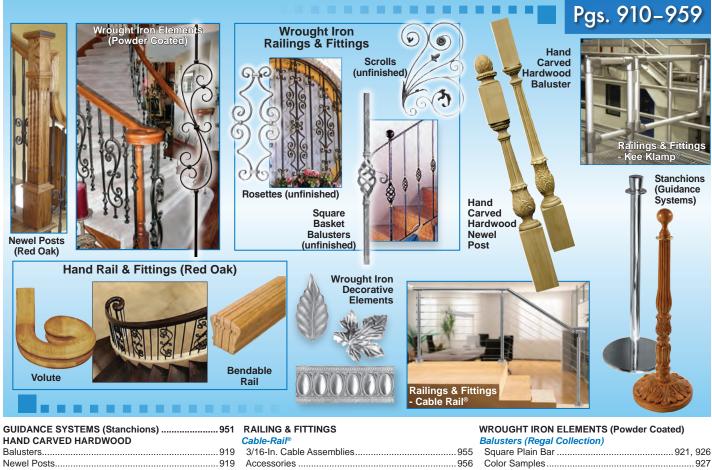


RAILINGS AND GUIDANCE SYSTEMS

www.panelplus.co

RAILINGS/GUIDANCE SYSTEMS



Balusters	919
Newel Posts	919
HAND RAIL & FITTINGS (Red Oak)	
Bendable Rail	916
Easings	
90° Up9	917
Over	917
Up	917
Goosenecks	
2 Rise Left Hand9	917
2 Rise Right Hand9	917
2 Rise Straight9	917
Level Quarter Turn	916
Opening Cap	916
Rail Bolt Kits	917
Returned End	916
Rosette	917
Start Easing	916
Straight Rail	916
Volutes	
Left Hand	916
Right Hand	916
NEWEL POSTS (Red Oak)	
Box	918
Hand Crafted Tuscan Collection	
Fluted	
Open Twist	
Twist	918
Pin Top Support9	
Turned	918
RAILING & FITTINGS	
Cable-Rail [®]	
1/4-In. Cable Assemblies9	
1/8-In. Cable Assemblies9	955

Cable-Rail [®]	
3/16-In. Cable Assemblies	
Accessories	
Overview	.952-954
Kee Klamp [®]	
Fittings	.947-950
Hex Key	
Steel Pipe (Schedule 40)	
Kee Lite®	
Aluminum Pipe (Schedule 40)	
Fittings	.947-950
Hex Key	
Pre-Fabricated Posts for Cable	
Accessories	
Overview	
Posts	.958-959
Railings	
CTANCHIONS (Ordelands Createring)	054
STANCHIONS (Guidance Systems)	
WROUGHT IRON DECORATIVE ELEMENTS	
WROUGHT IRON DECORATIVE ELEMENTS 250-Ft. Rolls (Unfinished)	
WROUGHT IRON DECORATIVE ELEMENTS	
WROUGHT IRON DECORATIVE ELEMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal)	943 943 943
WROUGHT IRON DECORATIVE ELEMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON ELEMENTS (Powder Coate	
WROUGHT IRON DECORATIVE ELEMENTS 250-Ft. Rolls (Unfinished)	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON ELEMENTS (Powder Coate Balusters (Classic Collection) Round Hand Forged	943 943 943 944-945 ad)
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON DECORATIVE PANELS Balusters (Classic Collection) Round Hand Forged Square Plain Bar Twist	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON DELEMENTS (Powder Coate Balusters (Classic Collection) Round Hand Forged Square Plain Bar Twist Square Plain Bar	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON ELEMENTS (Powder Coate Balusters (Classic Collection) Round Hand Forged Square Plain Bar Twist Square Plain Bar Balusters (Regal Collection)	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON DELEMENTS (Powder Coate Balusters (Classic Collection) Round Hand Forged Square Plain Bar Twist Square Plain Bar	
WROUGHT IRON DECORATIVE ELEMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON ELEMENTS (Powder Coate Balusters (Classic Collection) Round Hand Forged	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON ELEMENTS (Powder Coate Balusters (Classic Collection) Round Hand Forged Square Plain Bar Balusters (Regal Collection) Round Hand Forged Square Plain Bar Square Hammered Fleur De Lis	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON ELEMENTS (Powder Coate Balusters (Classic Collection) Round Hand Forged Square Plain Bar Twist Square Plain Bar	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished)	
WROUGHT IRON DECORATIVE ELÉMENTS 250-Ft. Rolls (Unfinished) Flowers (Unfinished Sheet Metal) Leaves (Unfinished Sheet Metal) WROUGHT IRON DECORATIVE PANELS WROUGHT IRON ELEMENTS (Powder Coate Balusters (Classic Collection) Round Hand Forged Square Plain Bar Twist Square Plain Bar	

5	Square Plain Bar Color Samples	
4	Epoxy	
+	For Balusters	027
D	For Newel Posts	
6	Epoxy Gun	
6	Pattern Ideas	
0	Shoes (Powder Coated)	
6	Round Opening	913 920 926
0	Square Opening	
6	Touch Up Paint	
Č	WROUGHT IRON RAILING & FITTI	
7	Balusters (Unfinished)	
7	Rail	
9	Round Forged	
7	Square Basket	
1	Square Heavily Hammered	930-932
	Stair	
3	Bars (Unfinished)	942
3	End Pieces for Handrails (Unfinished)941
3	Finials (Unfinished)	
5	Flowers (Unfinished)	940
	Newel Posts (Unfinished)	
	Round Forged	
3	Square Basket	
1	Square Heavily Hammered	
3	Railings (Unfinished)	
	Rosettes (Unfinished)	
6	Scrolls (Unfinished)	936-938
0	Shoes (Unfinished)	
1	Round Opening	,
4	Square Opening	
2	Spear Points (Unfinished)	
5	Spheres (Unfinished)	
,	Tubes (Unfinished)	942

SEE PAGES 1007-1023 FOR A - Z INDEX

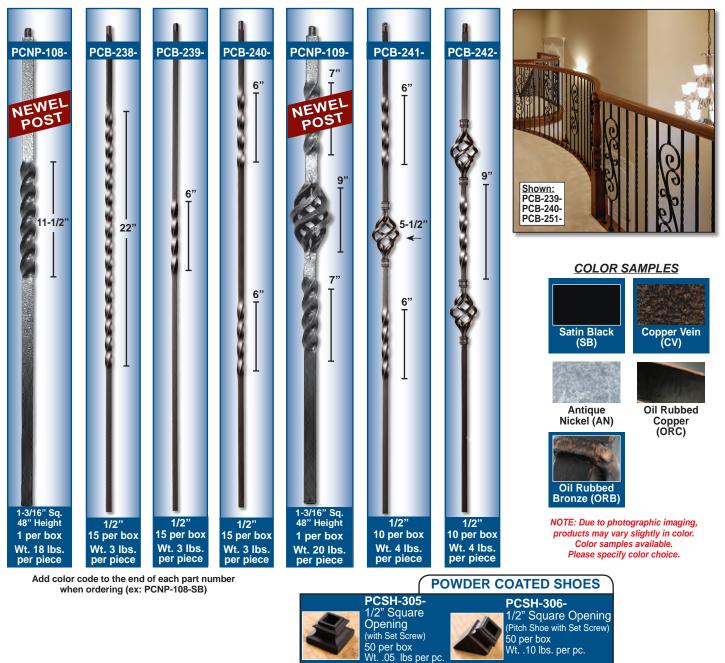


Create Looks of Distinction Using our Powder Coated Iron

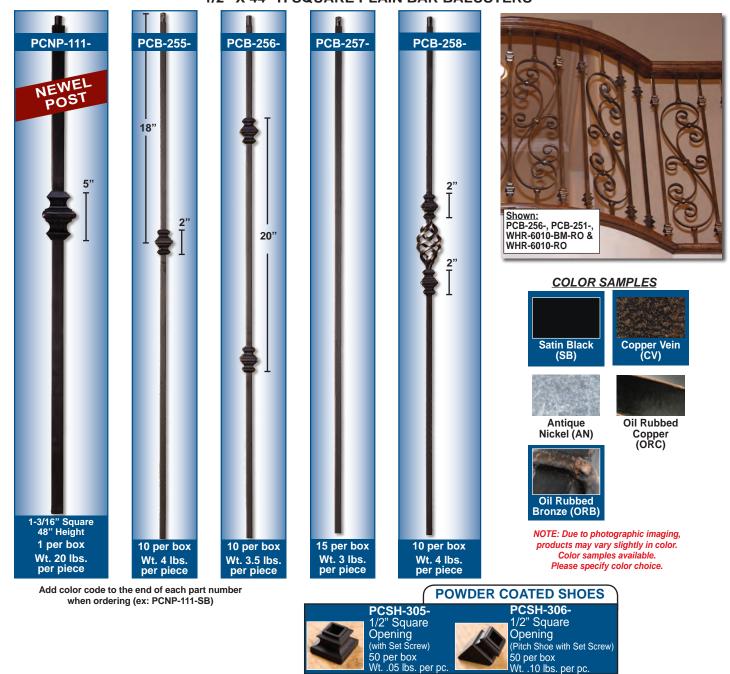
<u>NOTE:</u> Shoes are not a tight friction fit and are often loose fitting due to the forged nature of the iron and size tolerances.

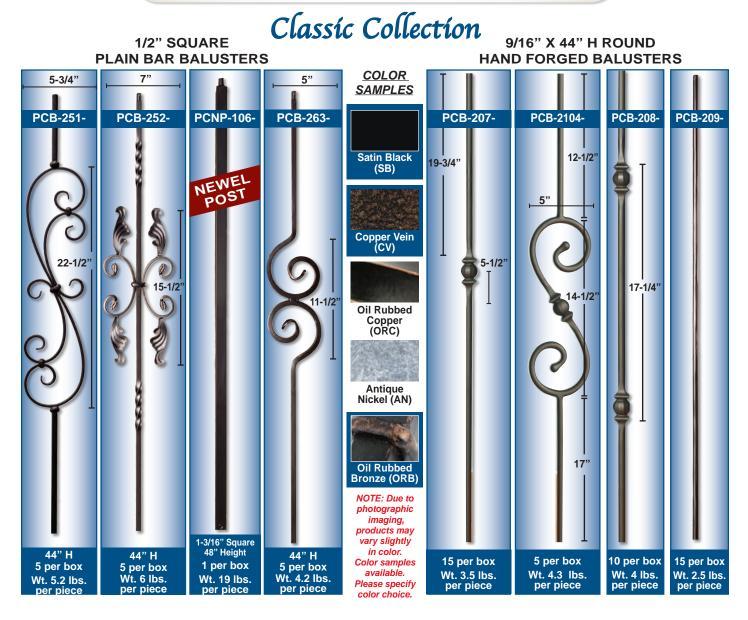
Classic Collection

1/2" X 44" H SQUARE PLAIN BAR TWIST BALUSTERS



Classic Collection 1/2" X 44" H SQUARE PLAIN BAR BALUSTERS









1/2" Square Opening (with Set Screw)

50 per box Wt. .05 lbs. per pc. PCSH-306-1/2" Square Opening (Pitch Shoe with Set Screw) 50 per box Wt. 10 lbs. per pc.

