CHAPTER 5

ROUND TOPS

Unit Features 5.2
NFRC Values 5.3
Sizing Guidelines 5.4
Elevations 5.5
Round Top Assembly Examples 5.6
Grilles Between the Glass 5.7
Available Divided Lite Patterns 5.9
Section Details 5.10
Installation Suggestions 5.11

ATTENTION:

- Specifications and technical data are subject to change without notice.
- Allow 1/16″ (1.59 mm) tolerance on all measurements.
- For answers to technical questions about Integrity products you may call our Integrity Support Line: 1–800–587–2712.
- Website: www.integritywindows.com

ROUND TOPS

UNIT FEATURES

FRAME:
The frame exterior is made of fiberglass that is exceptionally resistant to thermal conductance. The interior is clear pine, kiln dried to a moisture content of 6–12% at time of fabrication. Water-repellent, preservative treated in accordance with WDMA I.S.4. Frame width is 4 9/16″ (116 mm). 4/4 clear pine interior stop is applied to all units. The interior is available in Pine bare wood or factory applied white finish. Ultrex frame is .094″ (2 mm) thick. Available in stone white, pebble gray, bronze, evergreen, cashmere, or ebony colors.

JAMB EXTENSION:
6 9/16″ (167 mm) and 6 13/16″ (173) jamb extension available factory applied or in lineal lengths for field application.

INSTALLATION:
Integral nailing fin. Optional installation brackets available for round tops without nailing fin intended for masonry application.

GLAZING:
All units are manufactured with a glass thickness varying from 11/16″ (17mm) to 1” (25mm) IG with LoĒ^2 272®, LoĒ^3 366®, or LoĒ 180™ coatings including argon gas fill. Tempered glass and/or obscure glass are available as an option. All glass is of a select quality complying with ASTM C 1036. Insulating glass is manufactured and tested to pass level ASTM E 2190 and is IGCC certified. The glazing seal is a silicone bedding on both interior and exterior surfaces.

WOOD REMOVABLE INTERIOR GRILLES:
Wood grilles are manufactured from clear pine with a 3/4″ (19mm) x 15/32″ (12mm) bar, available in standard sunburst patterns with an open hub. Pine bare wood or factory applied white finish.

INTERIOR / EXTERIOR SIMULATED DIVIDED LITES (SDL):
Interior bar: 7/8″ (22 mm) wide bars. Pine bare wood or factory applied white finish, to match interior. Exterior straight bar: Ultrex, 7/8″ (22 mm) wide bars. Exterior radius bar: ABS Hi, HDT 7/8″ (22 mm) wide bars, available in standard sunburst patterns with an open hub. Finish to match exterior. SDL with spacer bar available on standard sunburst patterns with an open hub. SDL with spacer bar is not available on solid or closed hub patterns.

GRILLES–BETWEEN–THE–GLASS (GBG):
GBGs are manufactured from aluminum in an 11/16″ (17 mm) contoured profile placed between two panes of glass, available in standard sunburst patterns with a solid hub. Exterior color determined by frame color. White interior.

This page intentionally left blank.
NFRC Values are now located on www.integritywindows.com.

ROUND TOPS

SIZING GUIDELINES

Round Top multiple assemblies can be factory mulled up to 3 units wide by 2 units high.

MAXIMUM ROUGH OPENING: 113 1/2″ (2883 mm) x 91 1/16″ (2313 mm) or 85″ (2159 mm) x 107 9/16″ (2732 mm)

NOTE: Individual Double Hung Round Tops and Double Hung Round top assemblies with jamb extension: ADD 1/4″ (6 mm) to WIDTH, and 1/8″ (3 mm) HEIGHT of Frame, Rough, and Masonry Opening sizes.

6 9/16″ (167 mm) and 6 13/16” (173mm), jambs available factory installed or for field application.

Quarter Round shapes require a Casement with a continuous head jamb.

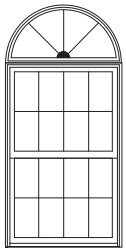
CALCULATING TOTAL ROUGH OPENING FOR ASSEMBLIES

WIDTH: ADD Frame Widths + 1″ (25 mm)

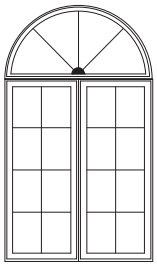
Tolerance = 1/2″ (13 mm) from frame to Rough Opening at left and right jamb.

HEIGHT: ADD Frame Heights + 1/2″ (13 mm)

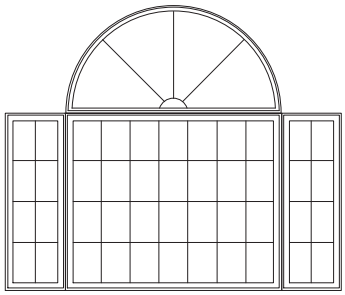
Tolerance = 1/2″ (13 mm) from Frame to Rough Opening at head jamb.



