



Custom Products Manual

Radius Products

Cabinetmaker's Choice, LLC (r-1169)
P.O.Box729
Newtown, CT 06470-0729

Neil Ratner - Phone: (203) 426-3247 Fax: (203) 270-9994 Email: sales1@cabinetmakerschoice.com

Chad Witwer - Phone: (717) 823-6204 Fax: (717) 427-1743 Email: sales2@cabinetmakerschoice.com

Jim Gamache - Phone: (203) 678-3015 Fax: (203) 702-5104 Email: sales3@cabinetmakerschoice.com

www.cabinetmakerschoice.com

RADIUS PRODUCTS

Custom Products

© 2009 Conestoga Wood Specialties Corporation. All the information contained herein is thought to be accurate at the time of printing. However, no responsibility is assumed by Conestoga Wood Specialties Corporation. All rights reserved. Reproduction of any part of this publication without the express written permission of Conestoga Wood Specialties Corporation is a violation of applicable laws. Order forms may be reproduced without notice to Conestoga Wood Specialties Corporation provided they are used to order Conestoga Wood Specialties Corporation products. All prices and specifications are subject to change without notice. All pictures and graphics are for visual representation only. This publication supersedes all prior technical, policy and price data.



General Information

Conestoga's radius products are an excellent compliment to our other custom products.

- Conestoga offers three standard radius families referred to as A (12"), B (18") and C (24"), (refer to the chart below).
- Any radius not listed in the chart below is considered "non-standard", additional charges and lead-times apply.
- Each product is manufactured as a single radius. Elliptical curves or multiple radii within a single item are not available.
- Radius products require some use of mathematical terms. Conestoga provides an illustrated Radius Glossary in this section as a reference.

Standard Radius Families All dimensions are measured to the product face					
Product Thickness	Radius	A (12")	B (18")	C (24")	Door Application
3/4" thick doors	Concave	11-5/8"	17-5/8"	23-5/8"	
	Convex	12-3/8"	18-3/8"	24-3/8"	
1" thick doors	Concave	11-3/8"	17-3/8"	23-3/8"	
	Convex	12-5/8"	18-5/8"	24-5/8"	
3/4" thick front frames	Concave	12-3/8"	18-3/8"	24-3/8"	Overlay 3/8" Inset Full Inset
		12"	18"	24"	
		11-5/8"	17-5/8"	23-5/8"	
	Convex	11-5/8"	17-5/8"	23-5/8"	
12"		18"	24"		
12-3/8"		18-3/8"	24-3/8"		

Ordering Information

Conestoga offers plan drawings (see the following pages) of commonly used convex and concave configurations. Use the drawings to complete the Radius Order Configuration (ROC) section of the Radius Order Form.

- Conestoga calculates radius dimensions from ROC information.
- No additional plan drawing is required with complete ROC information.
- Different radius or ROC types must be submitted on separate order forms.

Provide a detailed plan drawing if your configuration differs at all from ROC 1, 2 or 3.

- Clearly label dimensions and details.
- Include additional information that may be helpful for "unusual" applications.
- Complete all applicable parts of the Radius Order Form.

If the radius dimensions are already known, radius products may be ordered following this example: quantity – 2 convex doors: 19-7/16" face arc x 30" height. 12-3/8" radius face.

- Width dimension is the arc of the product face (see Radius Glossary).
- Radius dimension is the product face.
- Clearly label dimensions to avoid the need for clarification, which will delay production.