Add color code to the end of each part number when ordering (ex: PCNP-251-SB)

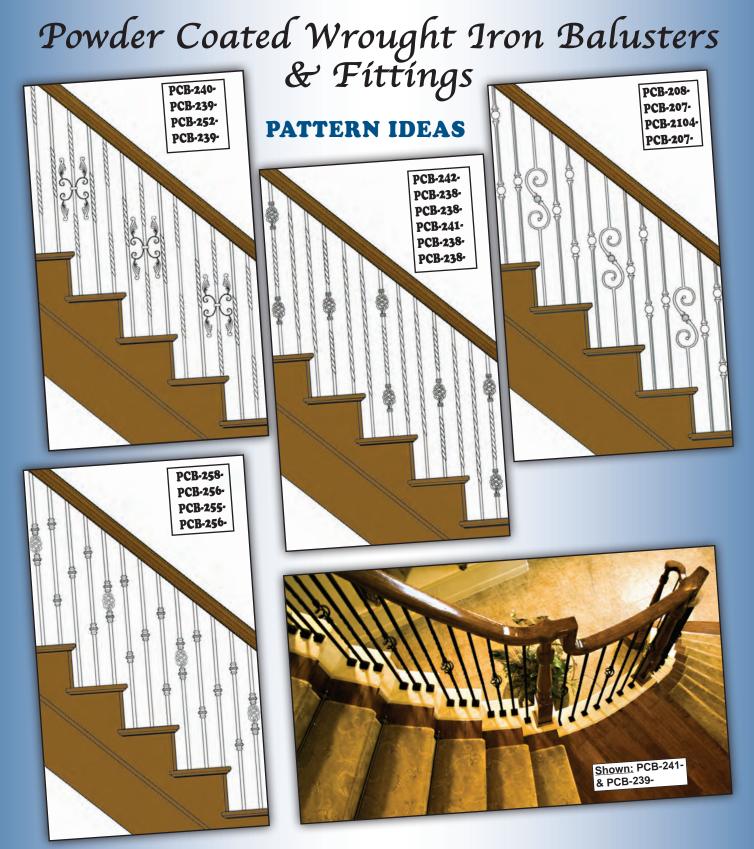


PCSH-302-9/16" Rd. Opening 50 per box Wt. .05 lbs per pc.

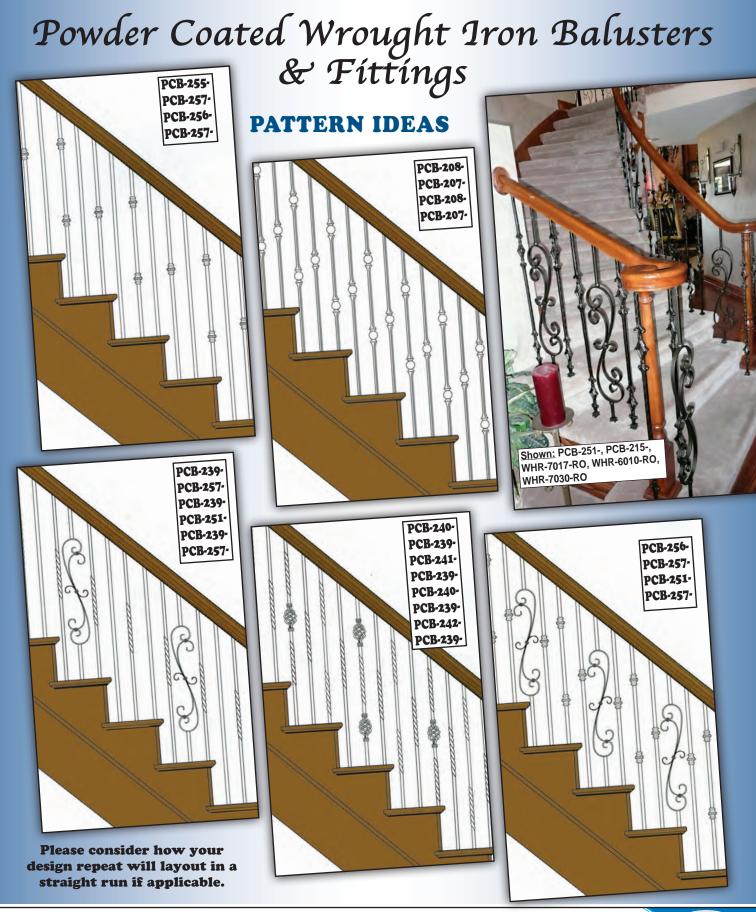
ROUND POWDER

PCSH-303-9/16" Rd. Opening (Pitch Shoe with Set Screw) 50 per box

Wt. .10 lbs per pc.



Please consider how your design repeat will layout in a straight run if applicable.



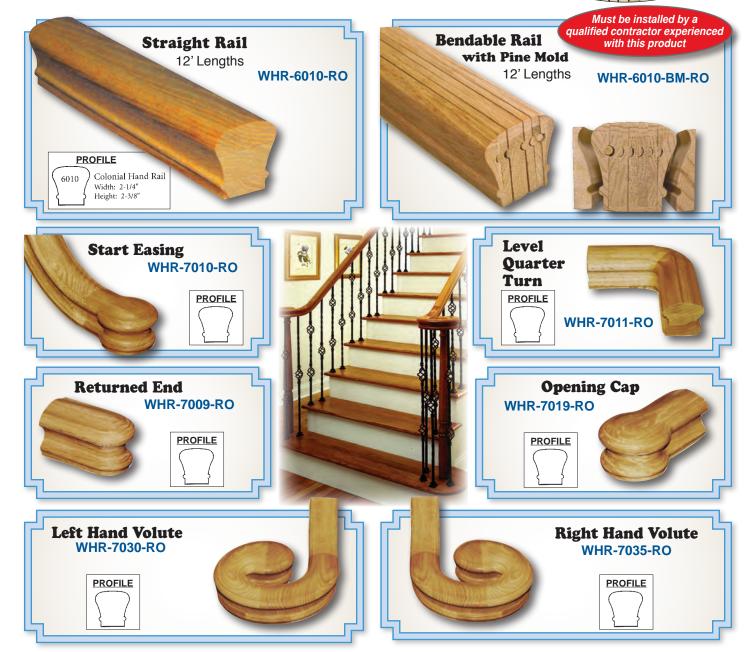
TRADITIONAL HAND RAIL & FITTINGS STOCKED IN UNFINISHED RED OAK

**** Other Species Available - Please See Note Below ****

Staircases . . .

So much more than a means of reaching various levels in the home, they provide the opportunity to create a striking architectural focal point.

Whether new construction or a remodel, consider form and not just function. With our selection of powder coated iron balusters, traditional Oak hand rail, fittings & newels, create a stairway with style and character.



All fittings include connective hardware #RBK-WOOD kit

🔆 🧩 Also available in Alder, Ash, Birch, Brazilian Cherry, Eastern White Pine, Douglas Fir, 🧩 🧩 Hard Maple, Hickory, Mahogany, Black Walnut & White Oak.

TRADITIONAL HAND RAIL & FITTINGS STOCKED IN UNFINISHED RED OAK

** Other Species Available - Please See Note Below **



All fittings include connective hardware #RBK-WOOD kit

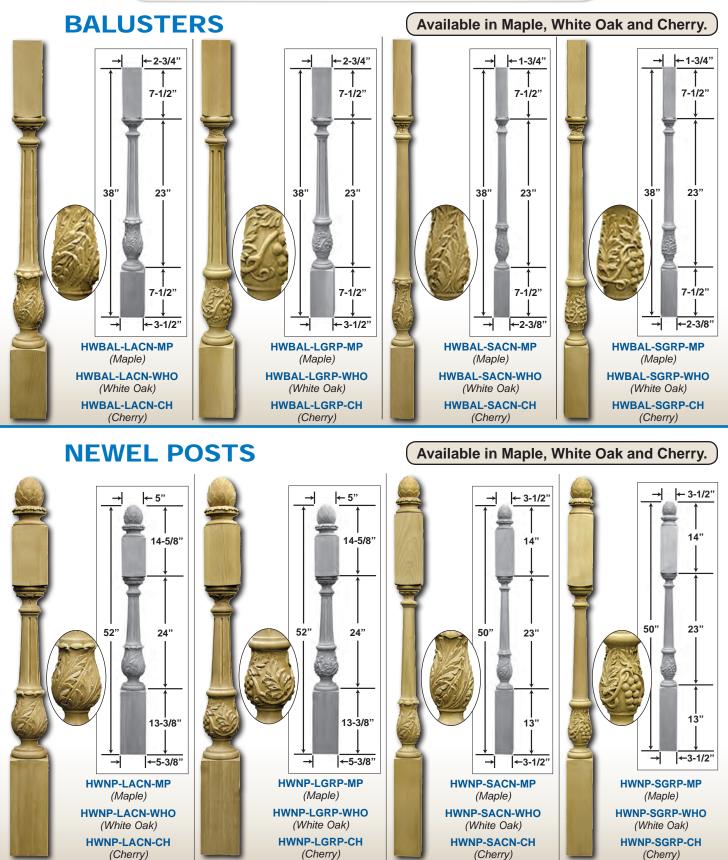
Also available in Alder, Ash, Birch, Brazilian Cherry, Eastern White Pine, Douglas Fir, Hard Maple, Hickory, Mahogany, Black Walnut & White Oak.

NEWEL POSTS UNFINISHED IN RED OAK

For Use With Our Oak Hand Rail And Fittings

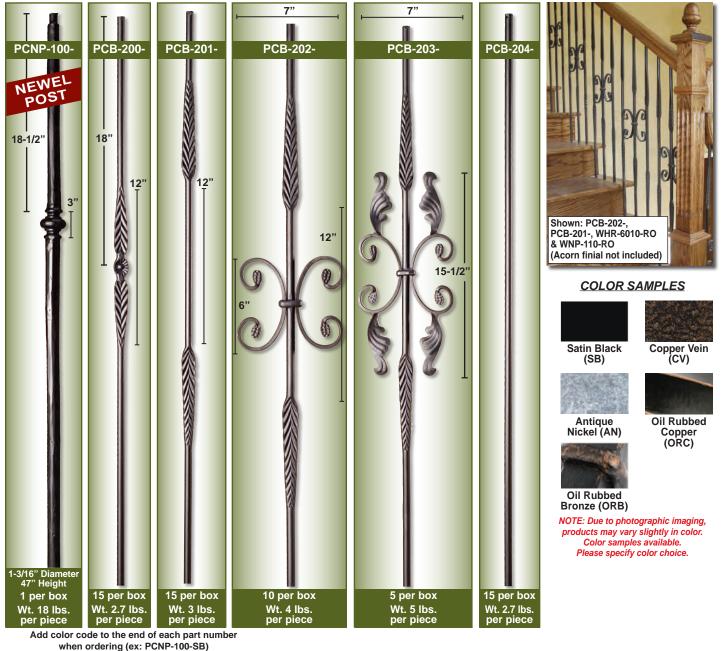
BOX NEWEL TURNED NEWEL PIN TOP SUPPORT NEWEL 3" コ 3" **WNP-100-RO** WNP-110-RO **RED OAK** RED OAK 6-1/4" 3" x 3" FLUTED 13" 42" BOX NEWEL 6-1/4" x 6-1/4" 56" 19-1/2" **WNP-104-RO** 21" RED OAK 16" 3-1/2" x 3-1/2" 56" 5" 24" 14-1/2" 24" HAND CRAFTED TUSCAN COLLECTION 6-5/8" 6-5/8" 6-5/8" **Open Twist** Fluted Twist Newel **Newel Newel** 8" 8 8" WNP-FLUTE-RO **WNP-TWIST-RO WNP-OPENT-RO** Weight: 35 lbs. Weight: 35 lbs. Weight: 35 lbs. Height: 51" Height: 51" Height: 51" Width: 5-1/2" Width: 5-1/2" Width: 5-1/2" 21-3/4" 21-3/4" 21-3/4" 14-5/8' 14-5/8" 14-5/8"

