LEGEND IMPACT RADIUS

Elevations

Legend Product Information

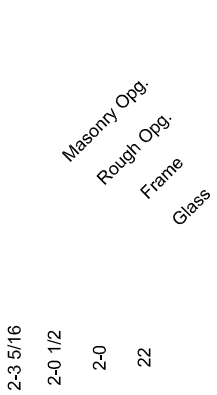
Specifications and technical data are subject to change without notice.

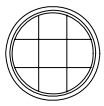
Legend Impact Series

Legend Full Round and Oval

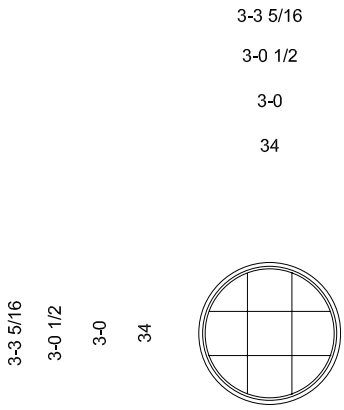
ELEVATIONS : FULL ROUND / OVAL
SCALE: 1/8" = 1'0"

FULL ROUND



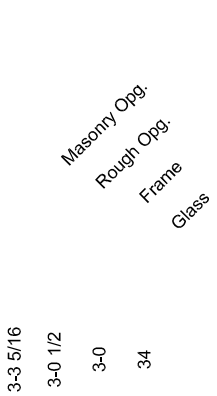


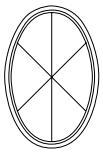
FR24



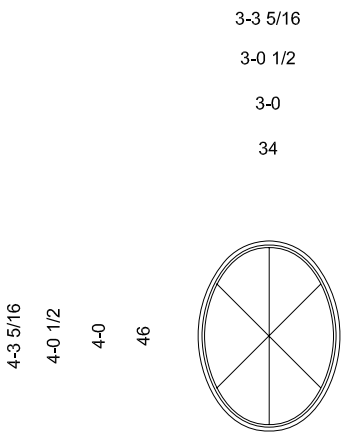
FR 36

OVAL





OVL 2436



OVL 3648

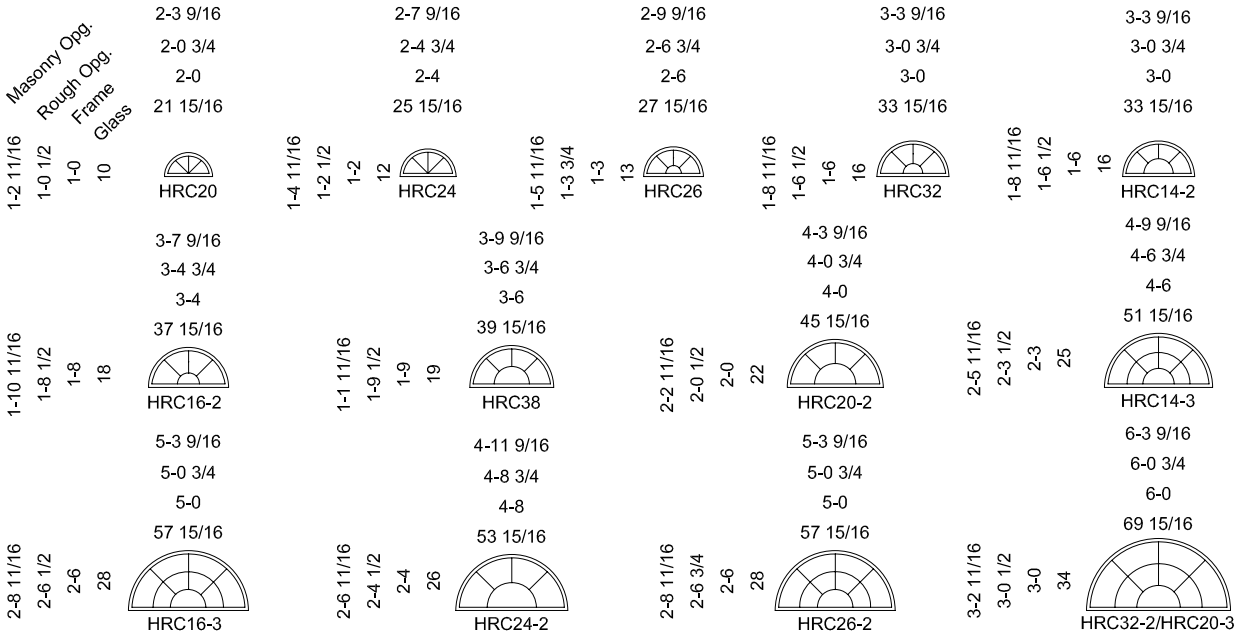
NOTES:
MASONARY OPENINGS ARE FOR STANDARD 180 BRICKMOULD

Legend Impact Series

LEGEND RADIUS - CASEMENT

ELEVATIONS : HALF ROUND / QUARTER ROUND

SCALE: 1/8" = 1'-0"