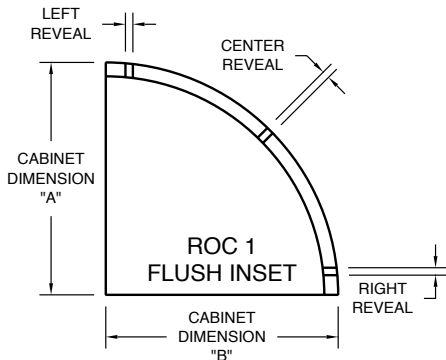
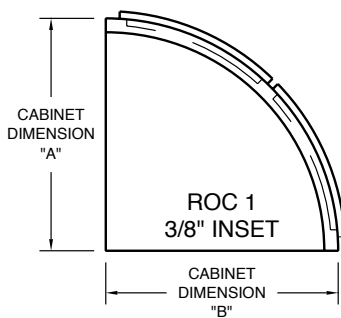
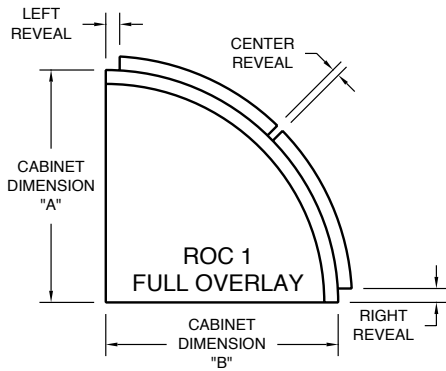


RADIUS PRODUCTS

Custom Products

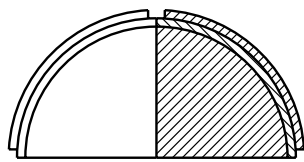


ROC 1: Convex configuration

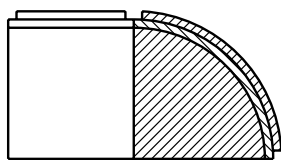


- Use Radius Products Order Form and complete all header information to insure that your order is processed accurately. Missing or incomplete information will delay order processing.
- Specify design and specie information for any radius product required.
- Complete ROC information as follows:
 1. Check ROC 1 configuration.
 2. Check the appropriate Overlay/Inset Application box.
 3. Enter the cabinet dimensions excluding the door thickness. Include front frame thickness when applicable.
 4. Enter reveals for all cabinetry applications. If no reveal is required, enter "0". Enter "N/A" for the center reveal if a single door is required.
 5. Check the appropriate box for the Conestoga standard radius family. Conestoga will contact you if a standard radius will not fit your application.
 6. If a non-standard radius is required, enter the specific radius to the product face, (door, drawer front and front frame) or check "To be Calculated" if Conestoga is to determine the radius.

ROC 1: Related Configurations



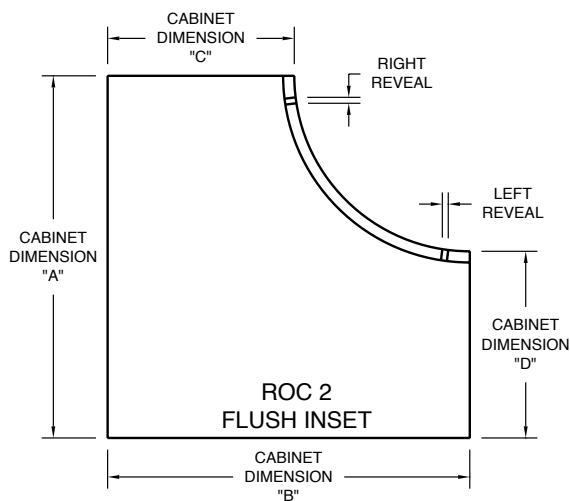
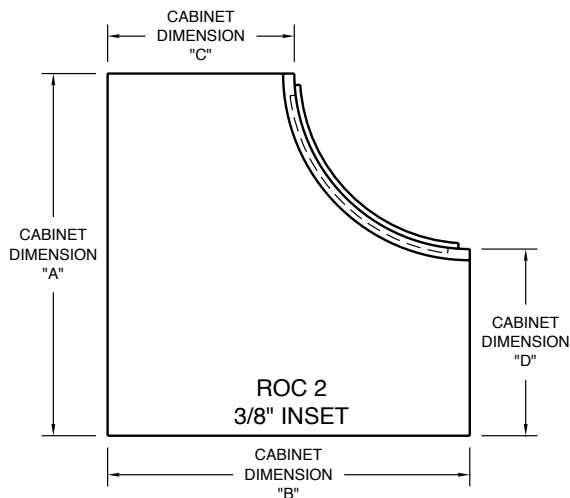
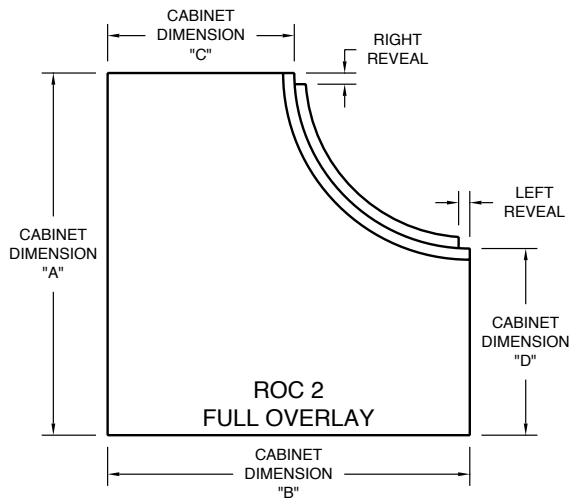
HALF CIRCLE
(FULL OVERLAY SHOWN)



