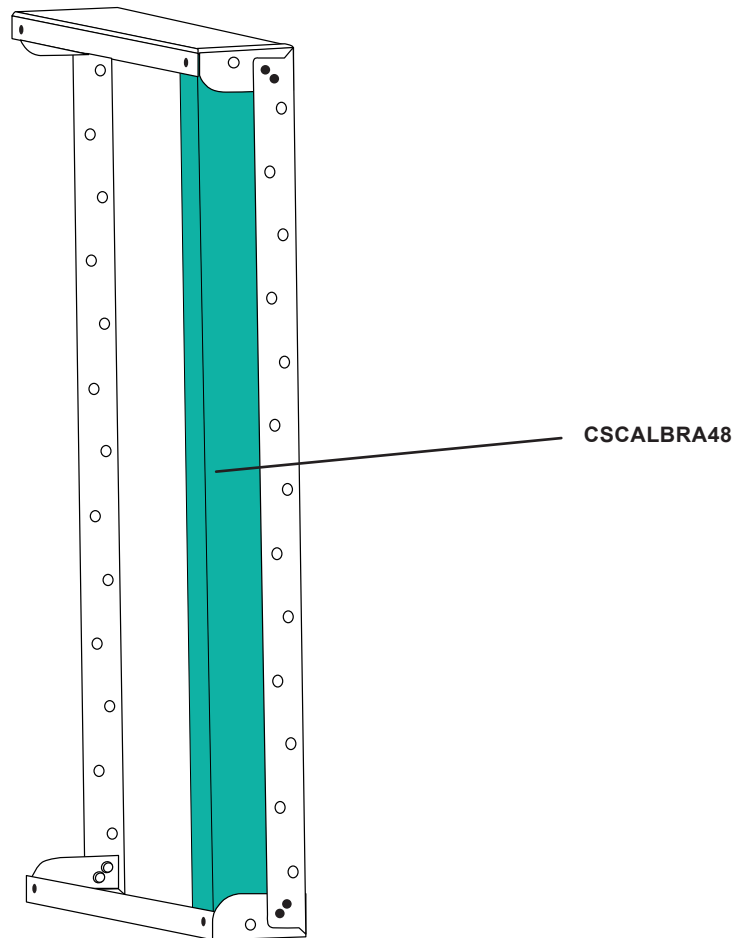
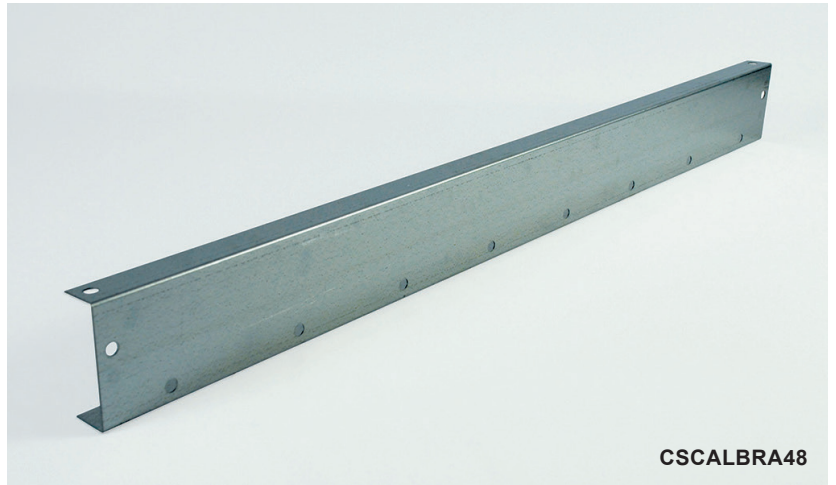
CALIFORNIA BRACE

CALIFORNIA BRACE

CALIFORNIA BRACE	
ITEM NO.	DESCRIPTION
CSCALBRA48	CA. Joint Brace - 48"

Standard Size. *Other sizes are available.
Acts as a joint stiffener.

*Mandatory on all panels over 48".