UNIT SIZE INFORMATION

FOR 180 BRICKMOULD*
- ADD 2 13/16" TO FRAME WIDTH
- ADD 2 3/16" TO FRAME HEIGHT

FOR 3 1/2" FLAT CASING*
- ADD 5 13/16" TO FRAME WIDTH
- ADD 3 11/16" TO FRAME HEIGHT

FOR 4 1/2" BACKBAND*
- ADD 7 13/16" TO FRAME WIDTH
- ADD 4 11/16" TO FRAME HEIGHT

FOR 5 1/2" FLAT CASING*
- ADD 9 13/16" TO FRAME WIDTH
- ADD 5 11/16" TO FRAME HEIGHT

FOR WILLIAMSBURG*
- ADD 5 3/8" TO FRAME WIDTH
- ADD 3 7/16" TO FRAME HEIGHT

FOR PLANTATION*
- ADD 5 13/16" TO FRAME WIDTH
- ADD 5 9/16" TO FRAME HEIGHT

FOR SLIMLINE
- ADD 7/8" TO FRAME WIDTH
- ADD 1 3/16" TO FRAME HEIGHT

* CASING OPTIONS MAY BE LIMITED BY SIZE DUE TO MINIMUM RADIUS RESTRICTIONS.

NOTE:
ADD 3/4" TO UNIT WIDTH & 1/2" TO UNIT HEIGHT TO CALCULATE MASONRY OPENING

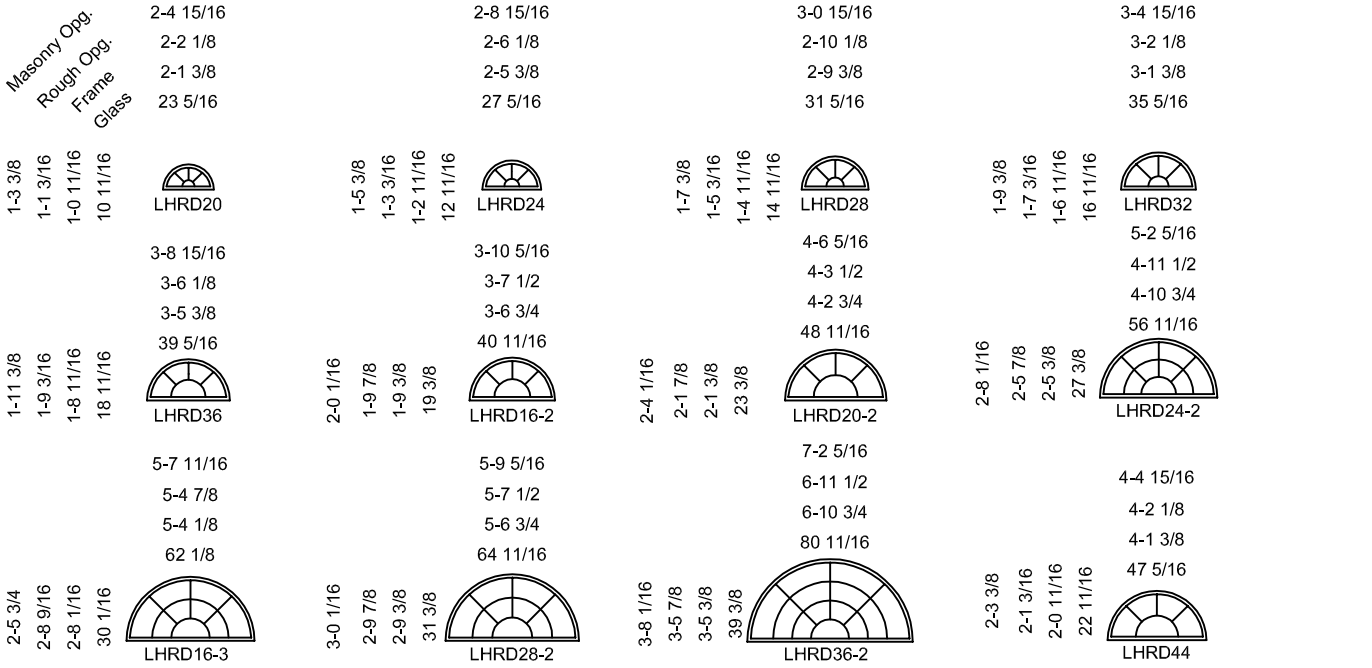
NOTES:
MASONARY OPENINGS ARE FOR STANDARD 180 BRICKMOULD
STANDARD GRILLE PATTERNS SHOWN