RADIUS AND FLAT
(FULL OVERLAY SHOWN)

- If your application is a full half circle (as shown at left) complete ROC 1 information and order 2x the quantity required for a quarter circle. As an option, Conestoga can join two Family "A" front frames to cover a 24" chord, (upcharges apply.) Contact the Special Designs Department for additional information.
- If your application is a cabinet that has a radius and a flat (as shown at left) complete ROC 1 information based on the quarter circle portion of the cabinet only. As an option, Conestoga can manufacture a Family "A" quarter circle front frame with a 12" flat in a single piece (upcharges apply). Order convex and "flat" door separately.

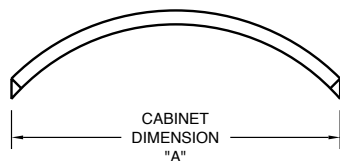
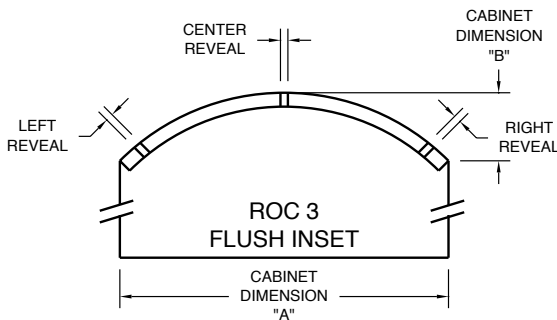
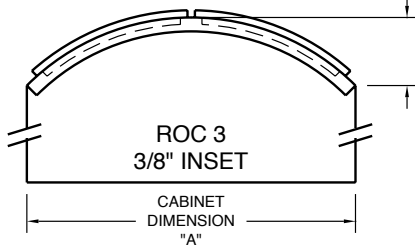
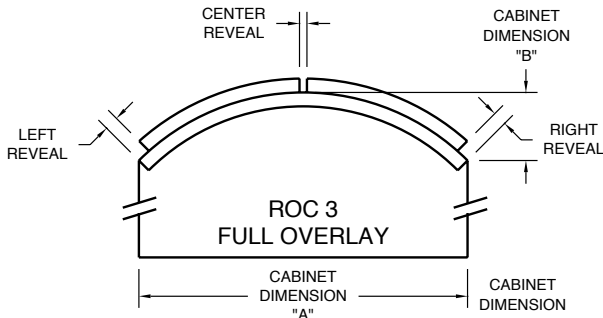
ROC 2: Concave configuration



