



RCP Shelters, Inc.

Tube Steel

Catalog



rcpshelters.com

1	About RCP Shelters
2	Core Values & Processes
4	Product Lineup
6	Gable
8	Hexagon
10	Hip
12	Octagon
13	Square
16	Roofing Options
18	Color Selections
20	Options & Accessories
22-25	Gallery



RCP Shelters, Inc.

info@rcpshelters.com | 800-525-0207

rcpshelters.com



About RCP Shelters

From humble beginnings, mechanical engineer James Ritter founded RCP Shelters in 1957. His vision was to provide superior quality construction materials at competitive prices. RCP continues this tradition today as a small, third generation, family-owned business. Today, RCP is the industry's most diverse shelter manufacturer. We offer a variety of pre-engineered structures available in laminated wood and tube steel.

Our products have been used for numerous purposes, such as:

- Gazebos, Pavilions, and Shelters
- Amphitheaters and Band Shells
- Dugouts
- Bleacher Covers
- Playground Covers
- Mini Shelters and Kiosks
- Trellis, Arbor, and Pergola Designs
- Enclosed, Concession, & Restroom Shelters

Each project is individually engineered to meet or exceed local building code and loading conditions. Our flexible designs have met 265 psf snow loads in the Rocky Mountains and 186 mph wind loads in South Florida. Whether your next project is small or large, custom or standard, RCP can provide a shelter that meets your needs. Our experienced, friendly staff looks forward to working with you!



Core Values & Processes

Health Before Wealth

- Family comes first
- Physical and mental health are our top priorities
- Balance promotes consistent growth

Be a Part of the Dream Team

- Trust in your coworkers
- Hold yourself accountable
- Strong communication is essential

Our Direction Is to Strive for Perfection

- Take the initiative
- Assessing, addressing and solving challenges
- Set goals and outline the requirements necessary to achieve those goals

Stable Foundations Made from Strong Relations

- Customer service is our priority
- Community service is our duty
- Our success is defined by the prosperity of our vendors and representatives

RCP's engineers are licensed and certified in all 50 states and Canada. Each project is individually engineered to meet or exceed local building code regulations. RCP's fabrication facilities are AISC and AISC certified. RCP's welders and inspectors are AWS certified for guaranteed quality. RCP's sanitary designs eliminate all places for birds or animals to roost.

RCP's steel designs utilize concealed, bolted connections that do not require field welding, resulting in lower installation costs. Unlike inferior designs, RCP does not use unsightly exposed connections.

RCP's tube steel gable beams are designed as shop welded assemblies, thus reducing installation costs, and resulting in a more aesthetically pleasing appearance by eliminating exposed bolts and access hole cover plates.

RCP's in-house powder coating facility shot blasts, phosphate washes, powder coat primes, and powder coat finishes steel members using durable polyester TGIC powder. RCP's powder coating finish surpasses the industry standards for quality and longevity having passed independent testing with exceptional results. In-house finishing prevents unnecessary damage of your shelter by minimizing the transportation and handling of materials.

RCP's cupolas are shop assembled for simple field installation, resulting in significantly lower installation costs and increased quality.

RCP's standard tongue and groove roof deck is #1 grade nominal 2" x 8", which requires fewer runs than 2" x 6", resulting in lower installation costs.

RCP's sole business focus is park structures. Our dedicated staff has the knowledge and experience to assist with your projects' requirements in a timely manner.

RCP's tube steel purlins and tension ring members are designed normal to the roof, lowering installation cost by eliminating the need for unsightly roof deck support members.

RCP's standard steel column fixed moment base design utilizes concrete to conceal the anchor bolts, which lowers material and installation costs. Inferior designs require a column access hole and cover plate that is easily removed by vandals, exposing the unprotected interior of the column to corrosion.

RCP's steel ornamentation is precision plasma cut from high strength, durable plate steel.

RCP's 65+ year legacy continues as a third generation, family owned business.

RCP's industry leading customer service remains unsurpassed.

Product Lineup

Tube Steel



- 6 Gable
- 8 Hexagon
- 10 Hip
- 12 Octagon
- 14 Square

Tube Steel, an alloy of iron and carbon, is the most versatile and important construction material in the world.