1 Unit Wide 2 Units High



2 Units Wide 2 Units High



3 Units Wide 2 Units High

MEASUREMENT CONVERSIONS				
Round Top	**WIDTH**		**HEIGHT**	
Rough Opening to	**Imperial**	**Metric**	**Imperial**	**Metric**
Masonry Opening	– 1/2″	– 13 mm	– 1/4″	– 6 mm
OM of Frame	– 1″	– 25 mm	– 1/2″	– 13 mm

ROUND TOPS

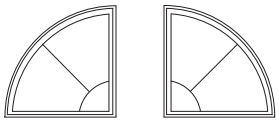
ELEVATIONS – QUARTER ROUND, TRUE HALF CIRCLE, AND ELLIPTICAL UNITS/TRANSOMS

REMOVABLE GRILLES AND SDL LITE PATTERNS

CASEMENT QUARTER ROUND

Mas. Opg.	**2–4 1/2**	(724)
Rgh. Opg.	**2–5**	(737)
Frame Size	**2–4**	(711)

2–4 1/4 (718)
2–4 1/2 (724)
2–4 (711)

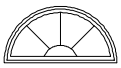


IQCIR29–1W CA

CASEMENT TRUE HALF CIRCLE

Mas. Opg.	**2–4 1/2**	(724)
Rgh. Opg.	**2–5**	(737)
Frame Size	**2–4**	(711)

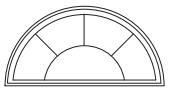
1–2 1/4 (362)
1–2 1/2 (368)
1–2 (356)



IRT29–1W CA

Mas. Opg.	**3–4 1/2**	(1029)
Rgh. Opg.	**3–5**	(1035)
Frame Size	**3–4**	(1016)

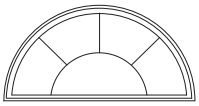
1–8 1/4 (514)
1–8 1/2 (521)
1–8 (508)



IRT21–2W CA

Mas. Opg.	**4–0 1/2**	(1232)
Rgh. Opg.	**4–1**	(1245)
Frame Size	**4–0**	(1219)

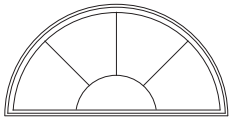
2–0 1/4 (616)
2–0 1/2 (622)
2–0 (610)



IRT25–2W CA

Mas. Opg.	**4–8 1/2**	(1435)
Rgh. Opg.	**4–9**	(1441)
Frame Size	**4–8**	(1422)

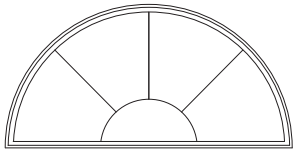
2–4 1/4 (718)
2–4 1/2 (724)
2–4 (711)



IRT29–2W CA

Mas. Opg.	**6–0 1/2**	(1842)
Rgh. Opg.	**6–1**	(1854)
Frame Size	**6–0**	(1829)

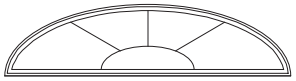
3–0 1/4 (921)
3–0 1/2 (927)
3–0 (914)



IRT25–3W CA

6–0 1/2	(1842)
6–1	(1854)
6–0	(1829)

1–6 1/4 (464)
1–6 1/2 (470)
1–6 (457)

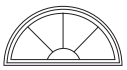


IRTCA 7318

DOUBLE HUNG TRUE HALF CIRCLE

Mas. Opg.	**2–6**	(762)
Rgh. Opg.	**2–6 1/2**	(775)
Frame Size	**2–5 1/2**	(749)

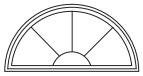
1–3 (381)
1–3 1/4 (387)
1–2 3/4 (375)



IRT30–1W DH

2–10	(864)
2–10 1/2	(876)
2–9 1/2	(851)

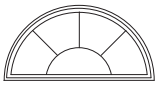
1–5 (432)
1–5 1/4 (438)
1–4 3/4 (425)



IRT34–1W DH

3–2	(965)
3–2 1/2	(978)
3–1 1/2	(953)

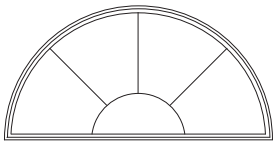
1–7 (483)
1–7 1/4 (489)
1–6 3/4 (476)



IRT38–1W DH

Mas. Opg.	**5–7 1/2**	(1715)
Rgh. Opg.	**5–8**	(1727)
Frame Size	**5–7**	(1702)

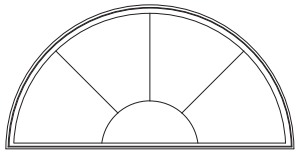
2–9 3/4 (857)
2–10 (864)
2–9 1/2 (851)



IRT34–2W DH

5–11 1/2	(1816)
6–0	(1829)
5–11	(1803)

2–11 3/4 (908)
3–0 (914)
2–11 1/2 (902)



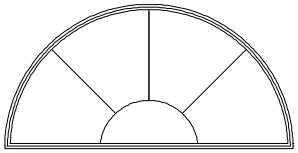
IRT36–2W DH

Individual Double Hung Round Tops and Double Hung Round Top assemblies with jamb extension, ADD 1/4″ to WIDTH, and 1/8″Height of Frame, Rough, and Masonry Opening sizes.