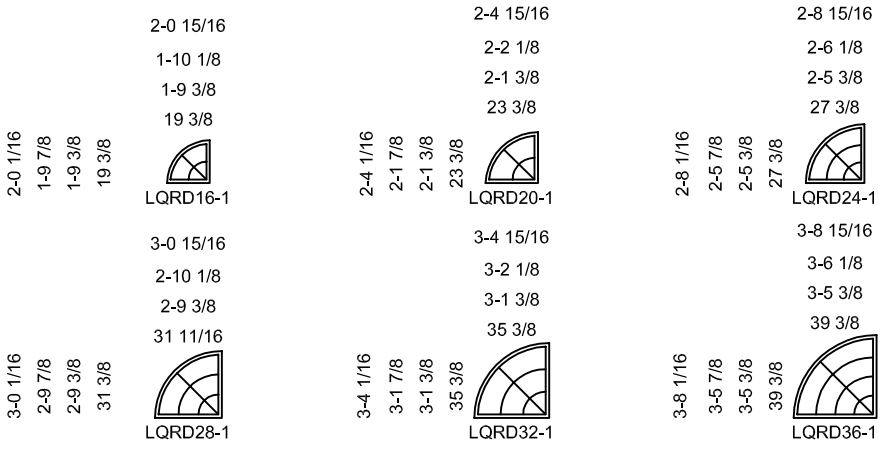
Legend Impact Series

LEGEND RADIUS - DOUBLE HUNG

ELEVATIONS : HALF ROUND / QUARTER ROUND

SCALE: 1/8" = 1'-0"





UNIT SIZE INFORMATION

FOR 180 BRICKMOULD*
- ADD 2 13/16" TO FRAME WIDTH
- ADD 2 3/16" TO FRAME HEIGHT

FOR 3 1/2" FLAT CASING*
- ADD 5 13/16" TO FRAME WIDTH
- ADD 3 11/16" TO FRAME HEIGHT

FOR 4 1/2" BACKBAND*
- ADD 7 13/16" TO FRAME WIDTH
- ADD 4 11/16" TO FRAME HEIGHT

FOR 5 1/2" FLAT CASING*
- ADD 9 13/16" TO FRAME WIDTH
- ADD 5 11/16" TO FRAME HEIGHT

FOR WILLIAMSBURG*
- ADD 5 3/8" TO FRAME WIDTH
- ADD 3 7/16" TO FRAME HEIGHT

FOR PLANTATION*
- ADD 5 13/16" TO FRAME WIDTH
- ADD 5 9/16" TO FRAME HEIGHT

FOR SLIMLINE
- ADD 7/8" TO FRAME WIDTH
- ADD 1 3/16" TO FRAME HEIGHT

* CASING OPTIONS MAY BE LIMITED BY SIZE DUE TO MINIMUM RADIUS RESTRICTIONS.

NOTE:
ADD 3/4" TO UNIT WIDTH & 1/2" TO UNIT HEIGHT TO CALCULATE MASONRY OPENING

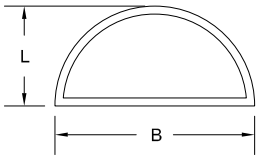
NOTES:
MASONARY OPENINGS ARE FOR STANDARD 180 BRICKMOULD
STANDARD GRILLE PATTERNS SHOWN

Legend Impact Series Shapes

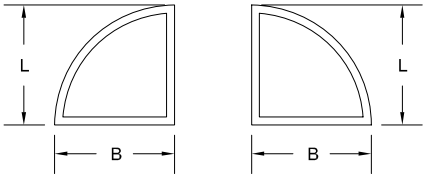
Legend Special Radius

Radius Shapes Chart

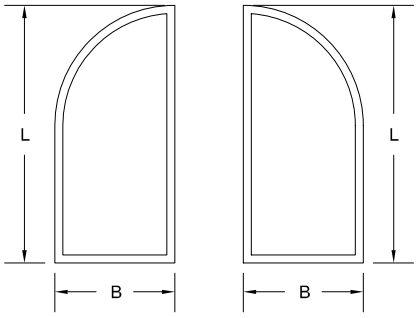
Units must be ordered by FRAME DIMENSIONS only



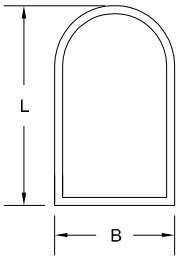
HR
"HALF ROUND"



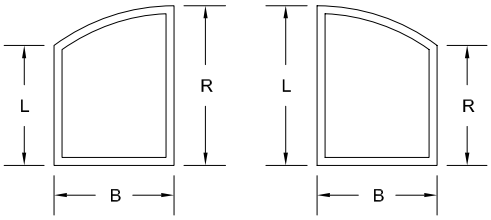
QR-1 QR-2
"QUARTER ROUND"