HAND CARVED HARDWOOD

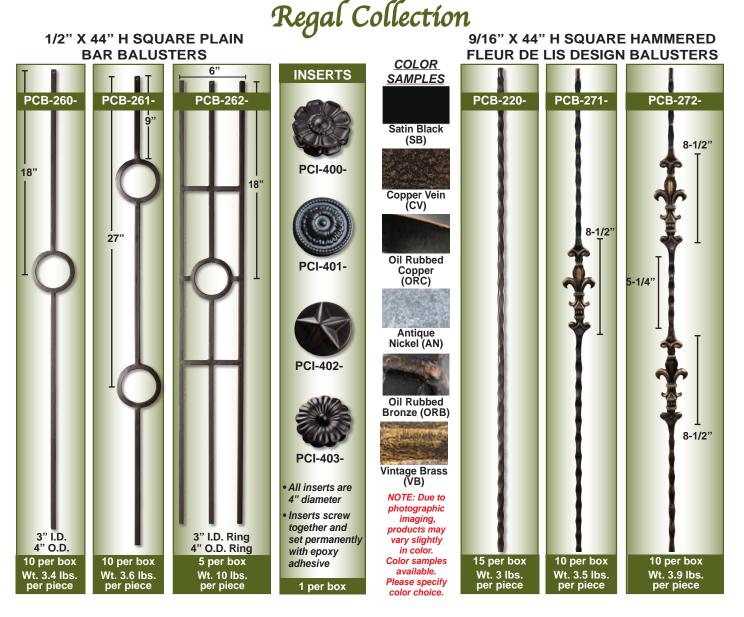


Regal Collection

9/16" X 44" H ROUND SMOOTH BALUSTERS





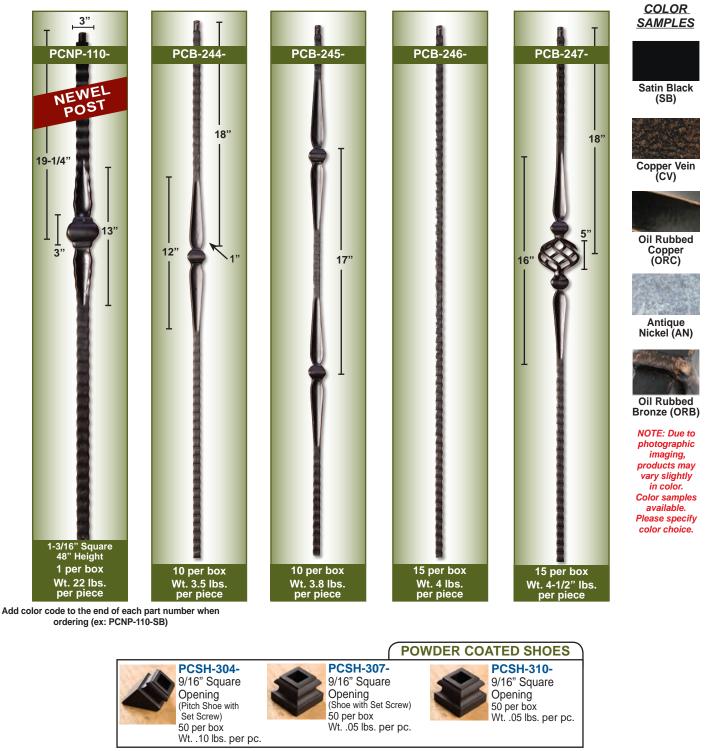


Add color code to the end of each part number when ordering (ex: PCB-260-SB)



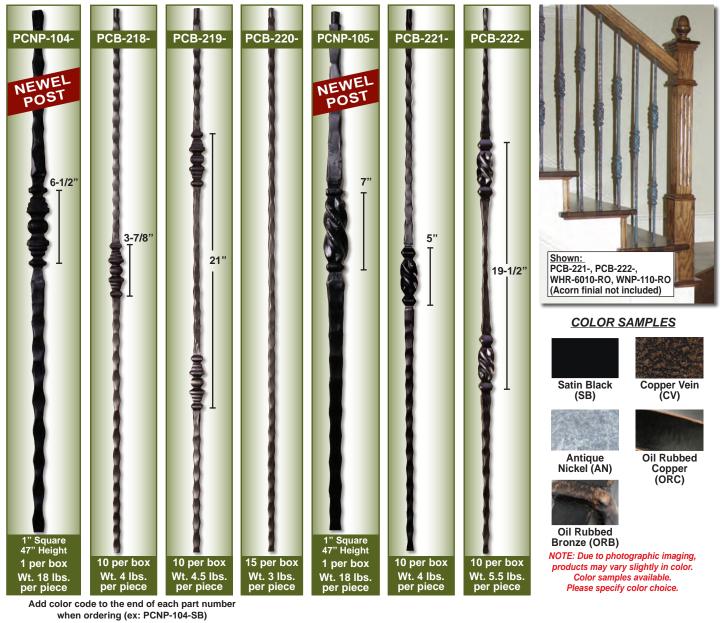
Regal Collection

9/16" X 44" H SQUARE HEAVY HAMMERED BALUSTERS



Regal Collection

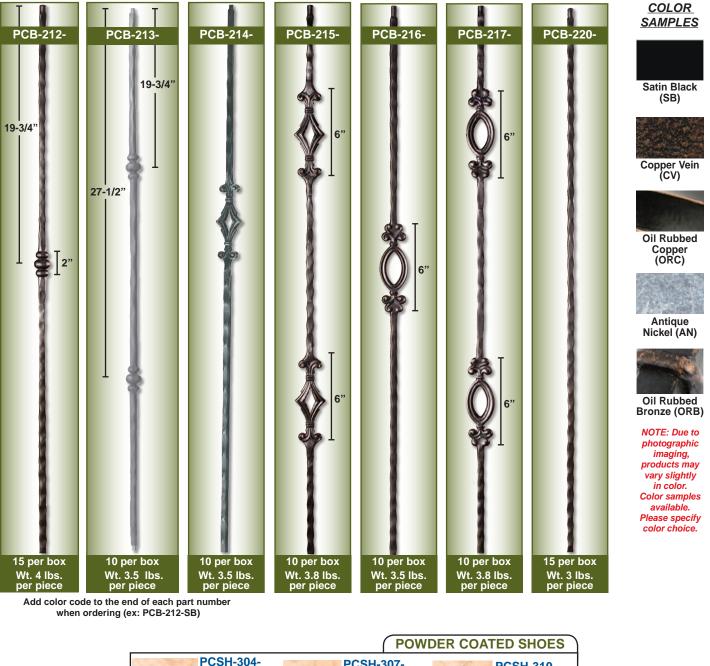
9/16" X 44" H SQUARE HAND FORGED BALUSTERS





Regal Collection

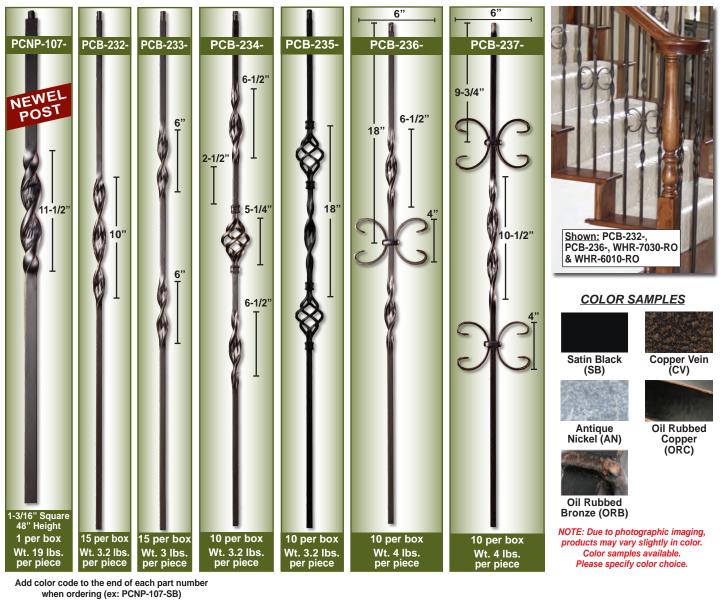
9/16" X 44" H SQUARE HAND FORGED BALUSTERS





Regal Collection

1/2" X 44" H SQUARE PLAIN BAR RIBBON TWIST BALUSTERS





1/2" Square Opening 50 per box Wt. .05 lbs. per pc.

PCSH-311-50 per box

1/2" Square Opening Wt. 5 lbs. per pc.

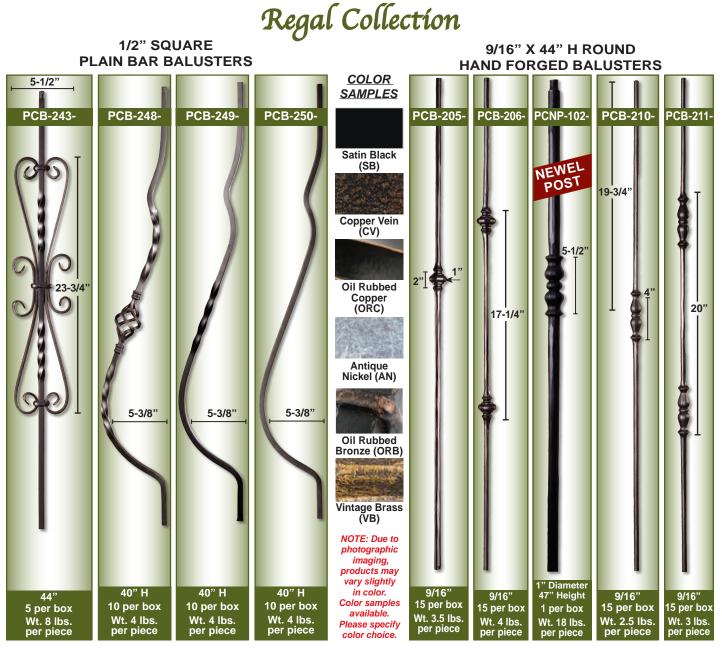
PCSH-305-1/2" Square Opening (with Set Screw) 50 per box Wt. .05 lbs. per pc.



PCSH-312-1/2" Square Opening 50 per box Wt. 5 lbs. per pc.

PCSH-306-1/2" Square Opening (Pitch Shoe with Set Screw) 50 per box Wt. .10 lbs. per pc.

POWDER COATED SHOES



Add color code to the end of each part number when ordering (ex: PCNP-243-CV)

SQUARE POWDER COATED SHOES

PCSH-305-1/2" Square Opening (with Set Screw) 50 per box Wt. .05 lbs. per pc.

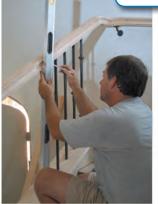
PCSH-306-1/2" Square Opening (Pitch Shoe with Set Screw) 50 per box Wt. .10 lbs. per pc.



Wt. .05 lbs. per pc.

50 per box Wt. .10 lbs. per pc.

EASY INSTALLATION (For use with our wood rails)



1. Check for plumb of baluster length and placement.



5. Apply epoxy in hole for baluster on top.



2. Cut baluster to length.



6. Do same for bottom.



3. Cut round hole in bottom of handrail for baluster.



7. Install baluster into epoxy filled holes and press in for tight fit.



4. Square off bottom hole with air hammer/chisel and mortising bit without the drill inside. (For installation of square balusters without needing shoes)



TOOLS USED: Standard Electric Drill, Air Hammer/Chisel, Epoxy Gun

Powder Coated Color Samples Available *** Please Specify Color Choice ***



- 1. Oil Rubbed Copper A blackenec background that is handrubbed revealinc hints of copper around the edges.
- 2. Copper Vein Brown, copper and black blended with a light texture.
- 3. Satin Black A smooth dull finish with a hint of gloss.
- 4. Antique Nickel A hand rubbed marblec effect with the look of aged nickel. Each piece will vary.
- Silver Vein Silver and black blendec 5. with a light texture.
- 6 Oil Rubbed Bronze – An aged bronze finish in a dark, deep chocolate browr with copper undertones. Each piece wil varv.

EPOXY ADHESIVES FOR IRON BALUSTERS



TOUCH UP PAINT



PCA-TUP-SB

Satin Black *

Touch Up Pen

* Touch up paints available in Black only

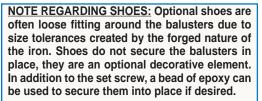
PCA-EBAL EPOXY FOR BALUSTERS (coverage approximately 15-20 pieces)



PCA-EG **EPOXY GUN**

PCA-TUC-SB

Satin Black * **Touch Up Paint**



DESCRIPTION OF PIECES:

Forged: Metal that is heated then shaped by hammering. Cast: Creating a shape by pouring molten metal into a mold. Edge Hammered: Hammered on all four edges (Corners). Heavily Hammered: Hammered on all four edges and all four flat sides.