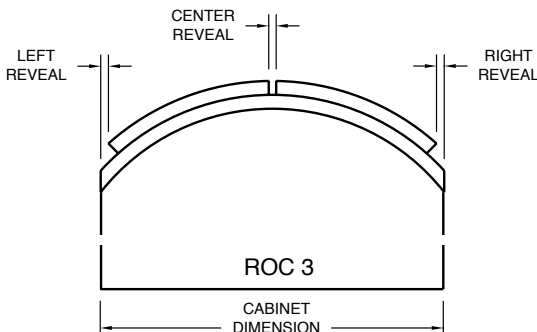
- Use Radius Products Order Form and complete all header information to insure that your order is processed accurately. Missing or incomplete information will delay order processing.
- Specify design and specie information for any radius product required.
- Complete ROC information as follows:
 1. Check ROC 2 Configuration.
 2. Check the appropriate Overlay/Inset Application box.
 3. Enter the cabinet dimensions excluding the door thickness. Include front frame thickness when applicable.
 4. Enter reveals even for a frameless application. If no reveal is required enter "0". **Caution!** Concave doors used in conjunction with minimal reveals, particularly full overlay and frameless applications, will require additional clearance to ensure proper door operation. Conestoga will not calculate exact clearance requirements. Possible solutions include the following:
 - ❖ Increase the reveal size. (The reveal required typically will be 1/2" to 3/4" but will vary according to door radius, cabinet box size, hinge type and placement, and door edge profile.)
 - ❖ Back-bevel the pull side of the door.
 - ❖ Add a filler strip between the adjoining cabinets on the pull side.
 5. Check an appropriate box for a Conestoga standard radius family. Conestoga will contact you if a standard radius will not fit your application.
 6. If a non-standard radius is required, enter the specific radius to the product face, (door, drawer front and front frame) or check "To be Calculated" if Conestoga is to determine the radius.



ROC 3: Convex configuration



REVEAL ORIENTATION OPTION



- Use Radius Products Order Form and complete all header information to insure that your order is processed accurately. Missing or incomplete information will delay order processing.
- Specify design and specie information for any radius product required.
- Complete ROC information as follows:
 1. Check ROC 3 Configuration.
 2. Check the appropriate Overlay/Inset Application box.
 3. Enter cabinet dimension A (cabinet width or chord length.) This is the only required cabinet dimension.
 4. Enter cabinet dimension B (the rise) or radius, but not both. If a radius is entered, the rise will be determined by the radius. If a rise is entered, the corresponding radius will be “non-standard” in most cases.
 5. Enter reveals even for a frameless application. If no reveal is required enter “0”. If a single door is required, enter N/A for the center reveal.
 6. Consider using a Conestoga standard radius whenever possible to receive the best cost and lead-time. Check the box for the appropriate Conestoga standard radius family. Conestoga will contact you if a standard radius will not fit your application.
 7. Check “To be Calculated” if Conestoga is to determine the radius, or enter the specific, non-standard radius to the product face (door, drawer front and front frame).

ROC 3: Options

- The standard front frame edge is shown in the top three drawings. Front frame with Beveled Stile Option is shown at left. Check Beveled Stiles Option to extend stiles so that the outer edges are parallel with each other. Beveled Stiles Option will not affect the face stile width or overall frame dimensions (upcharges apply).
- The standard reveal orientation is shown in the top drawing. Reveal Orientation Option is shown at left. Reveal Orientation Option is relative to the chord (cabinet dimension “A”) not the arc. Conestoga will calculate the door width based on the specific door edge profile ordered.

Radius Door and Drawer Front Pricing

Pricing Guide							
Design	Family			Design	Family		
	Footnote	A	B or C		Footnote	A	B or C
Raise Panel Doors				Raised Panel - Complex Doors			
CRP-10				Presidential Square	5		
CRP-10102	1			Presidential Cathedral	2,5		
CRP-10103	1,6			Slab and Batten Doors			
CRP-20	2			V200			
CRP-2020	2			DVG Batten			
HL/HR20				Flush Batten			
CRP-30	2			Statesman Collection			
CRP-3030	2			Churchill			
CRP-35	2			Douglas			
CRP-60	2			Franklin			
CRP-6060	2			Hancock			
CRP-90	2			Monroe			
CRP-9090	2			Statesman Collection Drawer Fronts			
HR/HR90				Churchill	6		
Monarch Square				Douglas	6		
Monarch Cathedral	2			Franklin	6		
Doors				Hancock	6		
CRP-10 Miter				Monroe	6		
CRP-1389	5			Shaker Design Series Doors			
CRP-10318	5			Albany			
CRP-10382	5			Amesbury			
CRP-10533	5			Fairhaven			
CRP-10605	5			Madison			
CRP-10751				Sheldon	1		
CRP-10827				Windham			
CRP-10875	5			Shaker Design Series Drawer Fronts			
CRP-10946	5			Albany	6		
Presidential Miter	5			Amesbury	6		
Prestige	5			Fairhaven	6		
Applied Moulding Doors				Madison	6		
Barcelona				Sheldon	4,6		
CRP-10161				Windham	6		
CRP-10209				Arts and Crafts Collection Doors			
CRP-10797				Cottage			
CRP-20209	3,4			Arts and Crafts Collection Drawer Fronts			
CRP-30209	3,4			Cottage I	6		
Raised Panel - Complex Doors				Cottage II	6		
CRP-10RC446				Winslow	6		
CRP-10141							