RCP engineers utilize space frame analysis to size the tube steel specifically to meet or exceed local code and loading requirements. As an AISC certified fabricator with Clark County, Nevada, City of Phoenix, and City of Los Angeles fabricator approvals, RCP's fabrication facility assures compliance with the highest quality standards.



Design Criteria: Structure shall be designed to be free standing, open air pavilion in conformance with all applicable building codes.

Scope: Structure shall be an all steel pavilion over a 4" minimum thickness reinforced concrete slab. Pavilion shall have a clear space, without a center column or open knee bracing. Structure shall be designed by professional engineers. The owner or contractor shall be responsible for unloading, temporary storage, soil testing (if necessary), site preparation, concrete slab, and erection of structures. Owner or contractor is responsible for protection of materials after arrival.

Frame: All structural framing of the pavilion shall be structural tube steel with end caps to form a clean, neat appearance with no place for birds to nest or small animals to roost. The compression ring shall be structural steel plate. Since all connections will bolt together, field welding shall not be required. Bolts shall be concealed within the tubing when possible.

Columns: The pavilion shall be set on prepared footings. Foundation shall be engineered to manufacturer's design and constructed to local code and good construction practices for the specific site conditions. The structure shall have tube steel corner columns. The columns shall be attached to the top of

Advantages

Hidden electrical provisioning

Concealed connections

Economical clerestory designs

Easy installation

Architectural freedom

Large clear span capabilities

Structural flexibility

Vast color selection and coordination

Robotic precision fabrication

the concrete foundation by use of anchor bolts, hidden when possible. Anchor bolts shall be provided by owner or contractor so that foundations can be prepared and ready for installation upon delivery of the pavilion. Alternatively, RCP Shelters offers an anchor bolt option, to be shipped upon receipt of drawing approval for fabrication.

Powder Coat: The columns and frame shall be sandblasted to near-white condition, five stage washed, including detergent, phosphate, and rust protectant sealant, epoxy primed, then top coated with TGIC powder. The columns and frame shall be packaged in foam, cardboard, and stretch wrap to protect the finish during transit. The color shall be selected from manufacturer's standard color chart. Field touch up painting shall be required by owner or contractor.

Roofing: The roof system shall be structural 24-gauge exposed fastener Galvalume® panels with 1½" high ribs, 7.2" on center. Ribs shall run with the pitch of the roof for proper drainage. Roof panels shall be 3' wide and pre-cut by the length from the eave to the ridge. Angles shall be factory pre-cut. Matching roof trim & fasteners shall be supplied. Hip and ridge beams shall have cap plates for metal deck bearing, as metal deck cannot structurally bear on beam corner only. Panels and trim shall be pre-painted with the Kynar 500® paint system. Color shall be chosen by owner from the standard color chart, provided upon request.

Quality Assurance: Structure shall be designed under direct supervision of a Professional Engineer experienced in design of this type of work and licensed in the State where the project is located.

Structure shall be fabricated in our shop that is certified by the American Institute of Steel Construction (AISC), requiring quality control documentation and procedures. All welding to be performed to American Welding Society (AWS) standards by AWS certified welders.

NOTE: Detailed 3-part specifications are available upon request.

Tube Steel Gable



Gable roofs slope in two directions creating a simple, cost-efficient design with a high clearance and open ends for increased natural lighting.

Features

Drawings & Calculations: engineered to local code & certified by state registered professional engineer

Columns & Framing: powder coated tube steel

Roof Deck: 24-gauge Mega-Rib exposed fastener

Roof Pitch: 4:12

Eave Height: 7'-6"