Italian Architectural Forged Steel

Wrought Iron Railings, Gate & Grille Components

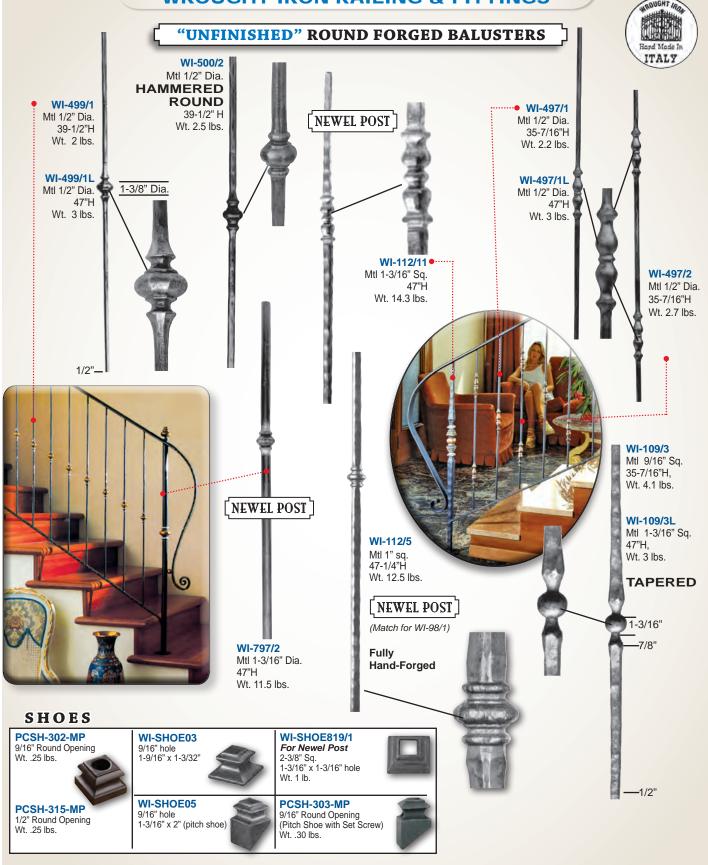


Wrought Iron has been a part of the Architecture & Culture of Europe for over two thousand years. Here in the United States, there is a reawakening and new appreciation for this beautiful and practical material as both a true building product and Architectural Element. Create works of distinction using our hand crafted wrought iron components.

In the following pages you will see several terms used to describe some of the pieces. **Forged:** Metal that is heated then shaped by hammering. **Cast:** Creating a shape by pouring molten metal into a mold. **Edge Hammered:** Hammered on all four edges (Corners). **Heavily Hammered:** Hammered on all four edges and all four flat sides.

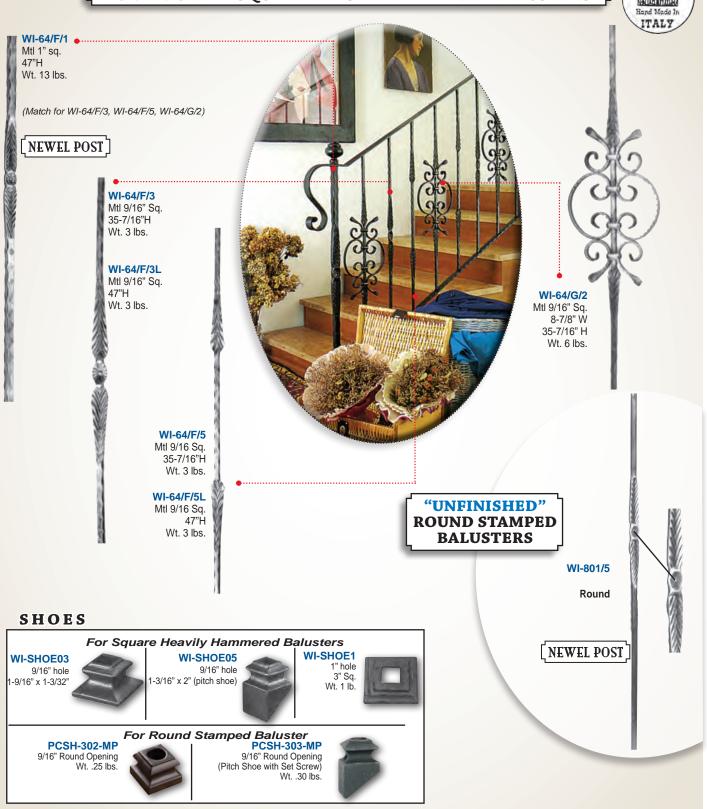
- Materials are shipped Raw/Unfinished
- Proper cleaning and priming will be needed before paint or other coatings are applied.
- Products are hand forged. For this reason dimensions and weights are approximate.
- Please Note: we do not offer fabrication or design services. Please contact a qualified fabricator.

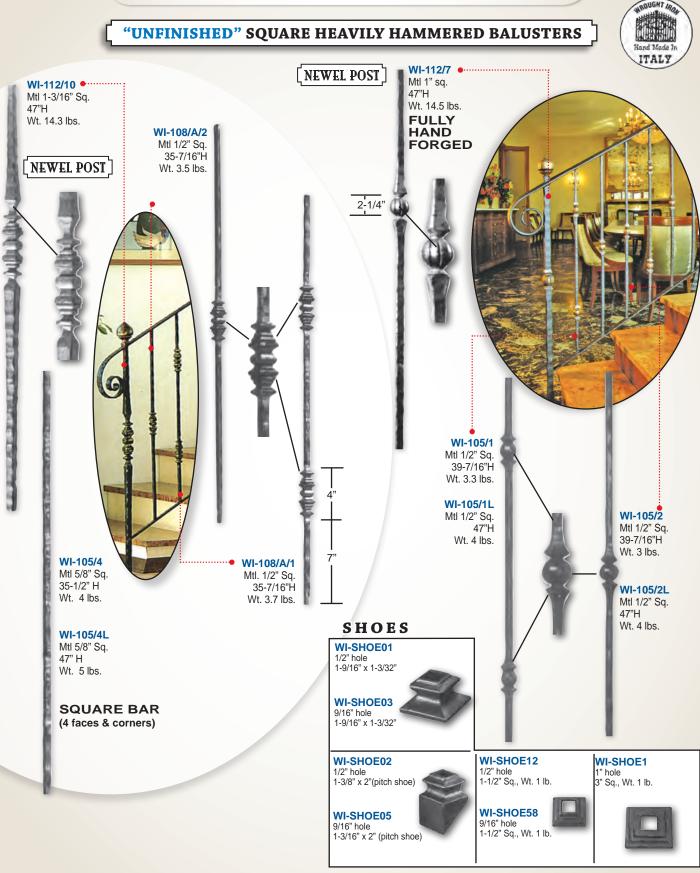


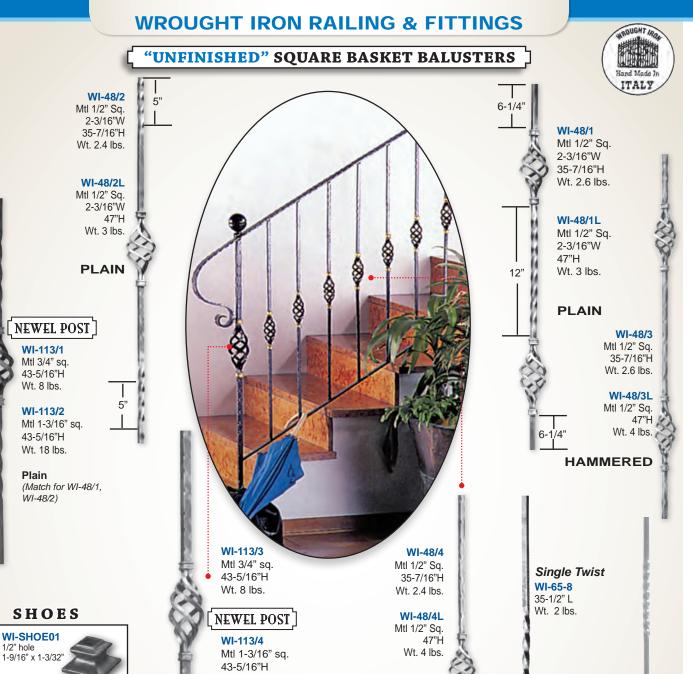




"UNFINISHED" SQUARE HEAVILY HAMMERED BALUSTERS







WI-SHOE02 1/2" hole 1-3/8" x 2" (pitch shoe)

WI-SHOE819/1 For Newel Post 2-3/8" Sq.

1-3/16" x 1-3/16" hole Wt. 1 lb.



HAMMERED Wt. 20 lbs. HAMMERED (Match for WI-48/3, . WI-48/4)

933

1/2" SQUARE SOLID PICKETS

WITH TWIST

PATTERN

Double Twist

WI-53-3

35-1/2" L Wt. 2 lbs.

"UNFINISHED" STAIR & RAIL BALUSTERS

Hand Made In ITALY

WI-2017/2 Mtl 1/2" Sq.

15-1/8" W 35-7/16" H

2

SHOES WI-SHOE01 1/2" hole 1-9/16" x 1-3/32"

WI-SHOE03 9/16" hole 1-9/16" x 1-3/32"

WI-SHOE02 1/2" hole 1-3/8" x 2"(pitch shoe)

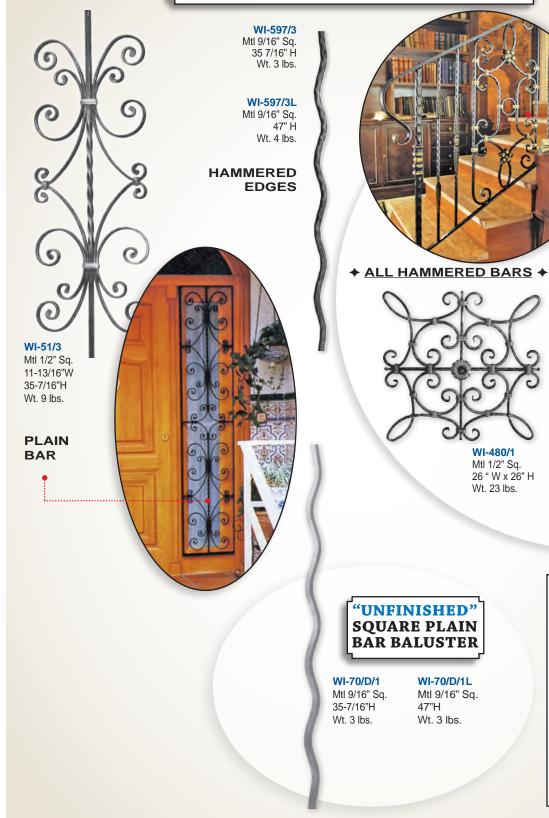
WI-SHOE05 9/16" hole

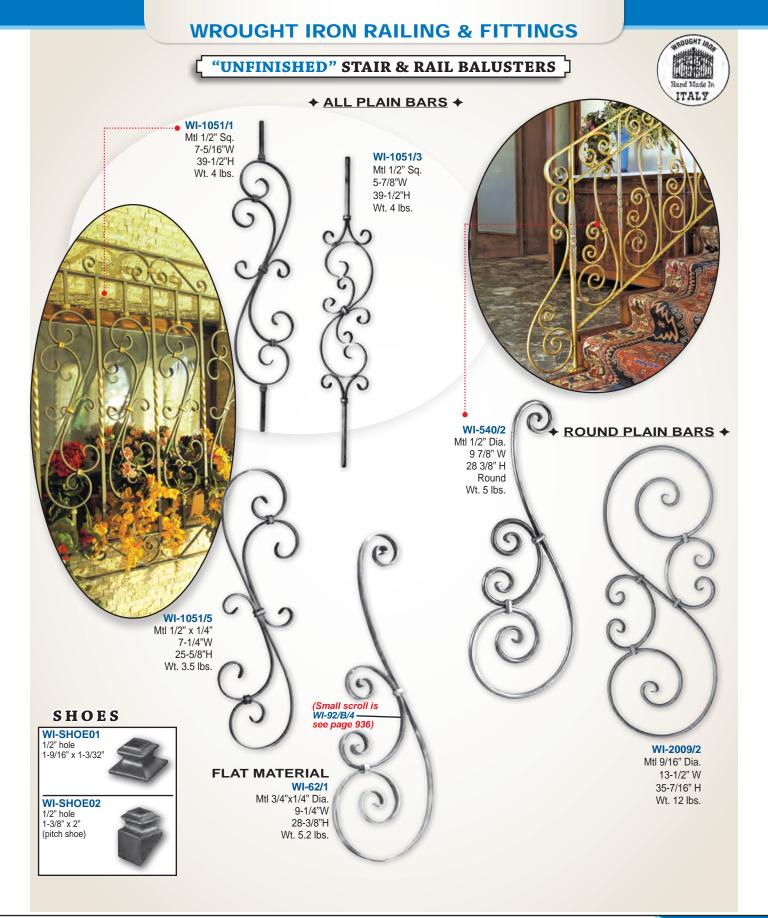
1-3/16" x 2" (pitch shoe)

WI-480/1

Mtl 1/2" Sq. 26 " W x 26" H Wt. 23 lbs.