QRP-1 QRP-2
"EXTENDED QUARTER"

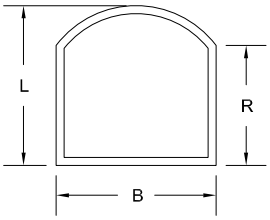


RTP
"ROUND TOP PICTURE"

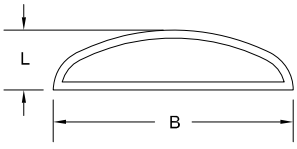


STP-1
"SEG-TOP QUARTER

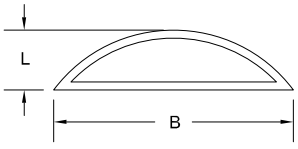
STP-2
"SEG-TOP QUARTER"



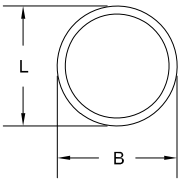
SEG
"SEG-TOP PICTURE"



ELL
"ELLIPSE"



EYE
"EYEBROW"



FUL
"FULL ROUND"

Size Limitations

1. The maximum dimension is 54" x 108" or 108" x 54"
2. The minimum base dimension is 14 inches.
3. The minimum leg dimension is 6 inches.
4. The maximum Square Footage allowed is 40 Square Feet.
5. The minimum pitch is a 5/12 angle.
6.The Aspect Ratio is 7 to 1 maximum.
7. Any one unit can not have glass smaller than 8" x 12".
8. Some spacer may be visible on units with tight angles.

Legend Impact Series

LEGEND RADIUS SPECIFICATIONS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Factory assembled low-maintenance PVC radius windows [including in-sash and direct glaze construction], glass and glazing, and [grilles].
B. Anchorages, attachments, and accessories.

1.02 RELATED SECTIONS

A. Section 01340 - Shop Drawings, Product Data, and Samples.
B. Section 01610 - Delivery, Storage, and Handling.
C. Section 01710 - Final Cleaning.
D. Section 07200 - Batt and Blanket Insulation.
E. Section 07920 - Sealants and Caulking.
F. Section 08800 - Glass and Glazing.

1.03 REFERENCES

A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM):
   1. ASTM E-283 - Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
   2. ASTM E-547 - Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Difference.
   3. ASTM E-330 - Structural Performance of Exterior Windows, Curtain Walls, and Doors under Uniform Static Air Pressure Difference.
B. NATIONAL WOOD WINDOW AND DOOR ASSOCIATION (NWWDA):
   1. AAMA / NWWDA 101-I.S.2 - 97 Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors.
   2. NWWDA I.S-4-81 - Industry Standard for Water-Repellent Preservative Treatment for Millwork
C. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI).

1.04 PERFORMANCE CRITERIA

A. Radius units shall meet requirements in accordance with AAMA 506-08 / NWWDA 101-I.S.2-97 / CSA A440.
B. Air leakage shall not exceed 0.30 cfm per sq.ft. of sash when tested in accordance with ASTM E-283 at 1.57 psf.
C. No water penetration shall be allowed when tested in accordance with ASTM E-547.
D. Window units shall withstand positive and negative wind loads without damage. The units shall be tested in accordance with ASTM E-330.
E. Window units shall meet impact requirements in accordance with AAMA 506-2000 / ASTM E-1886-05 / ASTM E-1996-06.

1.05 SUBMITTALS

A. Shop drawings shall be submitted in accordance with Section 01340.
B. Product data in the form of general catalogs, test lab reports, product performance, and warranty information shall be submitted in accordance with Section 01340.
C. Samples showing glazing, quality of construction, and finish shall be submitted in accordance with Section 01340.

1.06 DELIVERY, STORAGE, AND HANDLING

A. In compliance with Section 01610, window units shall be delivered undamaged and with protective packaging. Complete installation and finishing instructions shall be included.
B. Store units in a clean, dry place off the ground in an upright position.

Legend Impact Series

LEGEND RADIUS SPECIFICATIONS

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Legend Series Radius window units including in-sash and direct glaze construction as manufactured by Windsor Windows & Doors.

2.02 MATERIALS

A. Frame: All exterior stops shall be low-maintenance cellular PVC material. Sill jamb shall be interior primed select softwoods treated with water repellent preservative in accordance with NWWDA I.S.-4. Radius jamb material shall be low-maintenance cellular PVC material. Installation clips and screws will be provided with units.

B. Finish: Shall be one coat latex redi-finish topcoat applied to exterior surfaces of frame. This finish can be left as is or repainted if other color is desired. Interior cellular PVC components shall be one coat latex redi-finish top coat applied.