DOOR TRUE HALF AND ELLIPTICAL

Mas. Opg.	**5–11 1/2**	(1816)
Rgh. Opg.	**6–0**	(1829)
Frame Size	**5–11**	(1803)

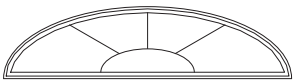
Rgh. Opg. **2–11 3/4** (908)
Mas. Opg. **3–0** (914)
Frame Size **2–11 1/2** (902)



IRTDR 7236

5–11 1/2	(1816)
6–0	(1829)
5–11	(1803)

1–6 1/4 (464)
1–6 1/2 (470)
1–6 (457)



IRTDR 7218

NOTE:

See Casement Chapter and Double Hung Chapter for additional information.

See page 5.6 for standard GBG pattern examples.

Imperial and metric dimensions are shown. Metric dimensions are in millimeters.

All units viewed from exterior.

The available SDL lite patterns match the current wood grille patterns. In addition, the following units will have multiple lite cut patterns to align with more assemblies.

The available SDL lite cuts match the current wood grille patterns with a few additions.

IRT 2502 (IRT 25–2W CA)

IRT 2502–ICA/IAWN 25–2W Default
IRT 2502–ICAP 49–1W

IRT 2902 (IRT 29–2W CA)

IRT 2902–ICA/IAWN 29–2W Default
IRT 2902–ICAP 57–1W

IRT 2503 (IRT 25–3W CA)