Ring is 4" I.D. 5" Ŏ.D. Wt. 10 lbs.





"UNFINISHED" SCROLLS

WI-73/3

3-9/16"W 7-1/16"H Wt. 5 lbs.

Mtl 5/16" Sq.

...

WI-73/2 Mtl 5/16" Sq. 4-5/16"W 9-1/16"H Wt. 6 lbs.



WI-1295/1 Mtl 1/2" Dia. 4-3/4" W x 14-3/16" H Wt. 2.1 lbs.







Mtl 3/4" x 1/4" 6" W x 8-7/8" H Wt. 1.6 lbs.

Component of WI-62/1 on page 935



WI-92/B/4 Mtl 1/2"x1/4" 6-5/16"Wx 9-7/8"H Wt. 1.5 lbs.

"UNFINISHED" SCROLLS



WI-80/A/1 Mtl 1/2"x1/4" 4-5/16"W 10-5/8"H Wt. .75 lbs.

HAMMERED END matches WI-80/A/3

WI-80/A/3 Mtl 1/2"x1/4" 2-3/8"W 4-5/16"H Wt. 3 lbs.

WI-80/A/9 Mtl 1/2"x1/4" 2-3/4"W

4-1/8"H Wt. 4 lbs.

WI-80/A/10 Mtl 1/2"x1/4" 3-3/4"W 5-1/2"H Wt. 5 lbs.

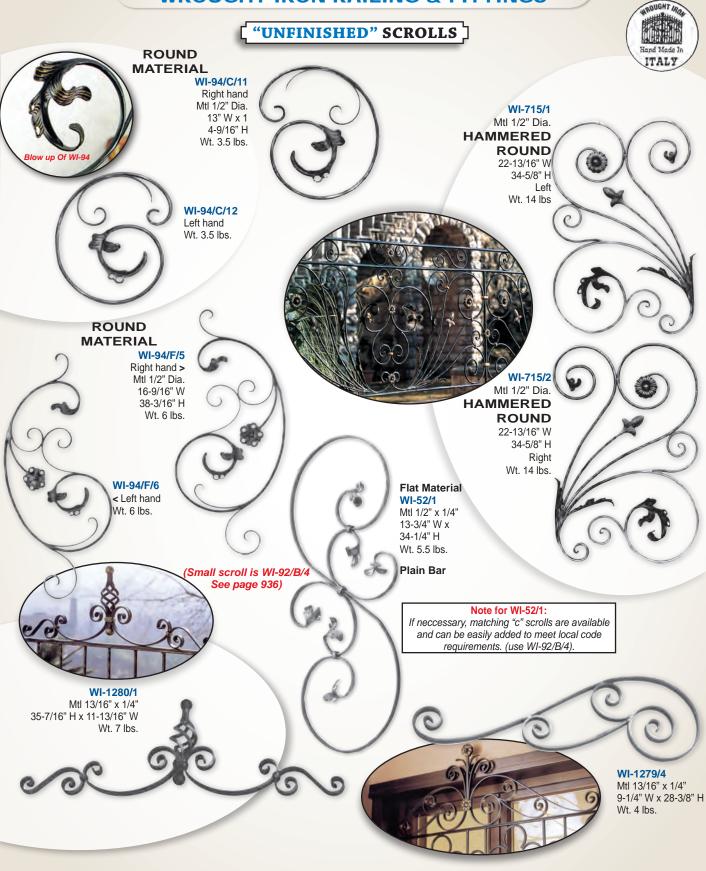
WI-80/A/11 Mtl 1/2"x1/4" 2-9/16"W

6"H Wt. 4 lbs.

WI-80/A/12 Mtl 1/2"x1/4" 2-3/4"W 7-1/2"H

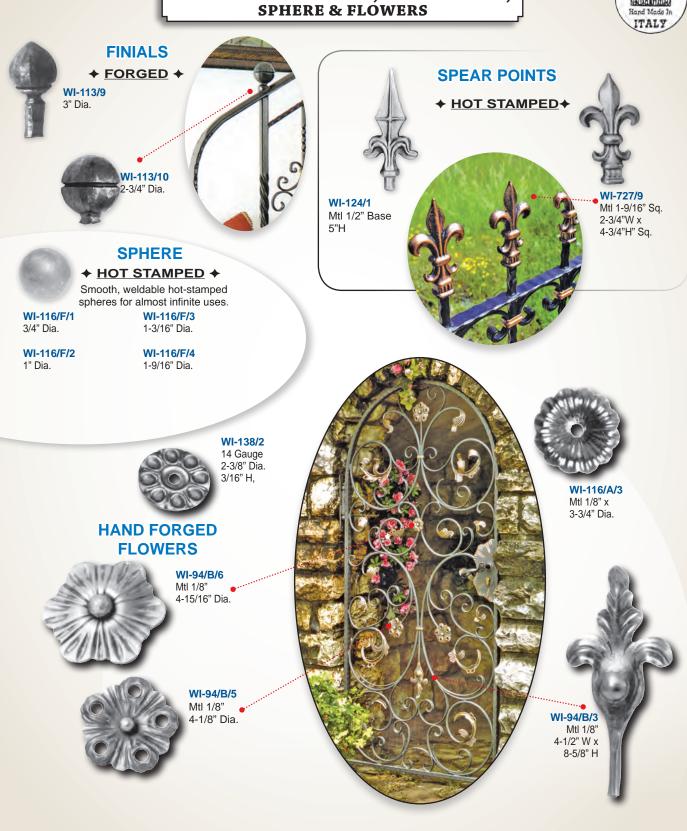
20

Wt. 5 lbs.





"UNFINISHED" FINIALS, SPEAR POINTS, SPHERE & FLOWERS



"UNFINISHED" END PIECES FOR HANDRAILS

WI-114/B/13 • To be used with 114/A/3 handrail 6"H Wt. 5 lbs.



WI-812/12

To be used with handrail WI-MCR/112 11-3/4"H Wt. 6 lbs.





Hand Made

The choice of handrail is as important as the balusters!

Any of these rails work beautifully with our balusters and scrolls.

WI-MCR

Wt. 26 lbs.

Steel handrail to fit 1" channel

or tubing, Length 20'

WI-114/A/3 Mtl 1-7/8"x5/8" Length 120" Wt. 17 lbs.

WI-MCR/112

Wide steel handrail Wide series for 1-1/2" channel, flat or tube, Length 20' Wt. 42 lbs.

WI-116/10 To be used with handrail 114/5 5-7/8'H Wt. 5 lbs.



1-3/4



WI-114/5 Mtl 5/16" 1-9/16" W Length 118-1/8" Wt. 17 lbs.

WI-114/8 Mtl 5/16" 1-9/16"W Length of bar 118-1/8" Wt. 17 lbs.

"UNFINISHED" BARS & TUBES



HOT PIERCED BARS



WI-606/1 Mtl 9/16" P=5 1/2", 78" H 14 holes per bar Wt. 6 lb<u>s.</u>

Works With WI-599/4

Ρ

◆ TREE BARK EFFECT ◆

10 FT. LENGTHS

WI-599/4 9/16" Dia. Wt. 12 lbs.

COLD FORGED BARS with HAMMERED EDGES on FOUR SIDES

20 FT. LENGTHS

Custom manufactured in U.S.A. All lengths are approximate

PART #	DESCRIPTION	WEIGHT
WI-118-3	5/8" Square	30 lbs.
WI-118-5	3/4" Square	38 lbs.
WI-118-6	1" Square	68 lbs.

COLD FORGED TUBES with HAMMERED EDGES on FOUR SIDES

20 FT. LENGTHS

For rails, fences and gates. All lengths are approximate.

HAMMERED ROUND BARS

- Custom hammered round bar.
- New automated manufacturing technique that
- give a hand forged look at an economical price.
- Stock length 118".



PART #	SIZE	WEIGHT
WI-12-14TB	1/4" Dia.	2 lbs.
WI-12-12TB	1/2" Dia.	7 lbs.
WI-12-38TB	3/8" Dia.	4 lbs.
WI-12-34TB	3/4" Dia.	15 lbs.

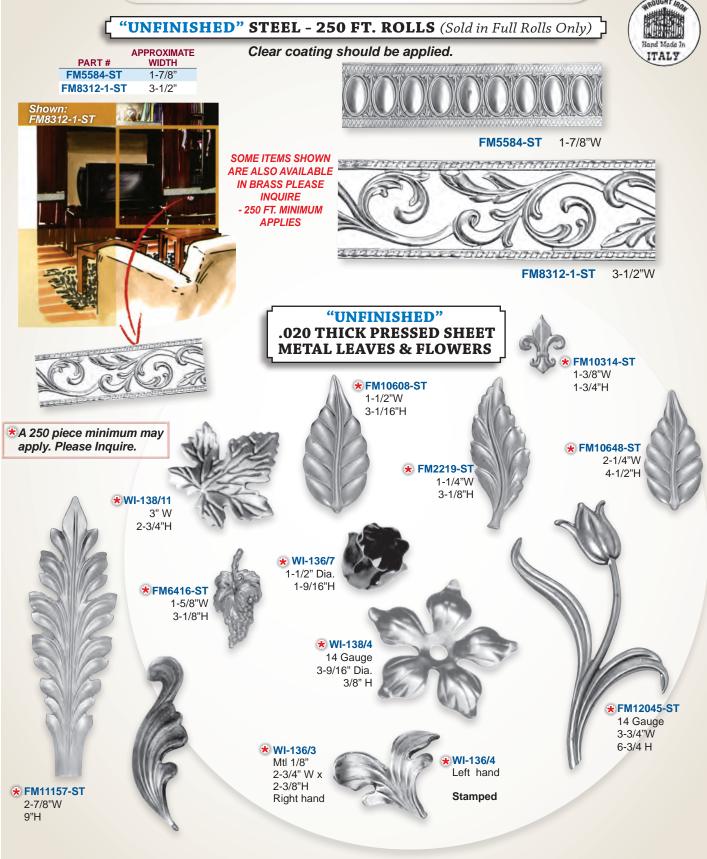
PART #	DESCRIPTION	WEIGHT	
WI-118-E-9	1" Square	22 lbs.	
WI-118-E-3	1-1/4" Square	31 lbs.	

TWISTED BARS

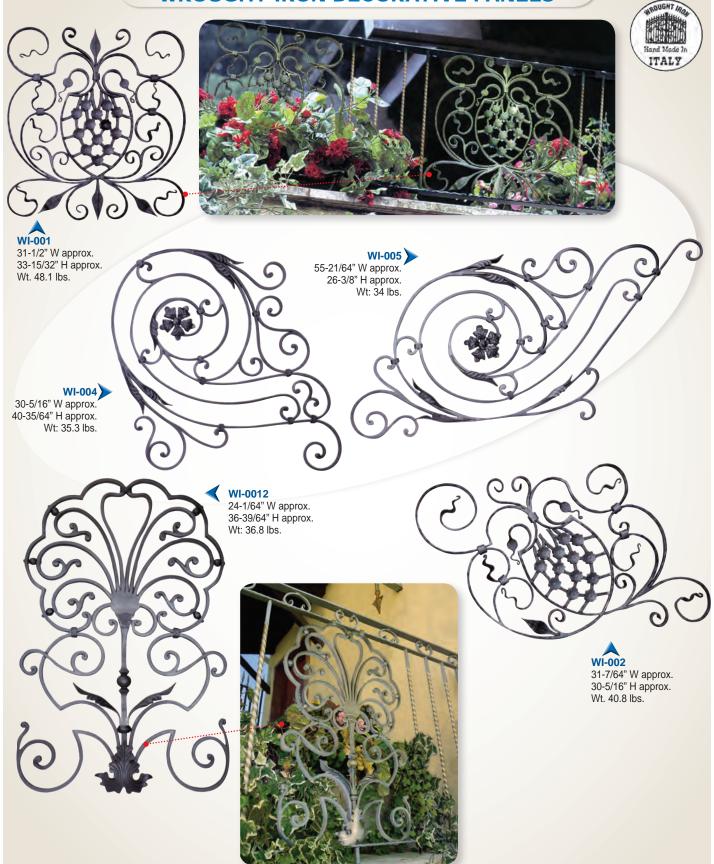
35-1/2, 40", 42" and 47" Baluster Lengths - 5 Twists			
PART #	DESCI	RIPTION	WEIGHT
WI-11-12365	1/2" Sq	35-1/2" L	3 lbs.
WI-11-1240	1/2" Sq	40" L	3 lbs.
WI-11-1242	1/2" Sq	42" L	3 lbs.
WI-11-1247	1/2" Sq	47" L	4 lbs.
WI-11-58365	5/8" Sq	35-1/2" L	4 lbs.
WI-11-5840	5/8" Sq	40" L	5 lbs.
WI-11-5842	5/8" Sq	42" L	5 lbs.
WI-11-5847	5/8" Sq	47" L	6 lbs.