C. Glazing: Shall be 1" Sea Storm™ Laminated LoE^2 insulating glass as standard, glazed with double-faced tape plus a full perimeter of structural silicone, and interior wood stops. Cardinal's Preserve™ option is standard for Sea Storm™ Impact IG. It is a removable, factory-applied protective film adhered to both interior and exterior surfaces of the glass.

D. Grilles: (Extra when specified) White, cinnamon, bronze, tan, ivory, hunter green, or black aluminum inner grilles (in air space) are available in 13/16" flat or 3/4" profiled. Two-toned inner grilles are available with a white interior, and a bronze, green, tan, ivory, or black exterior. Windsorlite (WDL) simulates true divided lite, but is created by adhesively fixing cellular PVC exterior and interior bars to the surfaces of the insulated glass. WDL is available in 5/8", 7/8" and 1-1/4" widths. See Divided Lite Options for profile details. Available in white color only. Also available with or without inner bar between the glass.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Verify that there is no visible damage to the unit before installation.

3.02 INSTALLATION

A. Verify the rough opening is of the recommended size and that it is plumb, level, and square.
B. Install the window unit in accordance with the manufacturer's recommendations.
C. Install sealant, backing material, and insulation around opening perimeter in accordance with Section 07900 and Section 07920.
D. For installation details reference Florida drawing number 1380.

3.03 ADJUSTMENT AND CLEANING

A. Cover the window unit to avoid damage due to spray paint, plaster, and other construction operations.
B. Remove all visible labels and instructions.
C. Final cleaning of glass in accordance of Section 01

Legend Impact Series

LEGEND RADIUS

NFRC VALUES / DESIGN PRESSURE VALUES

NFRC Unit Values					
Glazing Type	**U-Value**	**R-Value**	**Solar Heat Gain Coefficient**	**Visible Light Tansmittance**	**Fading Transmission**
In-Sash/Direct Glaze					
LoE 240 glass	0.31	3.23	0.22	27%	0.35
LoE^2 272 glass (Standard)	0.27	3.70	0.36	50%	0.53
LoE 366 glass	0.27	3.70	0.24	45%	0.43
LoE^2 glass with breather tubes	0.31	3.23	0.36	50%	0.53

NOTE:

Product Values are determined using the National Fenestration Rating Council (NFRC) Procedures for determining fenestration product values.

U-Value: (Btu/hr-sq ft-*F) Lower the U-Value, the greater the resistance to heat flow and better its insulating value.

R-Value: (1/U-Value) Higher the R-Value, the greater the resistance to heat flow and better it's insulating value.

Visible Light Transmittance (VLT): Percentage of visible light transmitted through the unit.

Solar Heat Gain Coefficient (SHGC): The lower a window's SHGC, the less solar heat it transmits, and the greater it's shading ability.

Fading Transmission: The lower the number, the better the glass is for reducing fading potential of carpets and interior furnishings

Capillary tubes are required for IG units at high elevations. Argon will not be furnished in units with capillary tubes.

Design Pressure Values - Direct Glaze											
Frame		12	24	36	48	54	60	72	84	96	108
Size		**Width**									
12	**Height**	50	50	50	50	50	50	50	50	50	50
24		50	50	50	50	50	50	50	50	50	50
36		50	50	50	50	50	50	50	50	50	50
48		50	50	50	50	50	50	50	50	50	50
54		50	50	50	50	50	50	50	50	50	50
60		50	50	50	50	50	NA	NA	NA	NA	NA
72		50	50	50	50	50	NA	NA	NA	NA	NA
84		50	50	50	50	50	NA	NA	NA	NA	NA
96		50	50	50	50	50	NA	NA	NA	NA	NA
108		50	50	50	50	50	NA	NA	NA	NA	NA

Legend Impact Series

LEGEND RADIUS

MEASUREMENT CONVERSIONS

STANDARD BRICKMOULD - DIRECT GLAZE

Size Referenced		Daylite Opening		Glass Size		Frame Size		Rough Opening		Unit Size		Mansonry Opening	
		Dimension Needed											
Daylite Opening				Width	+ 7/8	Width	+ 2 7/8	Width	+ 3 5/8	Width	+ 5 11/16	Width	+ 6 7/16
				Height	+ 7/8	Height	+ 2 7/8	Height	+ 3 3/8	Height	+ 5 1/16	Height	+ 5 9/16
Glass Size		Width	- 7/8			Width	+ 2	Width	+ 2 3/4	Width	+ 4 13/16	Width	+ 5 9/16
		Height	- 7/8			Height	+ 2	Height	+ 2 1/2	Height	+ 4 3/16	Height	+ 4 11/16
Frame Size	Dimension Given	Width	- 2 7/8	Width	- 2			Width	+ 3/4	Width	+ 2 13/16	Width	+ 3 9/16
		Height	- 2 7/8	Height	- 2			Height	+ 1/2	Height	+ 2 3/16	Height	+ 2 11/16
Rough Opening		Width	- 3 5/8	Width	- 2 3/4	Width	- 3/4			Width	+ 2 1/16	Width	+ 2 13/16
		Height	- 3 5/8	Height	- 2 1/2	Height	- 1/2			Height	+ 1 11/16	Height	+ 2 3/16
Unit Size		Width	- 5 11/16	Width	- 5 13/16	Width	- 2 13/16	Width	- 2 1/16			Width	+ 3/4
		Height	-5 1/16	Height	- 4 3/16	Height	- 2 3/16	Height	- 1 11/16			Height	+ 1/2
Masonry Opening		Width	- 6 7/16	Width	- 5 9/16	Width	- 3 9/16	Width	- 2 13/16	Width	- 3/4		
		Height	- 5 9/16	Height	- 4 11/16	Height	- 2 11/16	Height	- 2 3/16	Height	- 1/2		