IRT 2503–ICA/IAWN 25–3W Default
IRT 2503–ICAP 37–2W
IRT 2503–ICAP 73–1W

IRTDR 7236

IRTDR 7236 SPD Default
IRTDR 7236 SFD
IRTDR 7236 IFD

IRTDR 7218

IRTDR 7218 SPD Default
IRTDR 7218 SFD
IRTDR 7218 IFD

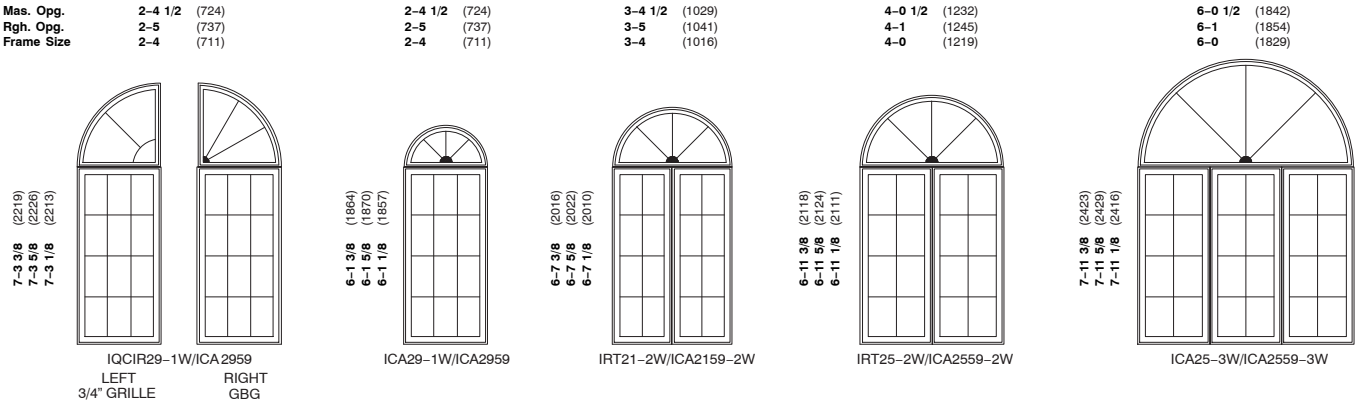
IRTCA 7318

IRTCA 7318–ICA/IAWN 25–3W Default
IRTCA 7318–ICAP 37–2W
IRTCA 7318–ICAP 73–1W

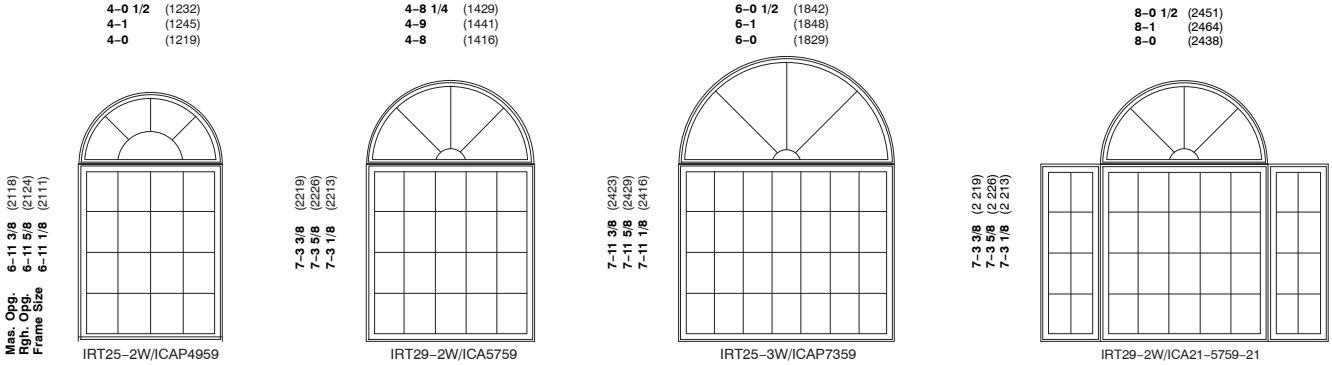
ROUND TOP EXAMPLES

Assemblies below represent factory mulled round tops to Casement or Double Hung units. Door round tops are available factory mulled, check with your Integrity representative for more information. Assemblies available using various standard heights for individual units below Round Top. See individual chapters for additional information. Standard grille and SDL patterns within Round Top units differ between 3/4″ removable grille and grilles between glass, see below for examples.

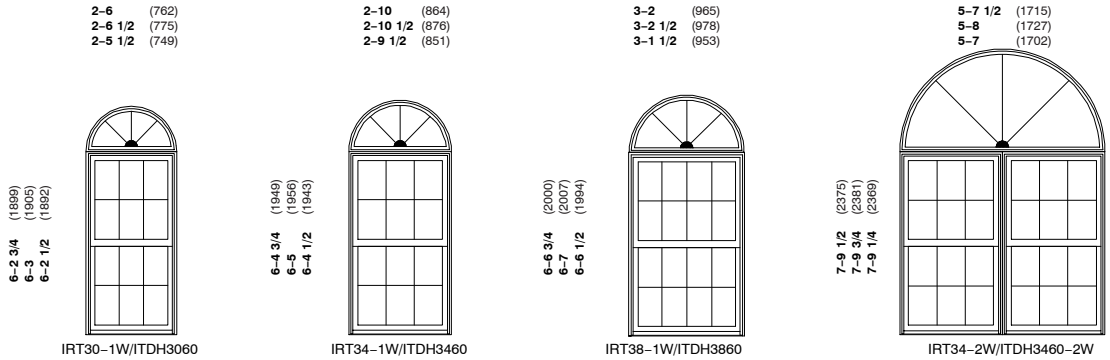
ROUND TOP OVER CASEMENT UNITS WITH GRILLES BETWEEN THE GLASS



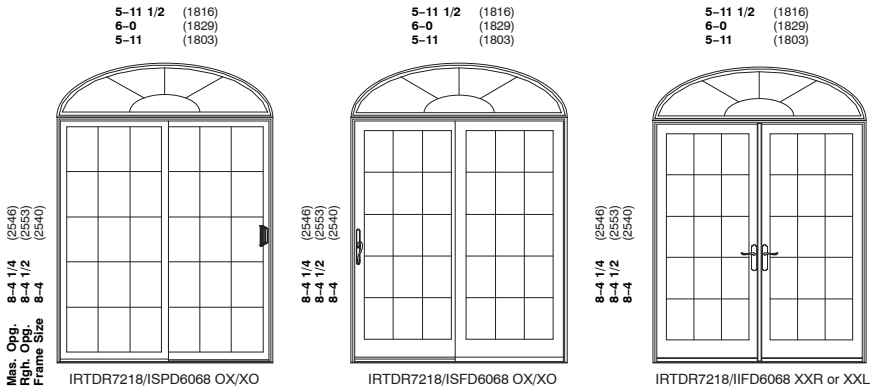
ROUND TOP OVER CASEMENT PICTURE UNIT WITH 3/4″ REMOVABLE GRILLES AND 7/8″ SDL



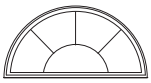
ROUND TOP OVER DOUBLE HUNG WITH GRILLES BETWEEN THE GLASS



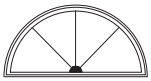
ROUND TOP OVER DOOR WITH 3/4″ REMOVABLE GRILLES AND 7/8″ SDL



STANDARD SDL AND GRILLE PATTERNS



Removable Grille or SDL
5 Radius Lites – Open Hub



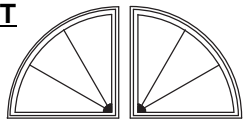
Grille Between Glass
4 Radius Lites – Solid Hub

NOTE:
For assembly size guidelines see page 5.3. Imperial and metric dimensions are shown. Metric dimensions are in millimeters.