General Notes

- Family "A", "B" and "C" standard radii are defined by the Standard Radius Families Chart found in the beginning of this section.
- Frame Only doors are priced as doors with panels. Frame Only doors are routed for glass and include #52 glass moulding in matching specie. Clear moulding is not available.
- Maximum size for any radius door or drawer front may not exceed 48" wide, 96" high or sixteen square feet.
- Plywood panel products not available with radius option.

Footnotes

1. Design price includes multiple panels and middle rail(s) and/or center stile(s).
2. Set up charge (per order) for each door width over 21" or each non-standard radius.
3. Design available in standard radius only.
4. Maximum door or drawer front size is 21" wide x 42" high. (Width and height maximums are not reversible.)
5. Design available in single panel only.
6. Conestoga recommends against ordering large horizontal grain slabs or panels in lighter finishes. Grain pattern and wood color can vary significantly between radius and non-radius horizontal grain slabs or panels because of different manufacturing processes.
7. Design price includes 1" thick material upcharge.



Radius Door and Drawer Front Pricing (continued)

Pricing Guide							
Design	Family			Design	Family		
	Footnote	A	B or C		Footnote	A	B or C
Decorative Applied Moulding Doors				Five Piece Mitered Drawer Fronts			
LaSalle	5			CRP-10 Miter	6		
Marquis	5			CRP-10318	5,6		
Monaco	5			CRP-10382	5,6		
Saxony	5			CRP-10533	5,6		
Moulding Drawer fronts				CRP-10605	5,6		
LaSalle	5,6			CRP-10751	6		
Marquis	5,6			CRP-10827	6		
Monaco	5,6			CRP-10875	5,6		
Saxony	5,6			CRP-10946	5,6		
1" Thick Door Collection				CRP-1389	5,6		
CRP-10	7			Presidential Miter	5,6		
CRP-10A48	7			Prestige	5,6		
CRP-30	7			MDF Door Designs			
Normandie	7			Slab			
Provence	7			10-RC	3,4		
Staffordshire	7			10SQ2	3,4		
1" Thick Drawer Front Collection				10SQ3	3,4		
CRP-10	6,7			10SQ3 Frame Only	3,4		
CRP-10A48	6,7			20-RC	3,4		
Marcel	6,7			20-RC Frame Only	3,4		
Normandie	6,7			30-RC	3,4		
Provence	6,7			30SQ3	3,4		
Staffordshire	6,7			MDF Drawer Fronts			
One Piece Drawer Fronts				Slab			
Slab	6			#10			
#10	6			Keystone			
Keystone	6			10-RC	3,4		
10141	6			10SQ2	3,4		
DVG Batten				10SQ3	3,4		
1-1/8" Sandwich	6,7						
1-1/2" Sandwich	6,7						
Five Piece Mortise and Tenon Drawer Fronts							
Barcelona	6						
CRP-10	6						
CRP-10161	6						
CRP-10209	6						
CRP-10797 mortise and tenon	6						
Presidential	6						

General Notes

- Family "A", "B" and "C" standard radii are defined by the Standard Radius Families Chart found in the beginning of this section.
- Frame Only doors are priced as doors with panels. Frame Only doors are routed for glass and include #52 glass moulding in matching specie. Clear moulding is not available.
- Maximum size for any radius door or drawer front may not exceed 48" wide, 96" high or sixteen square feet.
- Plywood panel products not available with radius option.

Footnotes

1. Design price includes multiple panels and middle rail(s) and/or center stile(s).
2. Set up charge (per order) for each door width over 21" or each non-standard radius.
3. Design available in standard radius only.
4. Maximum door or drawer front size is 21" wide x 42" high. (Width and height maximums are not reversible.)
5. Design available in single panel only.
6. Conestoga recommends against ordering large horizontal grain slabs or panels in lighter finishes. Grain pattern and wood color can vary significantly between radius and non-radius horizontal grain slabs or panels because of different manufacturing processes.
7. Design price includes 1" thick material upcharge.



