



ARCHITECTURAL
STEEL WINDOWS

AMERICA'S MOST DIVERSIFIED STEEL WINDOW & DOOR MANUFACTURER

RTS430
THERMALLY BROKEN STEEL

DELICATE SIGHT LINES. ENERGY EFFICIENT.



PRODUCING STEEL WINDOWS FOR OVER 30 YEARS IN THE USA

OptimumWindow.com



THIN SIGHT LINE THERMALLY BROKEN STEEL

Thermally broken steel windows and doors from a name that you can trust, ***Optimum Window Manufacturing Corp.*** Optimum Window's thin sight lines thermally broken steel windows and doors are durable and tested to surpass the competition in air, water and structural performance.

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Optimum Window Manufacturing Corp: Where style meets functionality.

Optimum Window is a family-owned business nestled in the town of Ellenville, in upstate NY. Established in 1985, our President, Candido Perez launched this ambitious enterprise in the Steel Window industry and has since become the largest and most diversified manufacturer of Fire-Rated and Architectural steel windows in the United States in this ever-evolving world.

Making continuous strides in the fenestration industry has been a consistent goal of Optimum Window. We utilize state-of-the-art technology to maintain the quality, precision and craftsmanship our clients have come to depend on over the years. We have also made becoming a "greener" institution a priority, while taking initiatives to reduce waste and use 100% recycled steel for our multitude of versatile systems.

We pride ourselves on custom making each unit as ordered in house at our upstate facility so that every piece features the unique perspective of each of our clients. Our Manhattan Design Studio also provides an opportunity for us to showcase an array of options to those that may wish to get a better idea of Optimum Window's endless design possibilities. Whether your project is residential, commercial or even a landmark application, we can create the steel windows and doors that would best meet your needs.

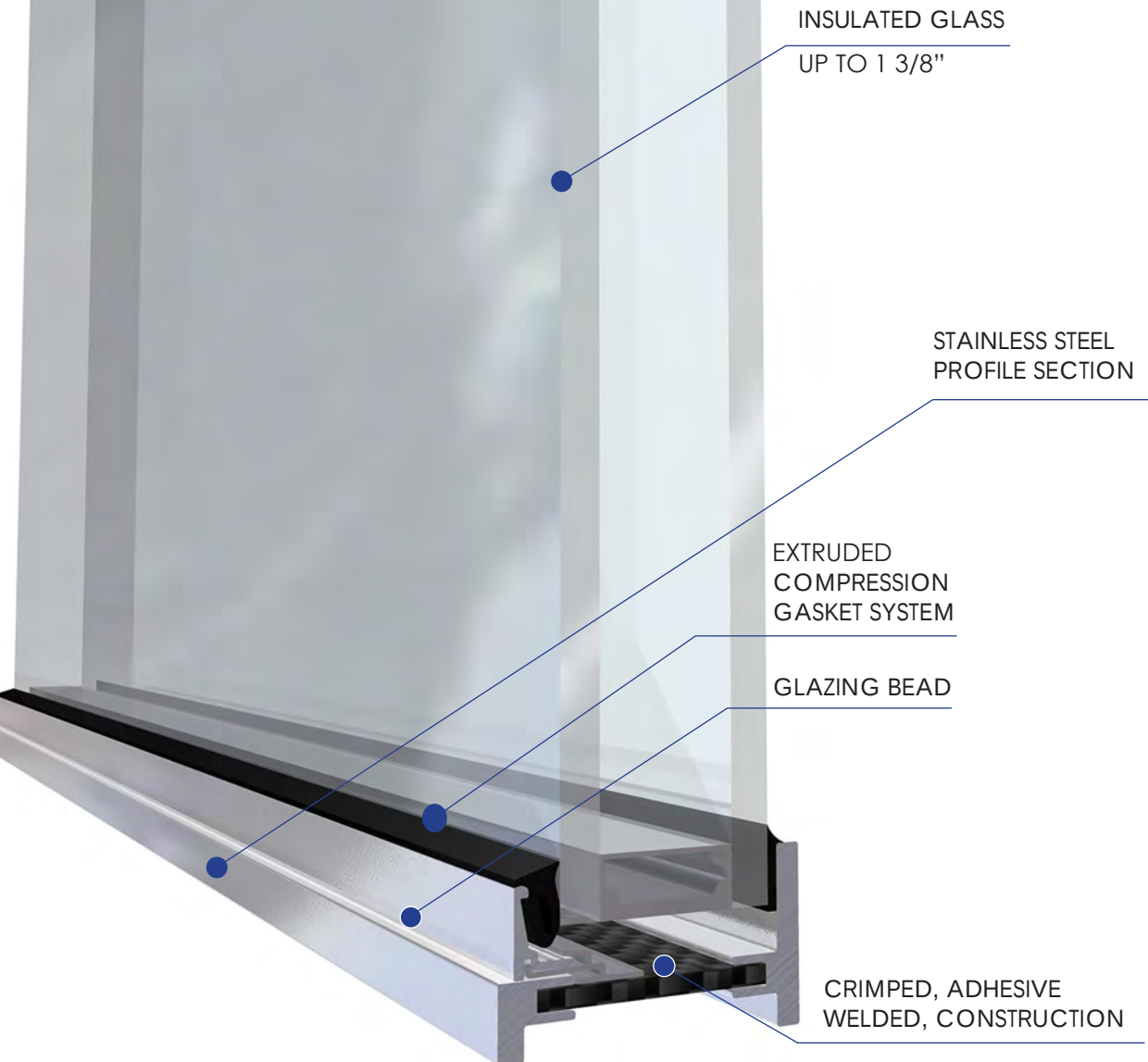
Another source of Optimum Window's pride can be traced back to editorials in such publications as Architectural Digest, Elle Design and Mountain Living, just to name a few. We are also happy to boast that we ship our products nationwide and beyond. Through creative ingenuity from our fantastic team, the use of custom-made specifications on a per job basis allows for maximum innovation to shine through on all collaborations, be it with architects, builders, and even homeowners.