Connections: hidden in tube steel frame

No place for birds or animals to roost

Options

Finish: hot-dipped galvanized steel

Roof Deck: tongue & groove Southern Yellow Pine

Electrical access throughout steel frame

Lightning protection kit

Decorative steel columns

2nd tier clerestory superstructure

Ornamentation & Railings

Gutters and downspouts

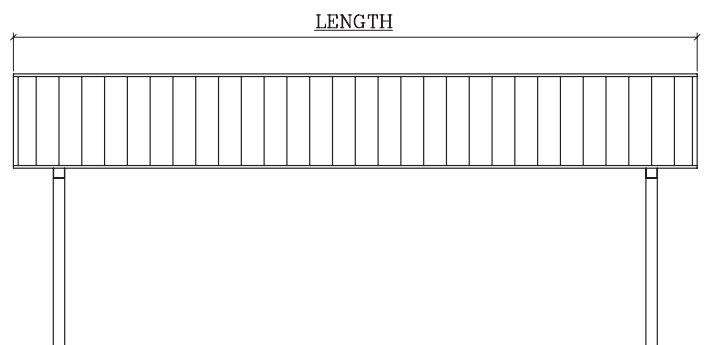
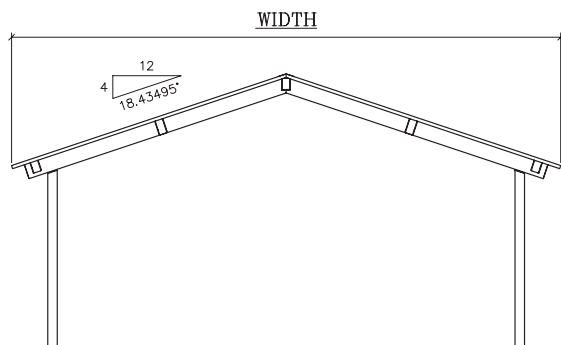
Functional steel louvered cupola

Architectural standing seam roofing



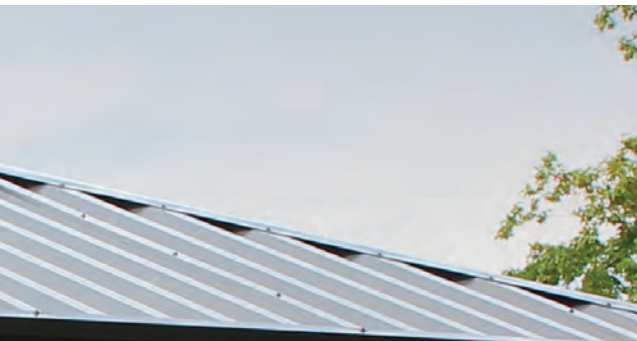
Popular Sizes

- **Roof Widths:** 12', 16', 20', 24', 30', 40', 60'
- **Roof Lengths:** 12', 16', 20', 24', 30', 36', 40', 44', 48', 60', 64'
- **Custom Sizes:** Available upon request



Tube Steel **Hexagon**





Six-sided shelters that maximizes usable area while utilizing a hip roof for superior protection against the elements.

Features

Drawings & Calculations: engineered to local code & certified by state registered professional engineer

Columns & Framing: powder coated tube steel

Roof Deck: 24-gauge Mega-Rib exposed fastener

Roof Pitch: 4:12 & 6:12

Eave Height: 7'-6"

Connections: hidden in tube steel frame

No place for birds or animals to roost

Options

Finish: hot-dipped galvanized steel

Roof Deck: tongue & groove Southern Yellow Pine

Electrical access throughout steel frame

Lightning protection kit

Decorative steel columns

2nd tier clerestory superstructure

Ornamentation & Railings

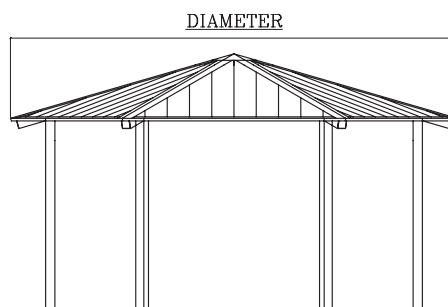
Gutters and downspouts

Functional steel louvered cupola

Architectural standing seam roofing

Popular Sizes

- **Roof Diameters:** 12', 16', 20', 24', 30', 34', 40', 48'
- **Custom Sizes:** Available upon request



Tube Steel **Hip**





Four-sided rectangular shaped roofs that are sloped downward on all sides for maximum structural stability and excel at providing protection against sun, wind, and rain.