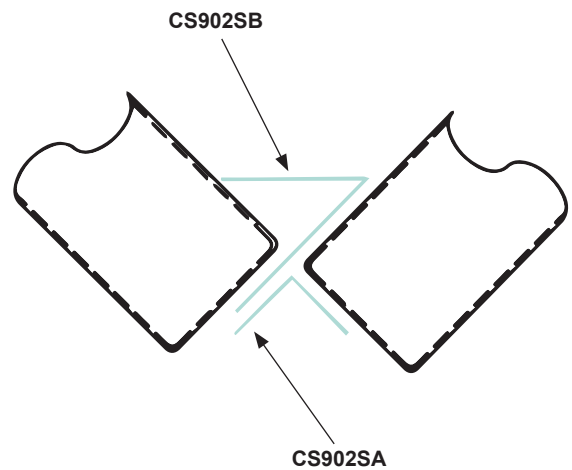
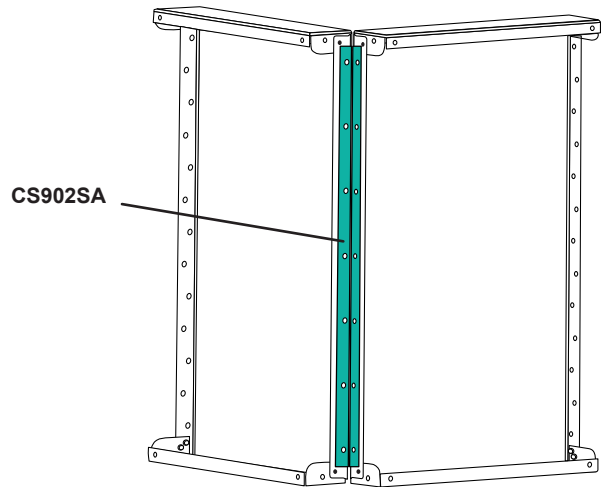


SQUARE CORNER ANGLES

SQUARE CORNER ANGLES	
ITEM NO.	DESCRIPTION
CS902SA	Square Corner Angle
CS948SA	48" Square Corner Angle

Angles listed above are for 42" or 48" pool kits. *Other sizes and angles are available.

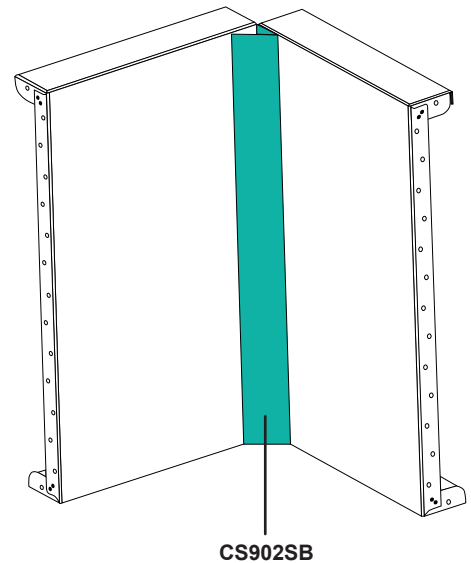
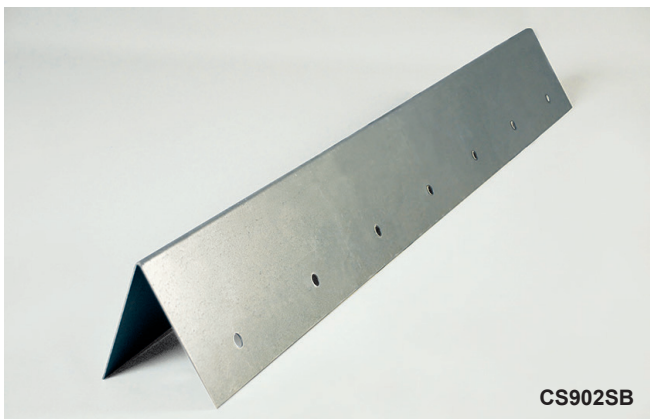
Ties a 90° corner together.



BIG VEE ANGLE

BIG VEE ANGLES	
ITEM NO.	DESCRIPTION
CS902SB	Big Vee Angle (for 6" Radius)
CS948SB	48" Big Vee Angle
CS902SA	Corner Angle