1/2" 5/8

WROUGHT IRON DECORATIVE ELEMENTS



WROUGHT IRON DECORATIVE PANELS



WROUGHT IRON DECORATIVE PANELS



Kee Klamp[®] & Kee Lite[®] Railings & Fittings

Kee Klamp[®]

- Material: Malleable Iron.
- Heavier material more suitable for extreme conditions & heavy duty applications.
- Non-corrosive.
- Recessed set screws.
- To be used with 1-1/4" or 1-1/2" pipe sizes.

Kee Klamp fittings are suitable for heavy duty environments. Strength and total reliability ensure security and safety.

Kee Klamp fittings are ideal for residential applications, providing the perfect blend of practicality and attractive appearance.

Retail & Display

Kee Lite®

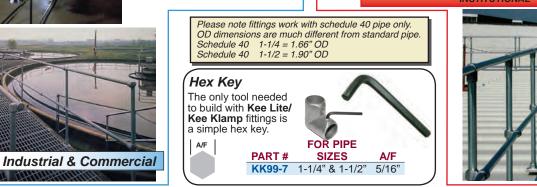
- Material: Schedule 40 Aluminum Pipe.
- Lightweight.
- For a stylish, sleek design.
- · Hidden set screws for smooth aesthetics.
- Non-corrosive.
- To be used with 1-1/4" or 1-1/2" pipe sizes.

Kee Lite fittings are made from high grade aluminum silicon magnesium alloy to provide you with a lightweight, corrosion resistant and strong alternative for fabrication of pipe structures.





HANDRAILS • LIGHTING GRIDS • PLAYGROUNDS • GUARDRAILS • SET DESIGN & PROPS • WATER TREATMENT FACILITIES • CORROSIVE ENVIRONMENTS • INDUSTRIAL/COMMERCIAL • RETAIL & RESTAURANT DESIGN • MUNICIPAL • INSTITUTIONAL



Kee Klamp[®] Schedule 40 Steel Pipe

Galvanized Finish - 7 Ft. Lengths

Kee Klamp fittings are produced in a range of standard sizes to suit Schedule 40 steel pipe, galvanized finish. Tubing of other specifications can be used, providing the outside diameter is compatible with Schedule 40 pipe. Pipe with a wall thickness of less than 1/8" can only be used in



lightly loaded structures. Recommended set screw torque is 29 lbs. ft.

Residentia



PART #	NOMINAL BORE	PIPE DIA. O.D.	FITTING I.D.	TUBE DIA. O.D.
KK114-125	1-1/4"	1.66"	1.72"	1-5/8"
KK112-15	1-1/2"	1.90"	1.94"	1-7/8"

Kee Lite[®] Schedule 40 Aluminum Pipe

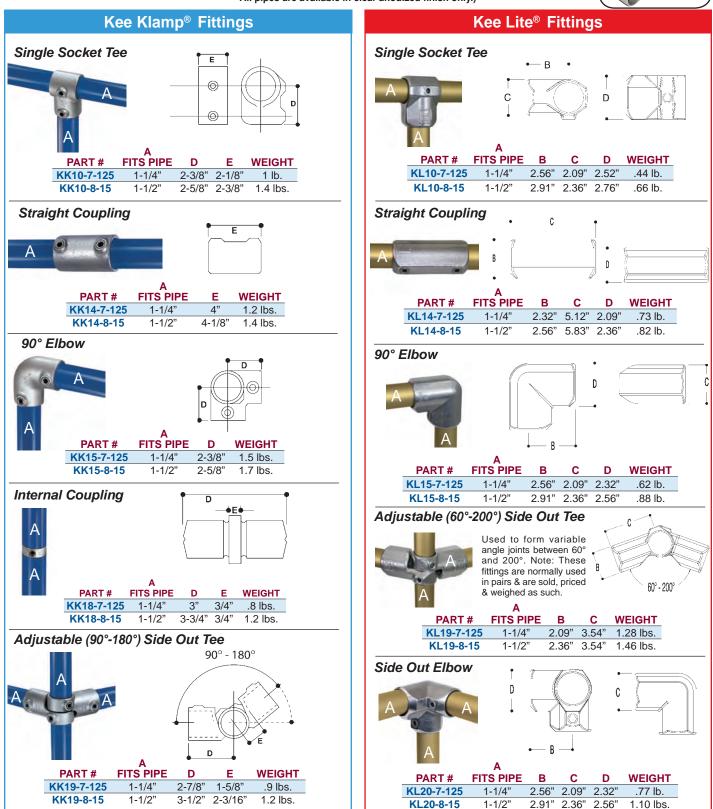
Clear Anodized Finish - 6 Ft. Lengths

Kee Lite fittings are produced in a range of standard sizes to suit Schedule 40 aluminum & steel pipe. Tubing of other specifications can be used, providing the outside diameter is compatible with Schedule 40 pipe. Pipe with a wall thickness of less than 1/8" can only be used in lightly loaded structures. Recommended set screw torque is 29 lbs. ft. Larger grub screws to resist thread stripping. Minimum slip load capacity on aluminum Schedule 40 pipe: 17,000 lbs. (safety factor = 2). Minimum material UTS: 33,000 PSI.

NOMINAL BORE	PIPE DIA. O.D.	FITTING I.D.	TUBE DIA. O.D.
1-1/4"	1.66"	1.72"	1-5/8"
1-1/2"	1.90"	1.94"	1-7/8"
	BORE 1-1/4"	BORE DIA. O.D. 1-1/4" 1.66"	BORE DIA. O.D. I.D. 1-1/4" 1.66" 1.72"

Kee Klamp[®] & Kee Lite[®] Railings & Fittings

(NOTE: Pipe shown in <u>blue or gold</u> to accentuate the fitting only. All pipes are available in clear anodized finish only.)

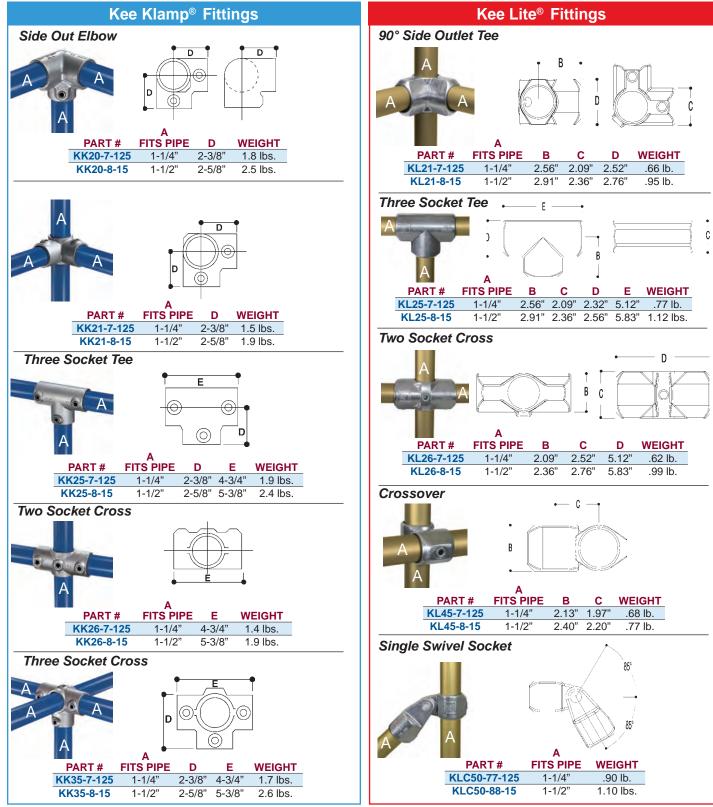


A simple hex key is the only tool required!



Kee Klamp[®] & Kee Lite[®] Railings & Fittings

(NOTE: Pipe shown in <u>blue or gold</u> to accentuate the fitting only. All pipes are available in clear anodized finish only.)



RAILING & FITTINGS Kee Klamp[®] & Kee Lite[®] Railings & Fittings A simple hex key is the only tool required! (NOTE: Pipe shown in *blue or gold* to accentuate the fitting only. All pipes are available in clear anodized finish only.) Kee Lite[®] Fittings Kee Klamp[®] Fittings Adjustable (45°-200°) Swivel for Inline Angle Crossover Е 45° to 200° ъ. В PART # **FITS PIPE** WEIGHT Ε F KK45-7-125 1-1/4" 1-13/16" 1-15/16' 1.0 lbs. FITS PIPE PART # В С D WEIGHT KK45-8-15 1-1/2" 2" 2-3/16' .7 lbs. KLB54-7-125 1-1/4" 2.28" 2.17" 4.69" 1.43 lbs. 2.56" 2.36" 5.16' **KLB54-8-15** 1-1/2" 1.61 lbs. Swivel Flange F **FITS PIPE** PART # D Ε F WEIGHT KK46-7-125 1-1/4" 2-3/8" 1-3/4" 1-15/16" 1.5 lbs. PART # **FITS PIPE** WEIGHT KK46-8-15 1-1/2" 2-5/8" 2" 2-1/8" 2 lbs. KLC58-7-125 1-1/4' .93 lb. Single Swivel Socket KLC58-8-15 1-1/2" 1.23 lbs. Wall Flange for Support Rail 85° В Ε D 85° DIA. OF FITS PIPE PART # WEIGHT FITS FIXING KKC50-77-125 1-1/4" 1.8 lbs. PART # С Е F HOLES WEIGHT PIPE В D KKC50-88-15 KL61-7-125 1-1/4" 2.09" 2.17" 1-1/2" 2 lbs. .64 lb. .31" 4.33" 2.40' .25" KL61-8-15 1-1/2" 2.36" 2.36" .31" 4.72" 2.64" .25' .71 lb. Swivel Flange 160° Railing Flange •— B G D 11-1 -DIA. OF FITS PIPE WEIGHT PART

 KKC58-7-125
 1-1/4"
 1.9 lbs.

 KKC58-8-15
 1-1/2"
 2.1 lbs.

 Wall Flange for Support Rail

 Image: for Support Rail

F

2"

4-1/2" 2-3/8" 3-1/2" 3/8"

G H

3" 1/4"

PART #

KK61-7-125

KK61-8-15

PIPE

1 - 1/4

1-1/2"

Ε

4"

WEIGHT

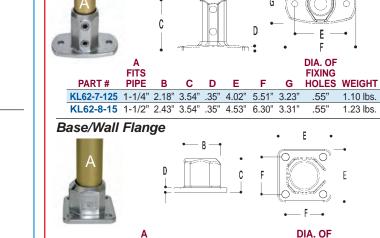
1.4 lbs.

1.5 lbs.

HOLES

5/16'

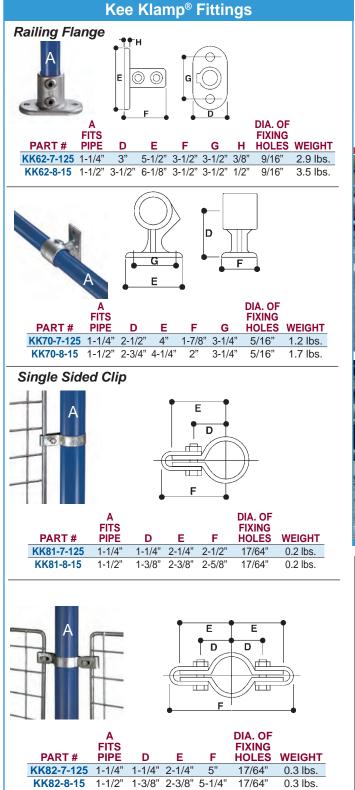
5/16"



FITS FIXING PART # PIPE С D Е HOLES WEIGHT R F .59 lb. KL152-7-125 1-1/4" 2.32" 2.17" .31" 3.35" 2.38" .45" KL152-8-15 1-1/2" 2.56" 2.56" .31" 3.62" 2.63" .45' .68 lb.