Features

Drawings & Calculations: engineered to local code & certified by state registered professional engineer

Columns & Framing: powder coated tube steel

Roof Deck: 24-gauge Mega-Rib exposed fastener

Roof Pitch: 4:12

Eave Height: 7'-6"

Connections: hidden in tube steel frame

No place for birds or animals to roost

Options

Finish: hot-dipped galvanized steel

Roof Deck: tongue & groove Southern Yellow Pine

Electrical access throughout steel frame

Lightning protection kit

Decorative steel columns

2nd tier clerestory superstructure

Ornamentation & Railings

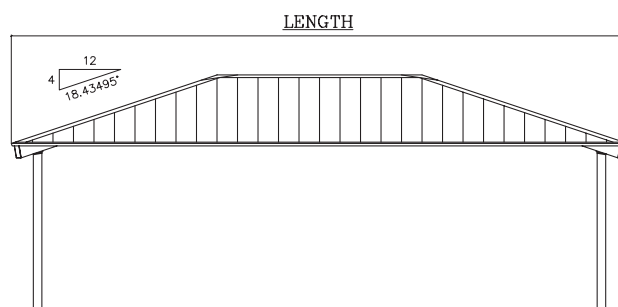
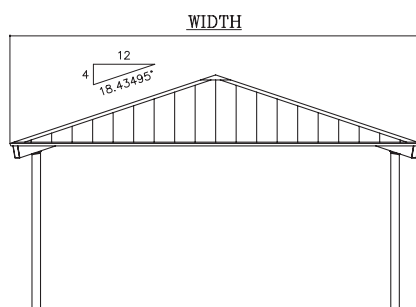
Gutters and downspouts

Functional steel louvered cupola

Architectural standing seam roofing

Popular Sizes

- **Roof Widths:** 12', 16', 20', 24', 30', 40'
- **Roof Lengths:** 16', 20', 24', 30', 36', 40', 44', 48', 60', 64'



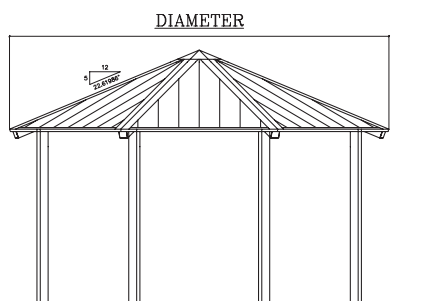
Tube Steel Octagon



Eight-sided shelters that maximizes usable area while utilizing a hip roof for superior protection against the elements.

Popular Sizes

- **Roof Diameters:** 12', 16', 20', 24', 30', 34', 40', 48'
- **Custom Sizes:**
Available upon request



Features

Drawings & Calculations: engineered to local code & certified by state registered professional engineer

Columns & Framing: powder coated tube steel

Roof Deck: 24-gauge Mega-Rib exposed fastener

Roof Pitch: 5:12

Eave Height: 7'-6"

Connections: hidden in tube steel frame

No place for birds or animals to roost

Options

Finish: hot-dipped galvanized steel

Roof Deck: tongue & groove Southern Yellow Pine

Electrical access throughout steel frame

Lightning protection kit

Decorative steel columns

2nd tier clerestory superstructure

Ornamentation & Railings

Gutters and downspouts

Functional steel louvered cupola

Architectural standing seam roofing



Tube Steel **Square**





Four-sided pyramid shaped roofs that are sloped downward on all sides for maximum structural stability and excel at providing protection against sun, wind, and rain. Square hips are symmetrical on all sides resulting in a cost effective solution for any application.

Features

Drawings & Calculations: engineered to local code & certified by state registered professional engineer

Columns & Framing: powder coated tube steel

Roof Deck: 24-gauge Mega-Rib exposed fastener

Roof Pitch: 4:12 & 6:12

Eave Height: 7'-6"