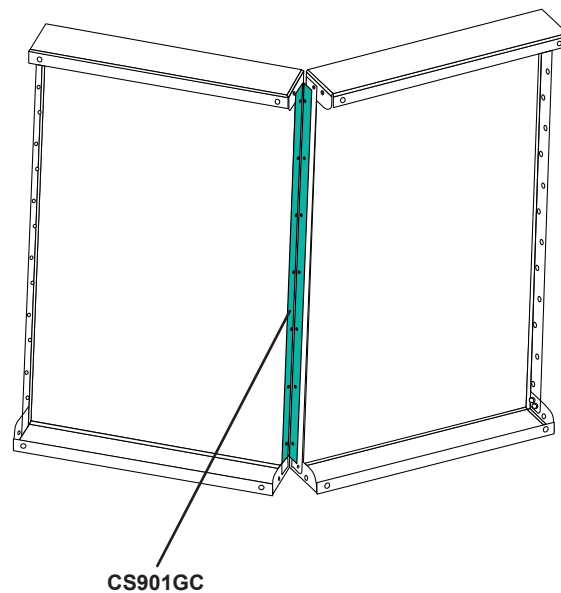
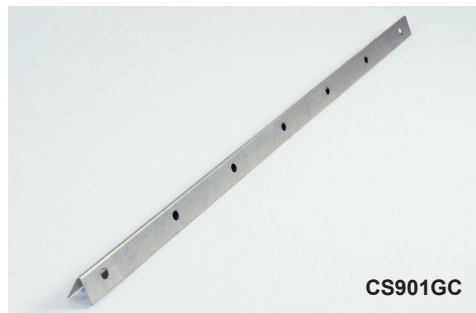
6" radius diagonal filler.



GRECIAN ANGLES

GRECIAN ANGLES	
ITEM NO.	DESCRIPTION
CS901GC	Grecian Corner Angle
CS948GC	48" Grecian Corner Angle

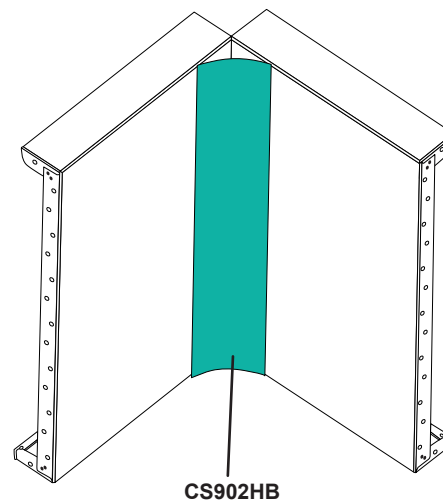
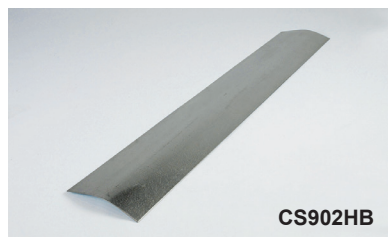
Ties a 45° corner together.



INSERTS

INSERTS	
ITEM NO.	DESCRIPTION
CS902HB	Heldor, 6" Radius Corner Insert
CS903FC	Foam Inserts 3.5" 3.5 x 5 x 40

6" radius roll form filler.



STEP ANGLES

STEP ANGLES	
ITEM NO.	DESCRIPTION
CS900GS	Grecian Step Angle

Attach a plastic or fiberglass stair or bench option to the panel.

Step Angles listed are for 42" pool kits. *Other sizes and angles are available.



BOLT PACKS

TEK SCREWS

TEK SCREWS	
ITEM NO.	DESCRIPTION
BP000TS	#12 Hex Tek Screw - 110 per box



BENT BOLTS

BENT BOLTS	
ITEM NO.	DESCRIPTION
BP500JS	56 - 2" Bent Bolts w/ Nuts (BP838HN) (Grecian)



BOLT PACKS

BOLT PACKS	
ITEM NO.	DESCRIPTION
BP216JS	216 Nuts/Bolts Per Pack
BP192JS	192 Nuts/Bolts Per Pack



7' DROP-IN STEP BOLT PACK

DROP-IN STEP BOLT PACKS	
ITEM NO.	DESCRIPTION
BP500DS	20 Hex Screws (BP375HB) 12 Stair Clips (SP0746) 26 Slotted Flathead Screws (BP834MB) 26 Bolts with Nuts (BP810MB) 52 3/8" Serrated Hex Nuts (BP838HN) per pack



LARGE STEP BOLT PACKS

LARGE STEP BOLT PACKS	
ITEM NO.	DESCRIPTION
BP375HB	Bolts w/ Nuts (BP838HN)
BP810MB	Bolts w/ Nuts (BP838HN)
SP0746	Stair Clips



VERSA BRACE BOLT PACKS

VERSA BRACE BOLT PACKS	
ITEM NO.	DESCRIPTION
BPS30DB	2" Bolts w/ Nuts (BP838HN)
BP000TS	#12 Hex Tek Screw - 110 per box