RTS430

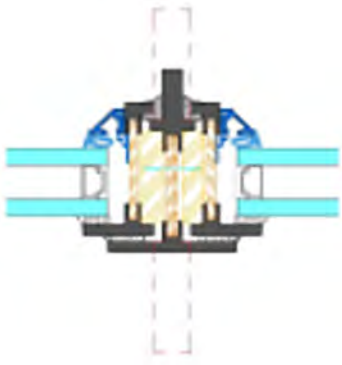
Optimum's Thermally Broken Technology in the form of the RTS430 line, is renowned for its thin sight lines and beauty. The RTS430 also offers reliability, versatility and thermal efficiency. Having surpassed vigorous testing requirements, the RTS430 is NFRC Certified. Optimum continues to work with architects that require custom designs for their applications, bringing performance and structural excellence together seamlessly; combining beauty and style with strength and reliability through the use of new computerized machinery for cutting, welding, punching, etc. All products are custom-made per specifications and approved shop drawings.

THERMALLY BROKEN STEEL



HANDCRAFTED HISTORICAL STEEL PERFECTION

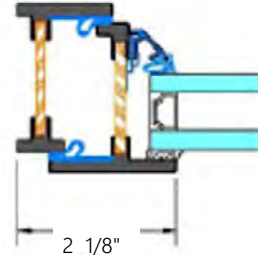
STRUCTURAL MULLION



FIXED WINDOW



OPERABLE WINDOW & DOOR



Having been featured in Architectural Digest for numerous appearances as well as other prestigious publications, Optimum Window Manufacturing has proven itself time and time again, offering the very best in steel window and door selections. Our rigorous testing ensures that our customers are receiving premium products. Mechanically bonded rather than utilizing glue adhesive like other window companies, our Thermally Broken Windows offer years of service, as well as timeless beauty and dynamic strength.





RTS430 Series Thermally broken steel windows and doors manufactured in Ellenville, New York by skilled craftpeople. It provides great energy performance that meets NFRC Rating and exceeds on steel performance (Air & Water) .