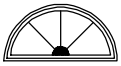
ROUND TOPS

ROUND TOP EXAMPLES / GRILLES–BETWEEN–THE–GLASS

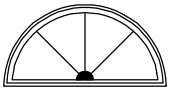
CASEMENT



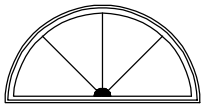
IQCIR 29–1W CA (L OR R)



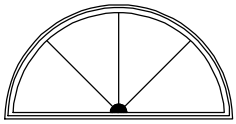
IRT 29–1W CA



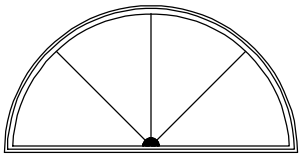
IRT 21–2W CA



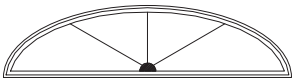
IRT 25–2W CA



IRT 29–2W CA

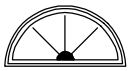


IRT 25–3W CA

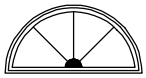


IRTCA 7318

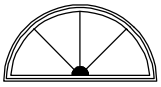
DOUBLE HUNG



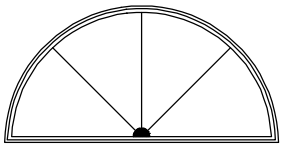
IRT 30–1W DH



IRT 34–1W DH

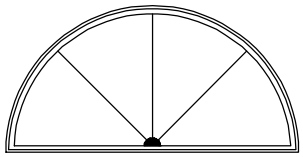


IRT 38–1W DH

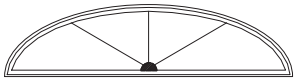


IRT 34–2W DH

DOOR

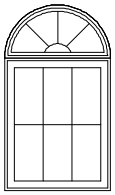


IRTDR 7236

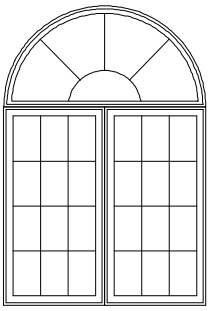


IRTDR 7218

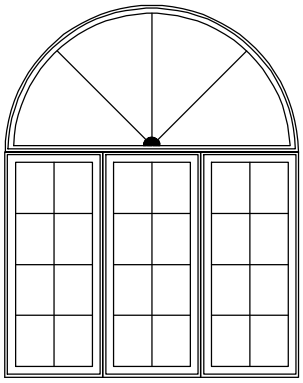
MULTIPLE ASSEMBLIES (examples)



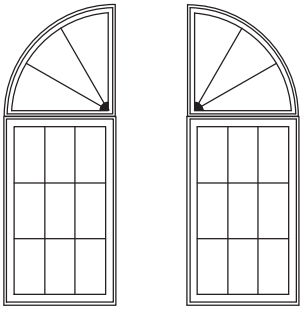
IRT 29–1W ICA 2935



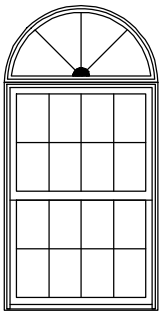
IRT 29–2W ICA 2955–2W



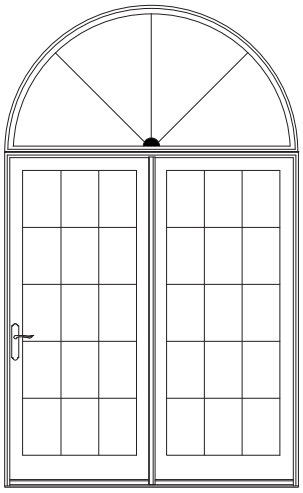
IRT 25–3W ICA 2555–3W



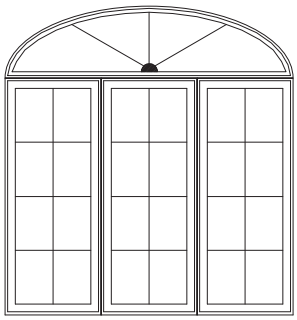
IQCIR 29–1W ICA 2947



IRT 38–1W ITDH 3856



IRTDR 7236 / IIFD 6068
(available field mulled only)