3 1/2 FLAT CASING - DIRECT GLAZE

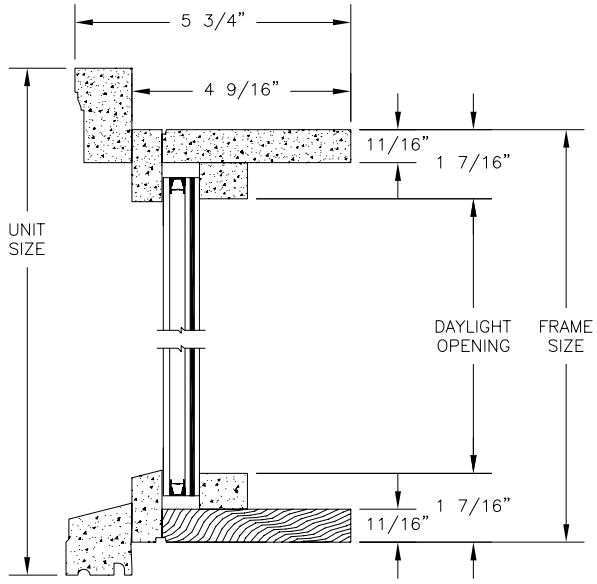
Size Referenced		Daylite Opening		Glass Size		Frame Size		Rough Opening		Unit Size		Masonry Opening	
		Dimension Needed											
Daylite Opening				Width	+ 7/8	Width	+ 2 7/8	Width	+ 3 5/8	Width	+ 8 11/16	Width	+ 9 7/16
				Height	+ 7/8	Height	+ 2 7/8	Height	+ 3 3/8	Height	+ 6 9/16	Height	+ 7 1/16
Glass Size		Width	- 7/8			Width	+ 2	Width	+ 2 3/4	Width	+ 7 13/16	Width	+ 8 9/16
		Height	- 7/8			Height	+ 2	Height	+ 2 1/2	Height	+ 5 11/16	Height	+ 6 3/16
Frame Size	Dimension Given	Width	- 2 7/8	Width	- 2			Width	+ 3/4	Width	+ 5 13/16	Width	+ 6 9/16
		Height	- 2 7/8	Height	- 2			Height	+ 1/2	Height	+ 3 11/16	Height	+ 4 3/16
Rough Opening		Width	- 3 5/8	Width	- 2 3/4	Width	- 3/4			Width	+ 5 1/16	Width	+ 5 13/16
		Height	- 3 5/8	Height	- 2 1/2	Height	- 1/2			Height	+ 3 3/16	Height	+ 3 11/16
Unit Size		Width	- 8 11/16	Width	- 7 13/16	Width	- 5 13/16	Width	- 5 1/16			Width	+ 3/4
		Height	- 6 9/16	Height	- 5 11/16	Height	- 3 11/16	Height	- 3 3/16			Height	+ 1/2
Masonry Opening		Width	- 9 7/16	Width	- 8 9/16	Width	- 6 9/16	Width	- 5 13/16	Width	- 3/4		
		Height	- 7 1/8	Height	- 6 3/16	Height	- 4 3/16	Height	- 3 11/16	Height	- 1/2		