Connections: hidden in tube steel frame

No place for birds or animals to roost

Options

Finish: hot-dipped galvanized steel

Roof Deck: tongue & groove Southern Yellow Pine

Electrical access throughout steel frame

Lightning protection kit

Decorative steel columns

2nd tier clerestory superstructure

Ornamentation & Railings

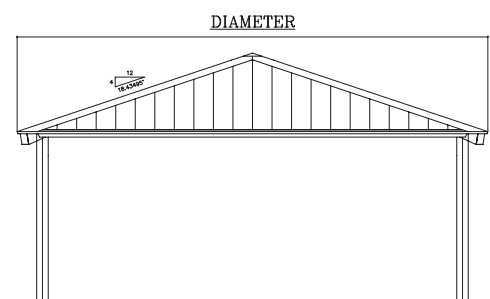
Gutters and downspouts

Functional steel louvered cupola

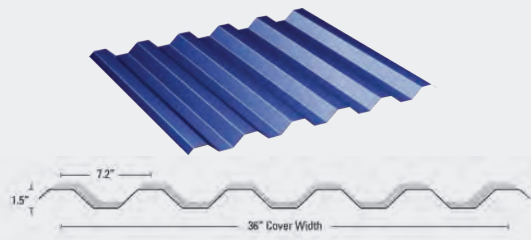
Architectural standing seam roofing

Popular Sizes

- **Roof Widths:** 12', 16', 20', 24' 30' 34', 40', 48'
- **Custom Sizes:**
Available upon request



Roofing Options

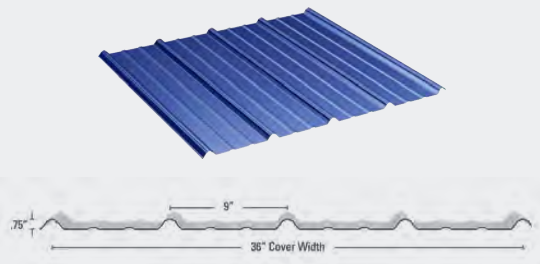
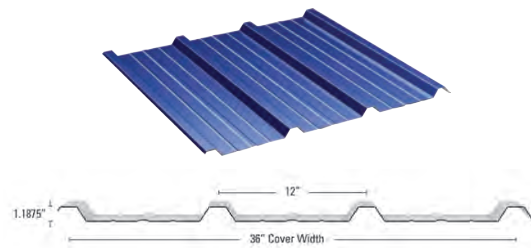


Mega-Rib

- Standard for all steel shelters
- Exposed fastener panel
- 24 gauge Galvalume®
- Kynar 500 finish

Multi-Rib

- Premium alternative for steel shelters
- Exposed fastener panel
- 24 gauge Galvalume®
- Kynar 500 finish

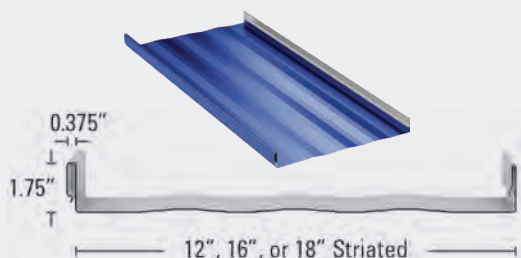
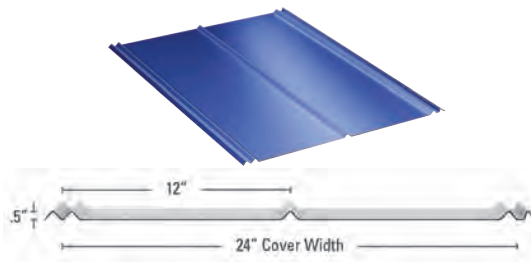


Max-Rib

- Standard for shelters with a wood roof deck system
- Exposed fastener panel
- 26 gauge Galvalume®
- Kynar 500 finish

5V Panel

- Alternative panel for shelters with a wood roof deck system
- Exposed fastener panel
- 26 gauge Galvalume®
- Kynar 500 finish



Medallion-Lok

- Premium alternative for steel shelters & wood roof deck systems
- True standing seam
- Hidden fastener panel
- Snap-together seams (no mechanical seaming)
- 24 gauge Galvalume®
- Kynar 500 finish



MEGA-RIB



MULTI-RIB



MEDALLION-LOK



MAX-RIB



5V

Color Selections

Metal Roofing Colors

The KYNAR 500® paint system outperforms polyester powder, urethane, silicone polyester and acrylic coating in every category with better color retention, better gloss retention, and better resistance to chalking. This high performance paint coating offers protection against weathering, aging, and pollution. Its performance keeps the painted metal looking vibrant year after year.