IRTCA 7318 / ICA 2559–3W

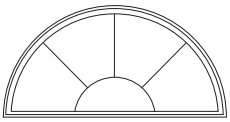
ROUND TOPS

AVAILABLE DIVIDED LITE PATTERNS

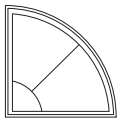
CN	Wood Grille	Unit Alignment	GBG		Unit Alignment	SDL	Unit Alignment
ROUND TOP per unit – Sunburst Lite Cut							
IQCIR 29–1W CA	Open Hub 1 Spoke	ICA 29–1W	Solid Hub 2 Spokes	Open Hub 2 Spokes	ICA 29–1W	Open Hub 1 Spoke	ICA 29–1W
IRT 29–1W CA	Open Hub 3 Spokes	ICA 29–1W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ICA 29–1W	Open Hub 3 Spokes	ICA 29–1W
IRT 21–2W CA	Open Hub 3 Spokes	ICA 21–2W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ICA 21–2W	Open Hub 3 Spokes	ICA 21–2W
IRT 25–2W CA	Open Hub 3 Spokes	ICA 25–2W ICAP 49W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ICA 25–2W ICAP 49W	Open Hub 3 Spokes	ICA 25–2W ICAP 49W
IRT 29–2W CA	Open Hub 3 Spokes	ICA 29–2W ICAP 57W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ICA 29–2W ICAP 57W	Open Hub 3 Spokes	ICA 29–2W ICAP 57W
IRT 25–3W CA	Open Hub 3 Spokes	ICA 25–3W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ICA 25–3W ICA 37–2W	Open Hub 3 Spokes	ICA 25–3W ICA 37–2W
IRTCA 7318	Open Hub 3 Spokes	ICA 25–3W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ICA 25–3W ICA 37–2W	Open Hub 3 Spokes	ICA 25–3W ICA 37–2W
IRT 30–1W DH	Open Hub 3 Spokes	ITDH 30–1W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ITDH 30–1W	Open Hub 3 Spokes	ITDH 30–1W
IRT 34–1W DH	Open Hub 3 Spokes	ITDH 34–1W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ITDH 34–1W	Open Hub 3 Spokes	ITDH 34–1W
IRT 38–1W DH	Open Hub 3 Spokes	ITDH 38–1W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ITDH 38–1W	Open Hub 3 Spokes	ITDH 38–1W
IRT 34–2W DH	Open Hub 3 Spokes	ITDH 34–2W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ITDH 34–2W	Open Hub 3 Spokes	ITDH 34–2W
IRT 36–2W DH	Open Hub 3 Spokes	ITDH 36–2W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ITDH 36–2W	Open Hub 3 Spokes	ITDH 36–2W
IRTDR/DH 7236	Open Hub 3 Spokes	ITDH 36–2W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ITDH 36–2W	Open Hub 3 Spokes	ISPD, ISFD, IIFD, IOFD CN 60W
IRTDR/DH 7218	Open Hub 3 Spokes	ITDH 36–2W	Solid Hub 3 Spokes	Open Hub 3 Spokes	ITDH 36–2W	Open Hub 3 Spokes	ISPD, ISFD, IIFD, IOFD CN 60W

Notes:

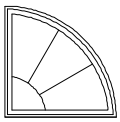
- Round Top Wood Grille to align with picture unit Wood Grille is available only when ordered in a factory mulled unit.
- Direct Glaze Round Tops with Wood Grilles, GBGs, or SDL will only align with the lite cut of the unit it is intended to be mulled with.



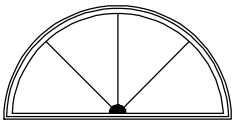
Open Hub, 3 Spokes Sunburst Lite Cut Wood Grilles, SDL and GBG



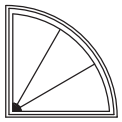
Open Hub, 1 Spoke Sunburst Lite Cut Wood Grilles, SDL