Legend Impact Series

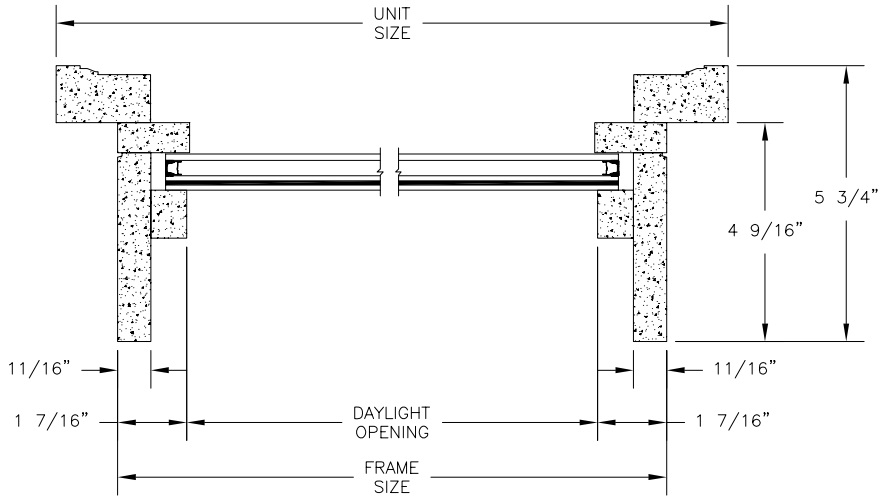
LEGEND RADIUS

SECTION DETAILS : DIRECT GLAZE

SCALE: 3" = 1'-0"



HEAD JAMB & SILL



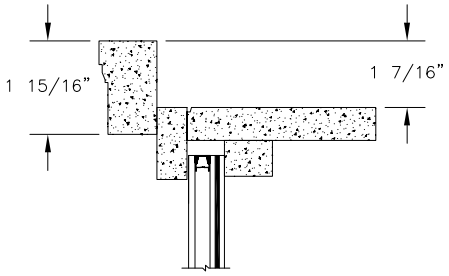
HALF ROUNDS, FULL ROUNDS & OVALS
JAMB

AVAILABLE INTERIOR TRIM PROFILES

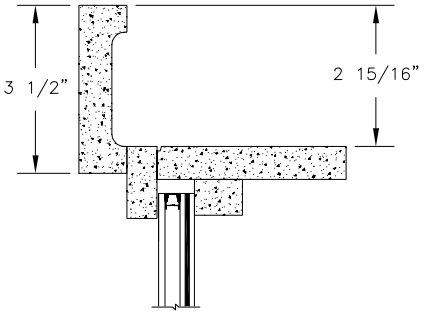
Legend Impact Series

LEGEND RADIUS

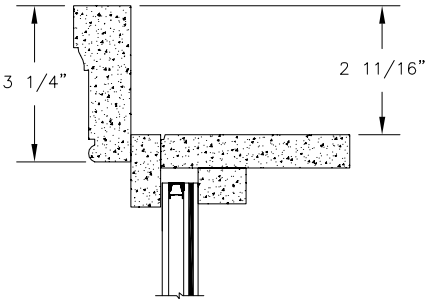
SECTION DETAILS : CASING OPTIONS
SCALE: 3" = 1'-0"