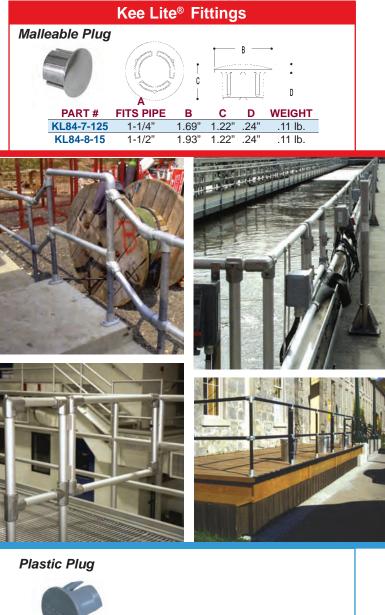
Kee Klamp[®] & Kee Lite[®] Railings & Fittings

(NOTE: Pipe shown in <u>blue or gold</u> to accentuate the fitting only. All pipes are available in clear anodized finish only.)



A simple hex key

is the only tool required!



PART # FITS PIPE WEIGHT KK77-7-125 1-1/4" 0.04 lbs. KK77-8-15 0.04 lbs. 1 - 1/2" Malleable Plug PART # FITS PIPE WEIGHT 1-1/4" KK84-7-125 0.3 lbs. KK84-8-15 1-1/2" 0.4 lbs.

GUIDANCE SYSTEMS



CADE: RAI [®] Standard Cable Assemblies Make Measuring, Ordering, and Installing a Breeze



CableRail[®] Standard Cable Assemblies are sold in a wide range of standardized pre-cut lengths for easy ordering. There is no wasted time taking precise railing measurements; just select assemblies that are longer than you need and trim any excess in the field. Each assembly includes special Threaded Terminal and automatic-locking Quick-Connect[®]SS attachment fittings that are sleek, simple to use, and easy to conceal. CableRail[®] is not only extremely durable and aesthetically pleasing but also virtually invisible, allowing for beautiful, unimpaired views.



- Made from high-strength, low maintenance, weather-tough, 316-grade stainless steel
- Available in 1/8", 3/16" and 1/4" diameter cable to complement any railing design
- Sold in a wide range of standard lengths (5 ft. up to 80 ft. in 5 ft. increments) that can be trimmed to a finished dimension in the field
- Patented automatic-locking Quick-Connect[®]SS fittings make installation fast and easy
- May be installed on new or existing wood or metal railing frames in exterior, interior, residential and commercial settings
- Product contains recycled material

Now Available In 3 Cable Diameters: 1/8", 3/16" & 1/4"



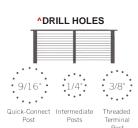
Standard Assemblies

- Our most popular and cost effective cable option
- · Perfect for all residential and light commercial projects
- Can be installed on wood or metal frames



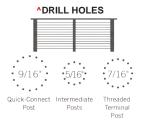
3/16" Standard Assemblies

- Extra durable option for commercial and residential setting
- · Can be installed on wood or metal railing frames



1/4 Standard Assemblies

- Largest, most durable option for high-traffic high wear commercial locations
- Also for railings designs where the "look" of a larger cable is desired
- · Recommended for metal railing frames only



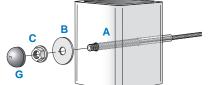
^ Drill hole sizes may differ if using isolation bushings. Call to confirm correct drill sizes.

CADLE·RAIL

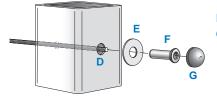
PARTS & COMPONENTS



Assemblies begin with the threaded terminal...



and end with the QuickConnect®SS



- A = Threaded Terminal Fitting
- B = Flat Washer with Small Hole
- C = Washer Nut
- D = Bare Cable End
- E = Flat Washer with Large Hole
- F = Quick-Connect®SS G = End Cap
- Note: Accessories vary with wire diameter



Stainless Quick-Connect[®]SS fittings make cable projects quicker and easier than ever

Each assembly comes with a Threaded Terminal fitting pre-attached to one end and a field installed Quick-Connect®SS fitting for the other end. Simply secure the Threaded Terminal to one end post, lace the free end of the cable thought the remaining posts, slip on a Quick-Connect®SS, tension the line, trim the excess, and finish with decorative end caps.

The cable is 1x19 construction 316-grade stainless steel for strength, durability, and weather protection. Available in 1/8", 3/16" and 1/4" diameter.



Our unique patented stainless steel Quick-Connect[®]SS fitting is attached to the cable in the field **without special tools**. One way jaws allow the cable to easily slide through the fitting in one direction but automatically grab and lock-on when the cable is released. Just slip it on, pull the cable tight and cut the excess.

Steps for Installing the Standard Cable System



Measure, mark and drill holes in all posts



Tighten the Snug-Grip[®] Washer Nuts to adjust the final tension in the line



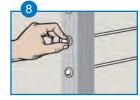
Insert Protector sleeves (wood posts) or Grommets/Isolation Bushings (metal posts) at necessary locations



Trim the excess threads on the Threaded Terminal and excess cable behind the Quick-Connect®SS.



Insert the Threaded Terminal into one end termination post and secure with a Snug-Grip[®] Washer Nut.



Snap on decorative End Caps over the exposed ends of the Quick-Connect®SS fittings and Snug-Grip® Washer Nuts.



Lace the free end of the cable though the remaining posts and slide on a Quick-Connect®SS Fitting



Pull the cable through the Quick-Connect®SS fitting to remove the excess slack in the line

CAPIE·BAIL ARCHITECTURAL CABLE ASSEMBLIES



Now Available In 3 Cable Diameters: 1/8", 3/16" & 1/4"





Cable Assembly Care & Maintenance

The protective chromium oxide film on the surface of stainless steel gives it superior corrosion resistance. Properly maintained stainless steel provides excellent luster, strength and durability. In most applications stainless steel won't rust or stain even after many years of service, but it's NOT rust or stain proof. When stainless comes in contact with chloride salts, sulfides or other rusting metals, it can discolor or even rust and corrode. With proper care and maintenance, however, stainless steel can remain beautiful and functional for years to come, even when it's exposed to marine environments, polluted surroundings, salted highways or anywhere it might be exposed to corrosive elements.

- Clean stainless with soap and warm water. Never clean with mineral acids or bleaches.
- Never leave stainless in contact with iron, steel or other metals. This can cause rust spots or corrosion.
- · Always remove stains or rust spots as soon as possible with either soap and water or a brass, silver, stainless or chrome cleaner.
- Never use coarse abrasives like sandpaper or steel wool on stainless. Use synthetic Scotch pads instead.
- Periodically inspect cable assemblies for proper tension and re-tension as necessary. This is important.
- On outdoor cable installations, coat the inside of the QuickConnect®SS fittings with Fluid Film® Corrosion . Preventative and keep end fittings covered with End Caps. This is especially important in hot and humid areas and coastal locations with salt air.

Product Guidelines*

Spacing: For railings, we recommend spacing the cables no more than 3 inches apart and placing posts or vertical members no more than 3 feet apart.

Load: Frames must be built strong enough to support the cable loads of approximately 350 lbs. per cable.

* Securly fasten all posts and cap rails. Carefully plan all termination and corner posts for proper clearance, positioning and maximum cable run lengths.



2" wide, 1/2" thick



3-1/2" wide, 5-1/2" thick

4 x 6 WOOD FLAT BAR



2" wide, 1" thick

ANGLE IRON

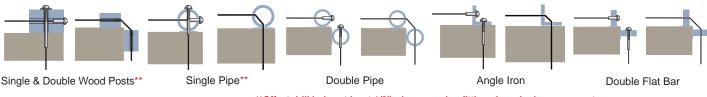






EXTRA STRONG PIPE 1-1/2" ID, 1-7/8" OD 2" wide, 1/4" wall

Cables can terminate or run through corner posts



**Offset drill holes at least 1/2" when crossing fittings in a single corner post.

NOTE: Since building codes vary by state, county and city, these recommendations may not comply with code requirements in all areas. ALWAYS consult with your local building department before starting your project.

CADLE·RAIL



How To Order:

- 1. <u>Carefully Review</u> all of the installation instructions & guidelines.
- 2. <u>Select Assembly Lengths</u>: Decide where you'll start & end your cables. Straight runs shouldn't be over 80 feet and runs with bends
- (2 bends at most) NOT over 40 feet. Select assemblies that are at least 1 foot longer than the length of your railing.
- 3. Determine Quantities: The number of assemblies depends on your railing design; remember, space cables no more than 3 inches apart (See guidelines).
- 4. <u>Check Accessories:</u> Count up all the end caps, protector sleeves, rubber grommets and beveled washers.
- 5. Place The Order:



1/8" Cable Assemblies:

Each assembly includes:

- 1/8" diameter type 316 Stainless Steel Cable
- One pre-attached threaded terminal fitting (4-1/4" for metal posts or 7-1/2" for wood posts)
- One Stainless Steel QuickConnect®SS fitting
- Two Stainless Steel flat washers (or two Nylon flat washers for metal posts)
- One Stainless Steel washer nut.
- Stainless Steel Caps or Plastic Caps are sold separately.

3/16" Cable Assemblies:

Each assembly includes:

- 3/16" diameter type 316 Stainless Steel Cable
- One pre-attached threaded terminal fitting (4-1/4" for metal posts or 7-1/2" for wood posts)
- One Stainless Steel QuickConnect®SS fitting
- Two Stainless Steel flat washers (or two Nylon flat washers for metal posts)
- One Stainless Steel washer nut
- Stainless Steel Caps or Plastic Caps are sold separately.

WITH 7-1/2" TERMINAL (for wood posts)	WITH 4-1/4" TERMINAL (for metal posts)	CABLE RAIL ASSEMBLY
CBLR-305W	CBLR-305M	5 ft.
CBLR-310W	CBLR-310M	10 ft.
CBLR-315W	CBLR-315M	15 ft.
CBLR-320W	CBLR-320M	20 ft.
CBLR-325W	CBLR-325M	25 ft.
CBLR-330W	CBLR-330M	30 ft.
CBLR-335W	CBLR-335M	35 ft.
CBLR-340W	CBLR-340M	40 ft.
CBLR-345W	CBLR-345M	45 ft.
CBLR-350W	CBLR-350M	50 ft.
CBLR-355W	CBLR-355M	55 ft.
CBLR-360W	CBLR-360M	60 ft.
CBLR-365W	CBLR-365M	65 ft.
CBLR-370W	CBLR-370M	70 ft.
CBLR-375W	CBLR-375M	75 ft.
CBLR-380W	CBLR-380M	80 ft.

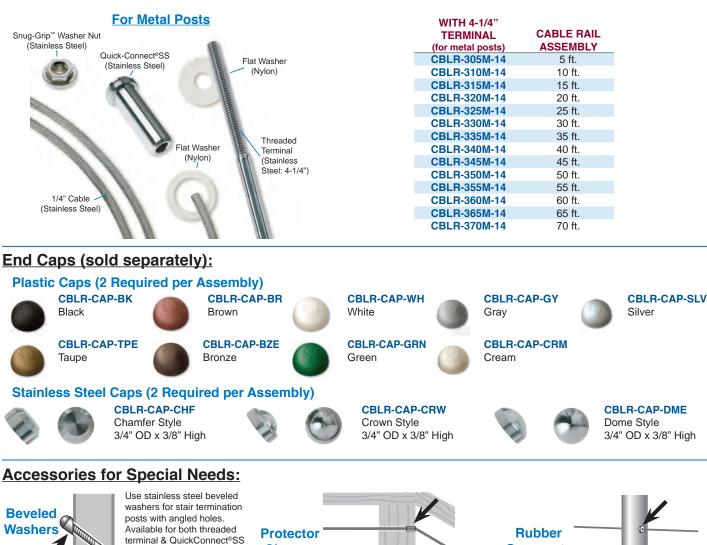
WITH 7-1/2"	WITH 4-1/4"	
TERMINAL	TERMINAL	CABLE RAIL
(for wood posts)	(for metal posts)	ASSEMBLY
CBLR-305W-316	CBLR-305M-316	5 ft.
CBLR-310W-316	CBLR-310M-316	10 ft.
CBLR-315W-316	CBLR-315M-316	15 ft.
CBLR-320W-316	CBLR-320M-316	20 ft.
CBLR-325W-316	CBLR-325M-316	25 ft.
CBLR-330W-316	CBLR-330M-316	30 ft.
CBLR-335W-316	CBLR-335M-316	35 ft.
CBLR-340W-316	CBLR-340M-316	40 ft.
CBLR-345W-316	CBLR-345M-316	45 ft.
CBLR-350W-316	CBLR-350M-316	50 ft.
CBLR-355W-316	CBLR-355M-316	55 ft.
CBLR-360W-316	CBLR-360M-316	60 ft.
CBLR-365W-316	CBLR-365M-316	65 ft.
CBLR-370W-316	CBLR-370M-316	70 ft.