26 GAUGE COLORS - MAX-RIB, 5V PANEL					
REGAL WHITE	ROMAN BLUE	CLAY	IVORY	SURREY BEIGE	PATRICIAN BRONZE
ASH GRAY	LIGHT STONE	AUTUMN RED	MATTE BLACK	TUDOR BROWN	CHARCOAL
TERRATONE	EVERGREEN	BRANDYWINE	HARTFORD GREEN		

24 GAUGE COLORS - MEGA-RIB, MULTI-RIB, MEDALLION-LOK					
REGAL WHITE	BONE WHITE	SURREY BEIGE	SANDSTONE	ALMOND	BUCKSKIN
ASH GRAY	SLATE GRAY	CHARCOAL	MATTE BLACK	MEDIUM BRONZE	DARK BRONZE
PATINA GREEN	EVERGREEN	MANSARD BROWN	COLONIAL RED	ROMAN BLUE	PATRICIAN BRONZE
TERRA COTA	REGAL BLUE	BRITE RED	HARTFORD GREEN	BRANDYWINE	

NOTE: The colors on this chart do not necessarily depict the exact colors of the products and should only be used as a guide for color selection.

Powder Coat Colors

RCP's industry leading in-house powder coating is finished with TGIC polyester powder coat paint that offers excellent application and performance characteristics. Diamond Vogel's T-Series Powder Coatings' tightly controlled particle size distribution provides extremely good first-pass transfer efficiencies. The polyester powder coating provides super weatherability, corrosion resistance, and chemical resistance in one superior coating.

POWDER COAT COLORS					
SKY WHITE II	ANTIQUE WHITE	AG OFF WHITE	ENCLOSURE BEIGE	ANSI 70 GRAY	ANSI 61 GRAY
ANSI 49 GRAY	CRANE GRAY	TRAFFIC YELLOW	SAFETY ORANGE	TRACTOR RED	EVERGREEN
BOOTH LIGHT BLUE	BORDER BLUE	BUILDING BROWN	BLACK SATIN		

Natural Wood Stains

Factory applied Sherwin Williams SuperDeck provides a penetrating oil-based formula that protects the beauty of wood with a rich transparent exterior grade stain.

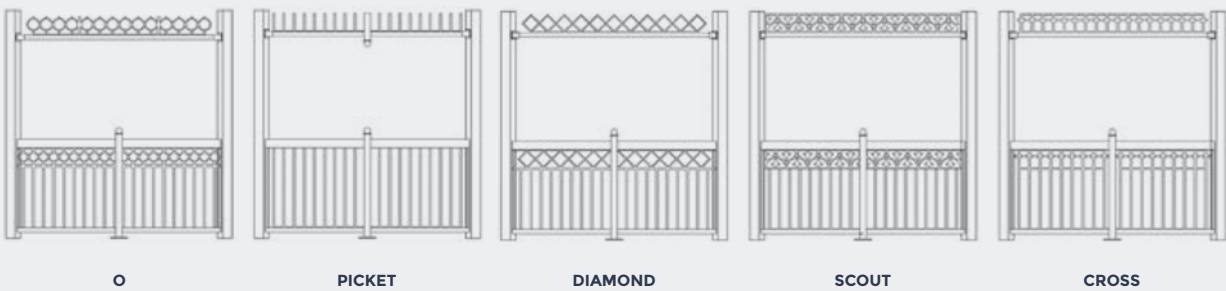
COLUMNS/BEAMS/FASCIA COLORS			DECK COLORS		
NATURAL 716	REDWOOD SW 3501	MISSION WALL SW	NATURAL 716	WHITE BIRCH SW 3503	MOUNTAIN ASH SW 3540
WHITE BIRCH SW 3503	YANKEE BARN SW 3505	RIVERWOOD SW			
BAJA BEIGE SW 3509	CIDER MILL SW 3512	MOUNTAIN ASH			

NOTE: The colors on this chart do not necessarily depict the exact colors of the products and should only be used as a guide for color selection.