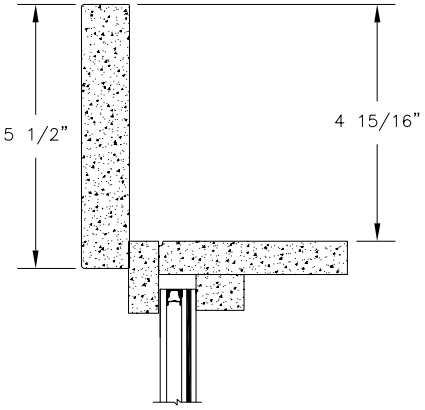
HEAD JAMB WITH
STANDARD 180 BRICKMOULD



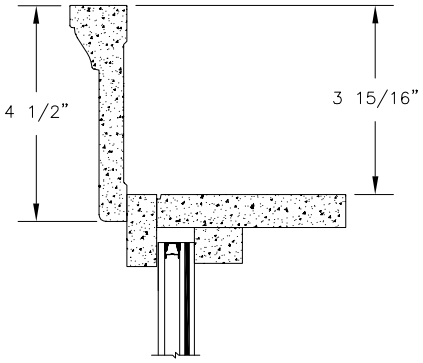
HEAD JAMB WITH
3 1/2" FLAT CASING



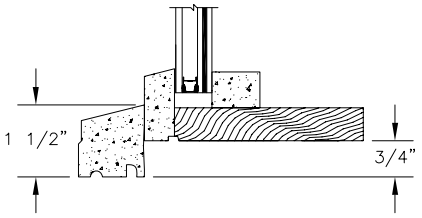
HEAD JAMB WITH
WILLIAMSBURG BRICKMOULD



HEAD JAMB WITH
5 1/2" FLAT CASING



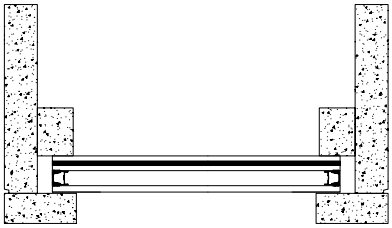
HEAD JAMB WITH
4 1/2" BACKBAND



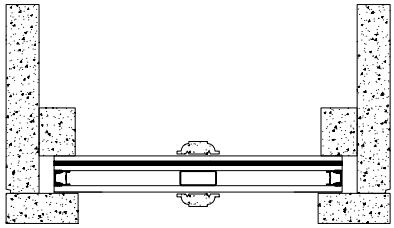
SILL WITH STANDARD SUBSILL

Legend Impact Series
LEGEND RADIUS

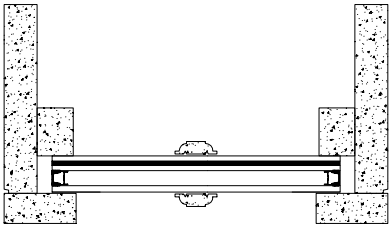
SECTION DETAILS : DIVIDED LITE OPTIONS
SCALE: 3" = 1'-0"



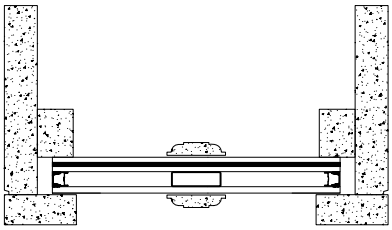
INSULATING GLASS



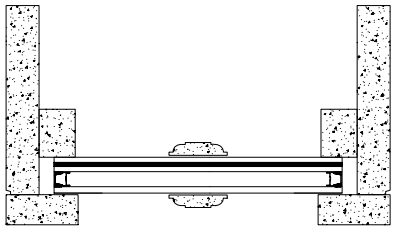
7/8" WDL
WITH INNERBAR



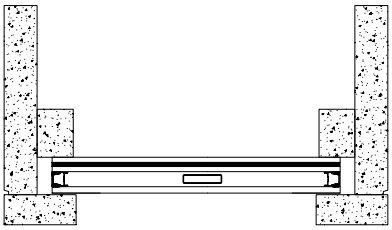
7/8" WDL
WITHOUT INNERBAR



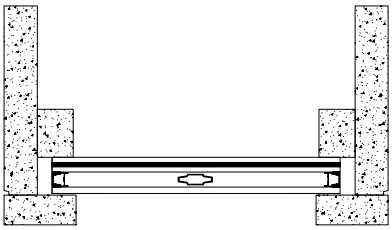
1 1/4" WDL
WITH INNERBAR



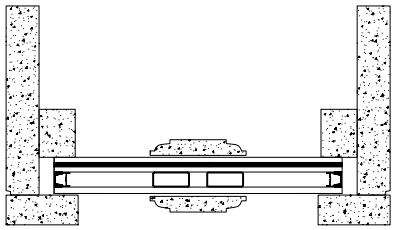
1 1/4" WDL
WITHOUT INNER BAR



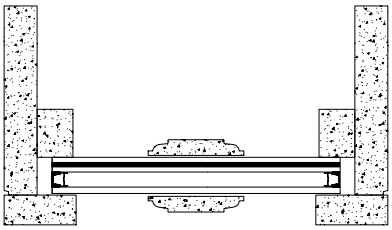
13/16" INNERGRILLE



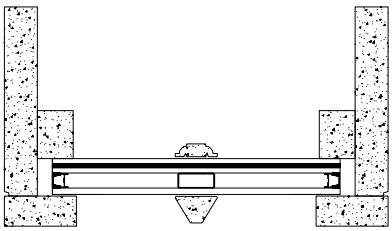
3/4" PROFILED INNERGRILLE



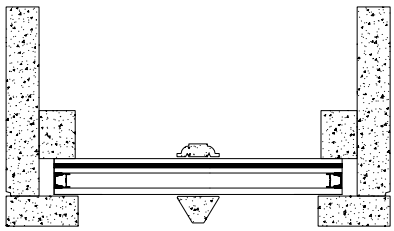
2" SIMULATED CHECK RAIL
WITH INNERBAR



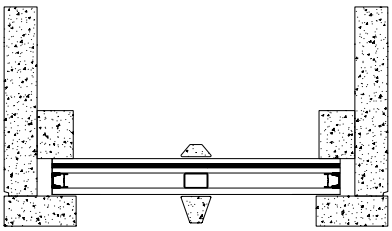
2" SIMULATED CHECK RAIL
WITHOUT INNERBAR



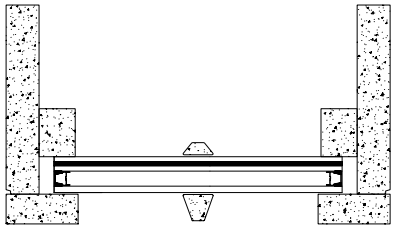
7/8" PUTTY GLAZE
WITH INNERBAR



7/8" PUTTY GLAZE
WITHOUT INNERBAR



5/8" PUTTY GLAZE
WITH INNERBAR



5/8" PUTTY GLAZE
WITHOUT INNERBAR