Open Hub, 2 Spokes Sunburst Lite Cut GBGs

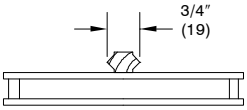


Solid Hub, 3 Spokes Sunburst Lite Cut GBGs

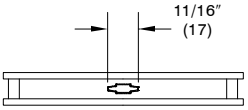


Solid Hub, 2 Spokes Sunburst Lite Cut GBGs

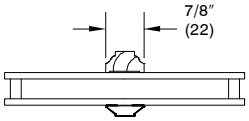
DIVIDED LITE OPTIONS



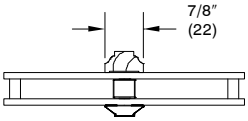
Wood Removable Grille



Aluminum Grille Between Glass



Simulated Divided Lite

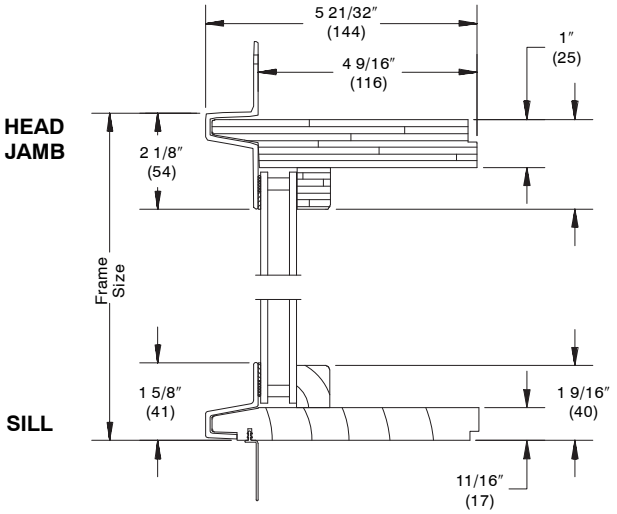


Simulated Divided Lite with Spacer Bar – Open Hub only

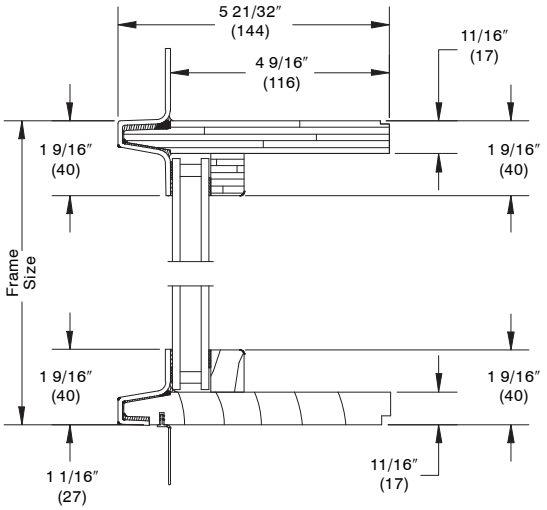
ROUND TOPS

SECTION DETAILS Scale 3″ = 1′ 0″

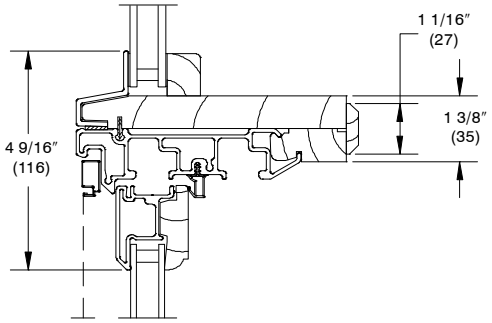
CASEMENT



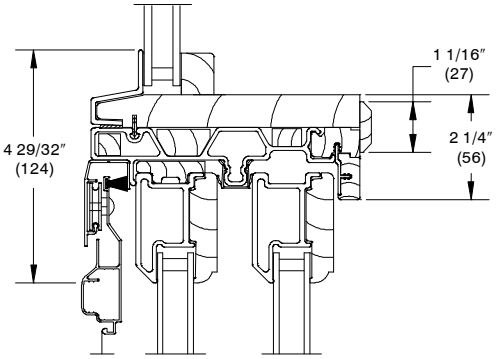
DOUBLE HUNG/PATIO DOOR



MULLIONS

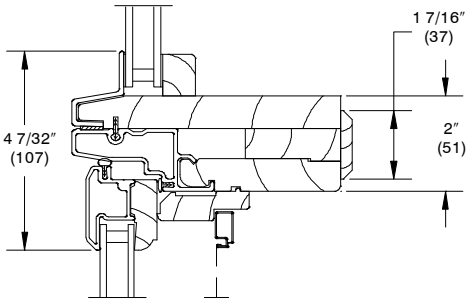


INTEGRITY DOUBLE HUNG ROUND TOP
OVER INTEGRITY DOUBLE HUNG OPERATOR

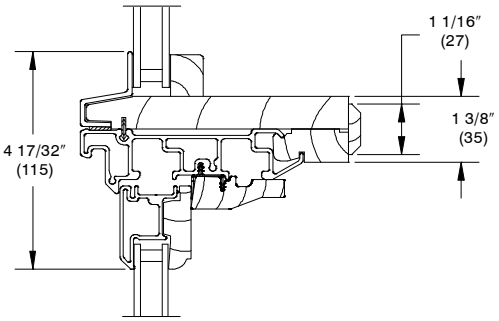


ROUND TOP TRANSOM
OVER PATIO DOOR
****FIELD ASSEMBLY TRUE HALF ONLY****

NOTE:
Only Elliptical factory mulled.