CADLE·RAIL



1/4" Cable Assemblies:

Each assembly includes: •1/4" diameter type 316 Stainless Steel Cable • One pre-attached threaded terminal fitting (4-3/4" long with 2-5/8" thread) use with metal posts • One Stainless Steel QuickConnect®SS fitting • Two Nylon flat washers • One Stainless Steel washer nut • Stainless Steel Caps or Plastic Caps are sold separately.



CBLR-BEVW-QC Works With For QuickConnect-SS[™] End 1/8" Cable **CBLR-BEVW-TT** For Threaded Terminal End CBLR-BEVW-QC-316 Works With For QuickConnect-SS[™] End 3/16" Cable CBLR-BEVW-TT-316 For Threaded Terminal End CBLR-BEVW-QC-14 For QuickConnect-SS[™] End Works With 1/4" Cable CBLR-BEVW-TT-14 For Threaded Terminal End

fittings.



Stainless Steel protector sleeves prevent abrasion at angled transitions on wood posts (i.e. stair transition posts or outside faces of double corner posts).

Works With 1/8" & 3/16" Cable CBLR-PROS 1/4" OD x 1" Long



Rubber grommets look good on tubular metal posts. Fits 1/4" holes in intermediate posts. (not for corner or end posts).

Works With 1/8" Cable

CBLR-RUBG 7/16" OD Flange - Black



Pre-fabricated Posts for Cable Post assemblies simplify installation and eliminate welding The look of custom, the ease of Prefab

Pre-fabricated cable railing posts offer an attractive, affordable, low maintenance and easy-to-install railing option for residential or commercial applications. They are extremely durable and virtually invisible, allowing for beautiful, unimpaired views. It is an elegant design alternative and is ideal for use indoor or outdoors.

How To Select Your Railing & Fittings

Mount Preference

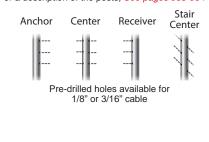


• Rail Height (36" or 42")

• Cable Diameter (1/8" or 3/16")

Note: 1/8" cables are commonly used for residential and light commercial projects. 3/16" cables are utilized in commercial jobs or residential applications where a heavier cable is desired.

• **Post Position** For a description of the posts, See pages 953-954



Top Bracket (Included As Selected) Short Adjustable Saddle

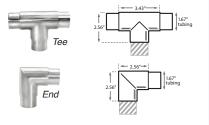
Completes the railing with a contemporary look



Adjustable Ball Saddle Completes the railing with a traditional ball-fitting styling



Flush Fittings



Product Features

- 36" Standard & 42" Guardrail Posts
- Works with 1/8" & 3/16" cable
- The spacing between wires is 3" 3.5" within the same post
- Both anchor posts and receiver posts are required when building a cable rail
- The top rail is a round, stainless steel tube with a 240 grit circular satin finish

For ADA Sensitive Applications

Our pre-fabricated posts with short adjustable saddles & adjustable ball saddles can work acceptably with a 1.5" diameter tube on the top, if needed. Although these saddles are made for 1.67" diameter tube, the visual gap created by using 1.5" diameter tube is insignificant and the tube will affix to the saddle acceptably. (Flush fittings will only work with 1.67" O.D. x .08" wall tube)

Railings & Accessories

Must Be Purchase Separately

Cable (Required):

See pages 952-956 Our cable rail comes with everything you need for a quick and easy installation, including a threaded stainless steel terminal, Quick-Connect® stainless steel tensioning hardware & washers



• Top Rail (Required):

316 Satin Stainless Steel, 240 Grit Tube, 1.67" O.D. x .08"



INAIL.
LENGTH
4 ft.
8 ft.
12 ft.
16 ft.

• End Cap (Optional)



PART # SST-1670-EC Note: Only used with the saddle brackets

Adjustable Flush Elbow (Optional)



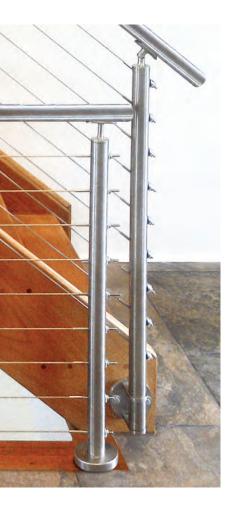
PART # SST-1670-AFE

Pre-fabricated Floor Mount Posts

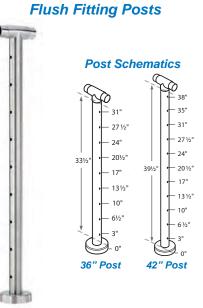


Rail Heights 36" or 42" Rails
Material: 316 Stainless Steel • Satin Finish • 1.67" Diameter Post Tube

Adjustable Saddle Posts



Post Schematics 34 31 27 1/2 27 1/2 24" 24' 321/2' 201/2" 381/2 20 ½" 17" 17" 131/2 13 ½ 10" 10" 61/2' 6 1/2' -0" 36" Post 42" Post



Available Pre-fabricated Post Positions:

AP (required)	Anchor posts are made of 1.67" OD tube with an extra wall thickness and holes to receive the threaded terminal of a cable assembly. Depending on the cable thickness used, the hole diameters are 5/16" (for 1/8" thick cable) or 3/8" (for 3/16" thick cable).
CP (optional)	Center posts are made of 1.67" OD tube with $\frac{1}{4}$ " diameter holes that allow both 1/8" thick cable and 3/16" thick cable to pass through.
SP (customized optional)	Stair center posts are made of 1.67" OD tube with ¼" diameter holes and are the same as center cable rail posts in construction with one exception: The hole locations on one side are higher to accommodate for the slope of the stairs. The exact location of the holes are determined on a per order basis by measuring the tread length and the rise height of the stairs. Ship within 5-7 business days.
RP	Receiver cable rail posts are made of 1.67" OD tube with an extra wall thickness and holes to receive cable on one side and a connector fitting on the opposite side. The connector fitting

(required)

Receiver cable rail posts are made of 1.67" OD tube with an extra wall thickness and holes to receive cable on one side and a connector fitting on the opposite side. The connector fitting comes in two sizes: one for 1/8" thick cable and one for 3/16" thick cable. Hole diameters are ¼" on the side for the cable and either 3/8" or 9/16" on the other side.

36" posts accept 9 cables per post & 42" post accept 11 cables per post Cable assemblies are sold separately (See Pages 952-956)

	RAIL	CABLE		
PART #	HEIGHT	DIAMETER	POST POSITION	TOP BRACKET
CBLR-3618FLAP-*	36"	1/8"	Anchor Post	
CBLR-36316FLAP-*	36"	3/16"	Anchor Post	
CBLR-3618FLCP-*	36"	1/8"	Center Post	*SA- Short Adjustable Saddle
CBLR-36316FLCP-*	36"	3/16"	Center Post	*AB- Adjustable Ball Saddle
CBLR-3618FLSP-*	36"	1/8"	Stair Post	*FT- Flush Tee
CBLR-36316FLSP-*	36"	3/16"	Stair Post	*FE-Flush End
CBLR-3618FLRP-*	36"	1/8"	Receiver Post	
CBLR-36316FLRP-*	36"	3/16"	Receiver Post	
CBLR-4218FLAP-*	42"	1/8"	Anchor Post	
CBLR-42316FLAP-*	42"	3/16"	Anchor Post	
CBLR-4218FLCP-*	42"	1/8"	Center Post	*SA- Short Adjustable Saddle
CBLR-42316FLCP-*	42"	3/16"	Center Post	*AB- Adjustable Ball Saddle
CBLR-4218FLSP-*	42"	1/8"	Stair Post	*FT- Flush Tee
CBLR-42316FLSP-*	42"	3/16"	Stair Post	*FE-Flush End
CBLR-4218FLRP-*	42"	1/8"	Receiver Post	
CBLR-42316FLRP-*	42"	3/16"	Receiver Post	

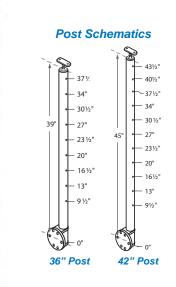
Pre-fabricated Fascia Mount Posts

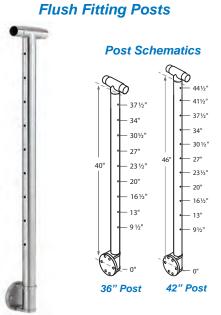


Rail Heights 36" or 42" Rails
Material: 316 Stainless Steel • Satin Finish • 1.67" Diameter Post Tube



Adjustable Saddle Posts





Available Pre-fabricated Post Positions:

AP (required)	Anchor posts are made of 1.67" OD tube with an extra wall thickness and holes to receive the threaded terminal of a cable assembly. Depending on the cable thickness used, the hole diameters are 5/16" (for 1/8" thick cable) or 3/8" (for 3/16" thick cable).
CP (optional)	Center posts are made of 1.67" OD tube with $\frac{1}{4}$ " diameter holes that allow both 1/8" thick cable and 3/16" thick cable to pass through.
SP (customized optional)	Stair center posts are made of 1.67" OD tube with ¼" diameter holes and are the same as center cable rail posts in construction with one exception: The hole locations on one side are higher to accommodate for the slope of the stairs. The exact location of the holes are determined on a per order basis by measuring the tread length and the rise height of the stairs. <i>Ship within 5-7 business days.</i>
RP (required)	Receiver cable rail posts are made of 1.67" OD tube with an extra wall thickness and holes to receive cable on one side and a connector fitting on the opposite side. The connector fitting comes in two sizes: one for 1/8" thick cable and one for 3/16" thick cable. Hole diameters are ¼" on the side for the cable and either 3/8" or 9/16" on the other side.

36" posts accept 9 cables per post & 42" post accept 11 cables per post Cable assemblies are sold separately (See Pages 952-956)

PART #	RAIL HEIGHT	CABLE DIAMETER	POST POSITION	TOP BRACKET
CBLR-3618FAAP-*	36"	1/8"	Anchor Post	
CBLR-36316FAAP-*	36"	3/16"	Anchor Post	
CBLR-3618FACP-*	36"	1/8"	Center Post	*SA- Short Adjustable Saddle
CBLR-36316FACP-*	36"	3/16"	Center Post	*AB- Adjustable Ball Saddle
CBLR-3618FASP-*	36"	1/8"	Stair Post	*FT- Flush Tee
CBLR-36316FASP-*	36"	3/16"	Stair Post	*FE-Flush End
CBLR-3618FARP-*	36"	1/8"	Receiver Post	
CBLR-36316FARP-*	36"	3/16"	Receiver Post	
CBLR-4218FAAP-*	42"	1/8"	Anchor Post	
CBLR-42316FAAP-*	42"	3/16"	Anchor Post	
CBLR-4218FACP-*	42"	1/8"	Center Post	*SA- Short Adjustable Saddle
CBLR-42316FACP-*	42"	3/16"	Center Post	*AB- Adjustable Ball Saddle
CBLR-4218FASP-*	42"	1/8"	Stair Post	*FT- Flush Tee
CBLR-42316FASP-*	42"	3/16"	Stair Post	*FE-Flush End
CBLR-4218FARP-*	42"	1/8"	Receiver Post	
CBLR-42316FARP-*	42"	3/16"	Receiver Post	