Radius Door and Drawer Front Pricing (continued)

Radius Door and Drawer Front Options Pricing		
Option	List price dollars	Per unit
1" Thick material <i>add before using material factor*</i>		door/drawer front
Premium material <i>add before using material factor*</i>		
3/8" Reverse G-Cove raise		
5/16" Square Pegs		
1/2" Square Pegs		
Radius Corners		
Back routed hand pull		
Face routed hand pull		
Cross grain sanding		
Edge profile, Sophisticate or LC-inset		
Framing bead, Elite		
Hand pulls		
Concealed hinge boring pattern "A" or "B"		
"Non-standard" radius (use family A as base)		slab drawer
"Non-standard" radius (use family A as base)		
Mullion, square bead or special		lite
Mullion, standard		
Radius middle rail/vertical center stile		framing piece
Wider framing 3" to 4-1/2"		
Wider framing 4-9/16" to 10"		
Over 42" high <i>add before using material factor*</i>		lineal inch
Wear Sanding		per panel
Level I distressing		
Level II distressing		
Antiquing		

*Options get added to price before material calculation. All other options are added after material calculation.

The following options are not available on radius doors: G-012 rout, G-056 rout, G-121 rout, G-015 panel grooving, Soss hinge boring, Knife hinge slot.



Custom Radius Front Frame

- Standard framing width 1-1/2" unless otherwise specified.
- Use the chart below to price standard radius ROC1 and ROC2 configurations. For non-standard radius ROC1 and ROC2, price the front frame as the next largest radius family; upcharges apply.
- For standard radius ROC3 configurations use family A up to an 18" chord, family B up to a 26" chord and family C up to a 34" chord. For non-standard radius ROC3; upcharges apply.
- Other configurations or larger sizes vary in cost. Contact the Radius Product Specialist for availability and pricing.

Radius Front Frame Pricing						
Material Grade:	Standard			Premium		
Species	A (12")	B (18")	C (24")	A (12")	B (18")	C (24")
Alder						
Birch, Red					N/A	
Birch, White						
Cherry						
Hickory/Pecan					N/A	
Lyptus						
Maple, Hard						
Maple, Soft					N/A	
Oak, Red						
Oak, White					N/A	
Paint Grade						
Paint Grade Hard Maple						
Pine						
Walnut						

*Example: A front frame for a 24" wide vanity may use the same radius as Family C (24") but be priced as a Family B (18") because it is closer in size to the family B chord length. Front frames larger than Family C (24") require a quote from Special Designs.

Radius Front Frame Options Pricing		
Option	List price	Per unit
Beaded inset (1/4" and 3/8")		opening
Bevel stiles		frame
Groove for CWS Cabinet Systems		
Customer specific grooves		
"Non-standard" radius		
Radius horizontal middle rail		rail
Radius vertical center stile		stile
Wider framing 3" to 4-1/2"		framing piece
Wider framing 4-9/16" to 10"		
Over 42" high framing piece		lineal inch



Radius Mouldings

Conestoga's radius mouldings are an excellent complement to our radius doors and front frames. We recommend against ordering radius mouldings in lighter finishes, such as Natural or Alpine for applications adjacent to straight lengths of mouldings. Grain pattern and wood color can vary significantly between straight and radius moulding because of different manufacturing processes.

- Available radius moulding profiles are noted in section 7, Mouldings.
- Crown mouldings will be sized to fit the face of the corresponding front frame. In frameless applications the back of the moulding will align with the back of the door. The profiled edge of moulding #801 will align with the face of the door.
- Provide a cross section drawing for any "non-standard" application.
- Family A (12") mouldings are a single section. Family B (18") or C (24") mouldings are made in two separate sections. An additional 2" will be added to the length of each section for field installation.
- The Radius Moulding Pricing Chart indicates the price per section for standard radius moulding. Mouldings are considered a "standard" radius if they are sized to fit a standard radius front frame.
- Additional charge for each non-standard radius. Minimum radius is 3" to the back of convex moulding. Minimum radius is 8" to the face of concave moulding. Moulding sections over 24" in length will incur an additional charge per inch for every inch over 24".