Options & Accessories

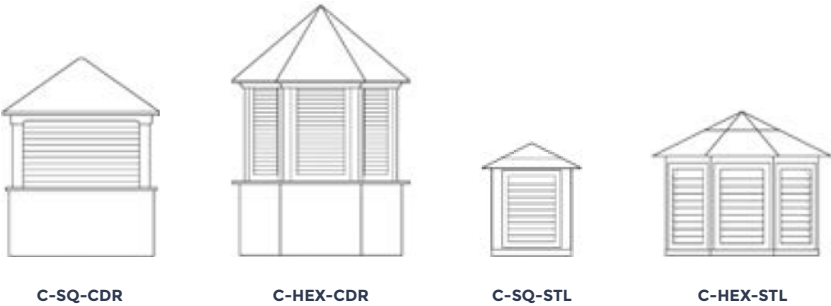
Rails & Overhead Ornamentation

Steel rails and ornamentation are available in an endless variety, including custom designs. All RCP designs are fabricated to exceed protective railing codes.



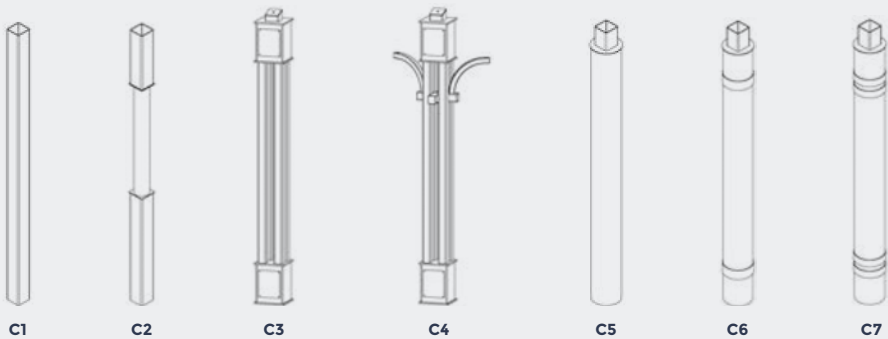
Cupolas

Both functional and decorative cupolas are available on all RCP models. Steel louvered cupolas are available for all steel models. Cedar louvered cupolas are available for models with a wood roof deck. All cupolas are appropriately sized per the building dimensions.



Columns

Steel column upgrades are available to add a decorative look to the shelter. Multiple combinations of accents are available from oversized, multi-post, stepped, rounded, and collared.





CROSS & C-OCT-STL



C-HEX-STL & PICKET



PICKET & C-HEX-STL



DIAMOND & C-HEX-CDR



C-SQ-STL



C6, PICKET & C-HEX-STL

Gallery



SQUARE WITH WOOD ROOF DECK (TS-SQ)



HEXAGON WITH 2ND TIER & PICKET ORNAMENTATION (TS-HEX)



SQUARE (TS-SQ)



SQUARE (TS-SQ)



HALF-HEXAGON BANDSHELL (TS-BS)



HIP (TS-H)



HIP WITH WOOD ROOF DECK & CEDAR CUPOLA (TS-H)



GABLE (TS-G)



TWO-POST GABLE (TS-G-2P)



BLEACHER COVER (TS-G-CL)



GABLE (TS-G)



MULTI-TIERED BAND SHELL (TS-BS)



CABLE (TS-G)



TRELLIS WITH PARASOLEIL PANELS (TS-ZP)



CANTILEVERED SEATING COVER (TS-G-CL)



SQUARE WITH WOOD ROOF DECK & C4 (TS-SQ)



CURVED DOUBLE ROOF (TS-C)

SQUARE (TS-SQ)



TWO-TIERED OCTAGON (TS-OCT-2T)



HEXAGON WITH 2ND TIER, CUPOLA, ORNAMENTATION (TS-HEX)



HALF-HEXAGON BANDSHELL WITH WOOD ROOF DECK AND BACK WALLS (TS-BS)



GABLE WITH T&G WOOD ROOF DECK (TS-G-TG)





RCP Shelters, Inc.

info@rcpshelters.com | 800-525-0207

rcpshelters.com