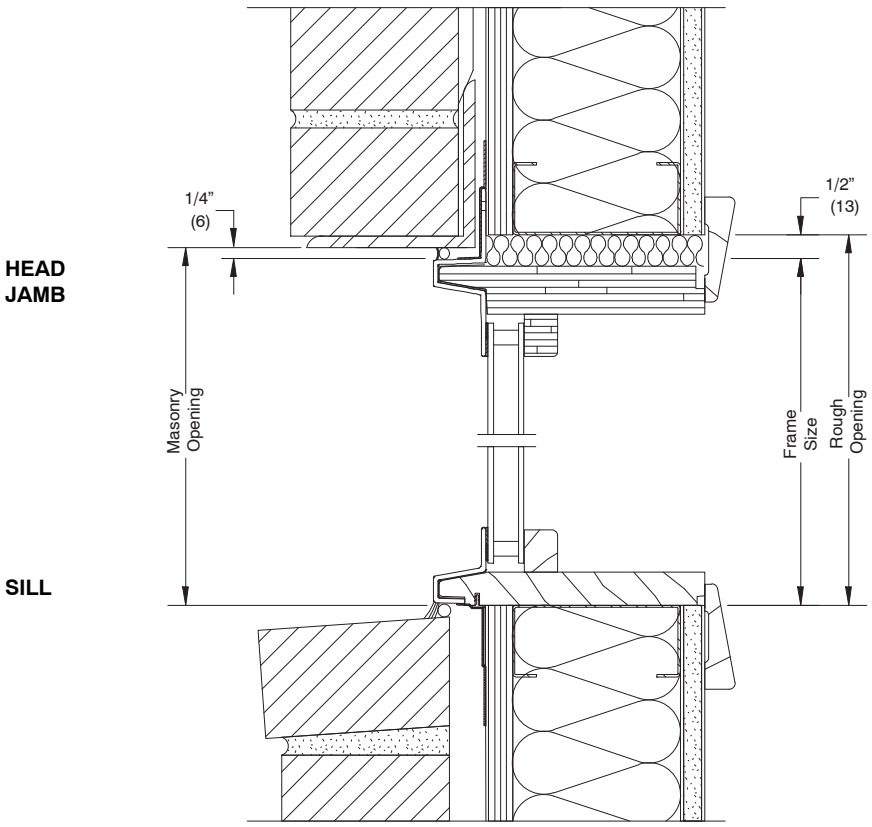


ROUND TOP
OVER OPERATING CASEMENT



ROUND TOP
OVER DOUBLE HUNG PICTURE UNIT

CASEMENT ROUND TOP



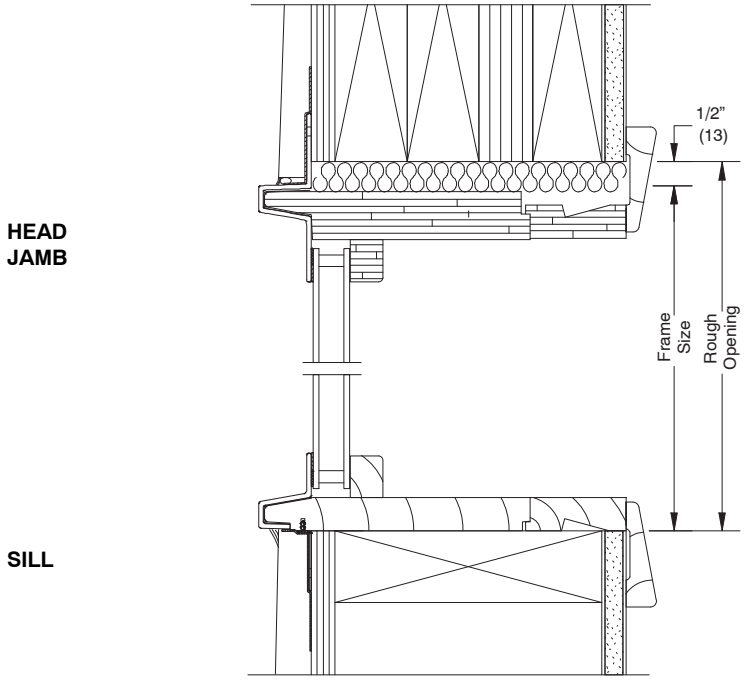
BRICK VENEER WITH STEEL FRAME CONSTRUCTION

NOTE:
The above wall sections represent typical wall conditions, these details are not intended as installation instructions. Please refer to the installation instructions provided with the purchased units.

ROUND TOP

INSTALLATION SUGGESTION Scale 3″ = 1′ 0″

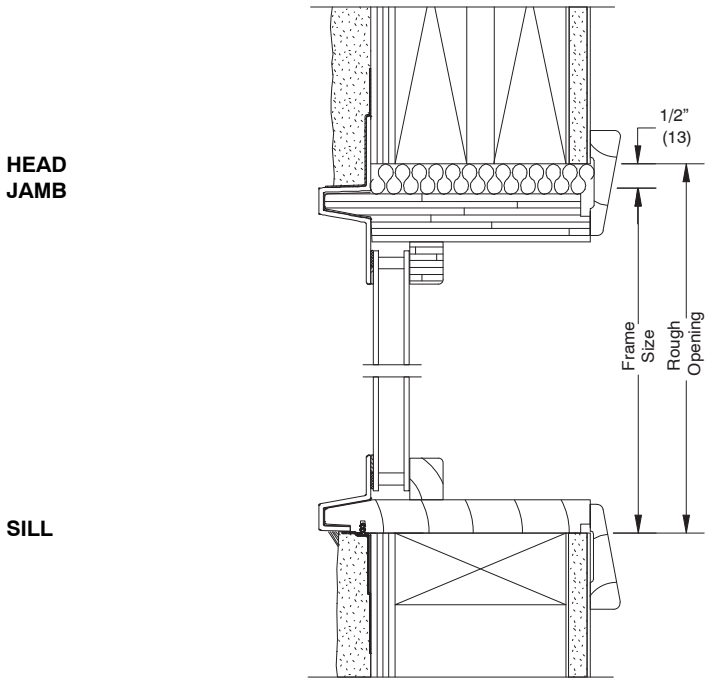
CASEMENT ROUND TOP



WOOD SIDING WITH 2X6 FRAME CONSTRUCTION

NOTE: Round Top unit shown with jamb extension

CASEMENT ROUND TOP



STUCCO WITH 2X4 FRAME CONSTRUCTION

NOTE:
The above wall sections represent typical wall conditions, these details are not intended as installation instructions. Please refer to the installation instructions provided with the purchased units.