Radius Moulding Pricing

Prices are per section. Multiple sections may be required.

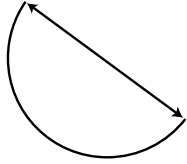
Species	Batten 13, Cove 11, Scribe 14, Scribe 1809	Crown 33	Crown 6, Crown 619, Crown w/heel 801, Colonial Casing 21, Light Rail B11, Light Rail 361	Colonial Base 10, Beaded Base 381	Crown 24, Large Cove 1524
Alder					
Birch, Red					
Birch, White					
Cherry					
Hickory					
Lyptus					
Maple, Hard					
Maple, Soft					
Oak, Red					
Oak, White					
Paint Grade					
Paint Grade Hard Maple					
Pine					
Walnut					

*All 18" and 24" radius mouldings will be made in two sections per quarter circle.



Radius Glossary

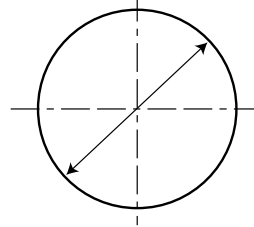
Chord



A straight line connecting two points on a curve

A chord can be measured at the face or the back of an item. Face measurement of radius product is based on a square edge for accuracy.

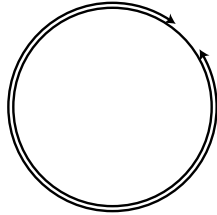
Diameter



A straight line passing through the center of the circle and connecting opposite edges.

The diameter is a specific chord. Specify the diameter as a chord length to cover a half circle.

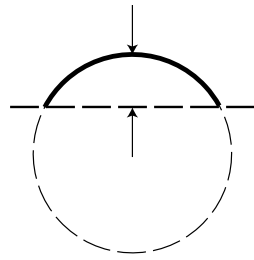
Circumference



The boundary line of a circle, or the distance around a complete circle

Radius products are a portion of a circle. An approximate quarter circle is typical, but the exact percentage of the circle will vary per application.

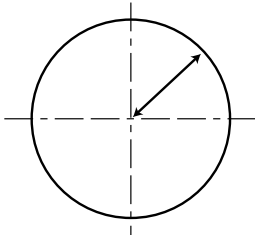
Rise



The change in elevation from the center of a chord.

A customer specific rise is available. However, a non-standard radius may be required for a specific rise.

Radius



A straight line connecting the center of a circle with any point on its circumference

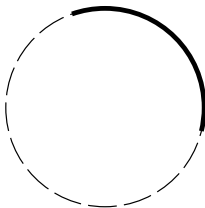
Radius products have a specific face radius. Smaller radii have tighter curves, while larger radii appear more gradual.

Product Width

A dimension measured as the arc of the product face.

The product width assumes a square edge on that item for measurement purposes.

Arc



A segment of a circle

Depending on the application, multiple pieces or sections of radius product may be required to cover a certain arc. Radius product width is based on an arc.

Standard radius

Any radius listed on the chart of Conestoga standard radii.

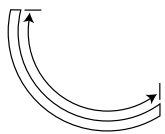
Indicate "use standard radius if possible" if not sure that a standard radius will work for a specific application.

Non-standard radius

Any radius not listed on the chart of Conestoga standard radii.

Minimum radius depends upon the design and profiles required. There is no maximum radius, although at some point the product will appear to lose its curved distinction. Non-standard radius product incurs an upcharge over standard radius product and requires additional lead-time.

Concave



Pertaining to the inside of a circle

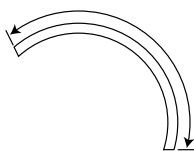
The face of this radius curves inward towards the cabinet. Concave doors used in frameless or "full overlay" applications, may require additional clearance to insure proper operation.

Reveal

The visible distance between two points.

Typically, the reveal is the distance between a door edge and cabinet edge or the distance between two doors. The reveal may be required to calculate radius product width.

Convex



Pertaining to the outside of a circle

The face side of the radius product appears to bow out.



Notes