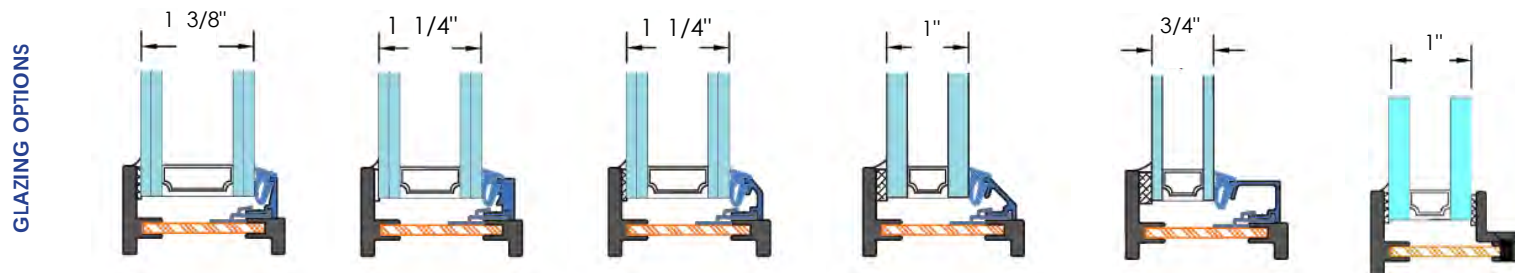
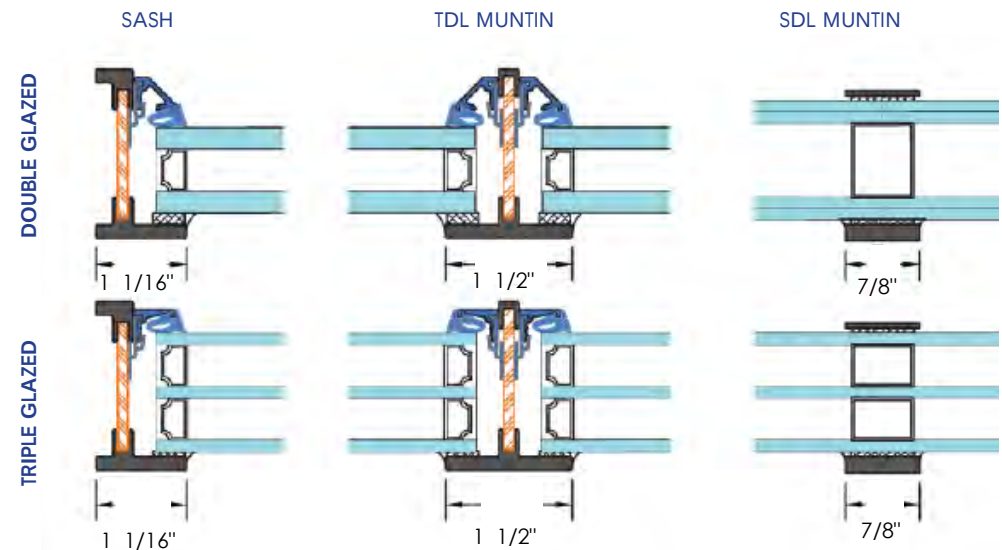




DESIGN FLEXIBILITY

GLAZING OPTIONS:

- **DUAL GLAZED**
1/4" individual panes with 5/8" air space for 1 1/8" over all glass thickness (**standard product)
- **TRIPLE GLAZE**
1 3/8" over all glass thickness
- **MUNTINS**
available in either simulated Divided Lite (SDL) or True Divided Lite (TDL)



PERFORMANCE



Out-swing Casement Window
Steel Window Triple Glazed
3mm Cardinal Lo E 366
3mm Cardinal Lo E 180
3mm Cardinal i 81

ENERGY PERFORMANCE RATINGS

U-Factor (U.S./I.P.)	Solar Heat Gain Coefficient
Casement: 0.24	Casement: 0.18
Projected: 0.24	Projected: 0.18
Fixed: 0.19	Fixed: 0.21
Door: 0.21	Door: 0.19

ADDITIONAL PERFORMANCE RATINGS

Visible Transmittance	Condensation Resistant
Casement: 0.39	Casement: 48
Projected: 0.39	Projected: 48
Fixed: 0.47	Fixed: 53
Door: 0.43	Door: 48

Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environment conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use.

Consult manufacturer's literature for other product performance information.

www.nfrc.org

MODEL/TYPE: "RTS-430" Steel Out-Swinging Casement

TITLE	SUMMARY OF RESULTS	
Air Filtration Per Area 75 Pa (1.57 psf)	0.15 L/s/m ² (0.03 cfm/ft ² mea-	Casement 0.03 Fixed 0.01
Air Filtration Per Area 300 Pa (6.24 psf)	0.20 L/s/m ² (0.04 cfm/ft ² measured)	Casement 0.04 Fixed 0.01
Water Penetration Resistance	290 Pa (6.0 psf)	Casement 6.0 Fixed 12.0
Design Pressure	±3360 Pa (70.0 psf)	Casement 70 Fixed 80
Uniform Load Structural Test	±5040 Pa (105.0 psf)	Casement 105 Fixed 120



AMAZINGLY ENERGY EFFICIENT

THERMAL PERFORMANCE

- NFRC Certified
- U-Values as low as .19
- The best Energy Performance in the steel window industry rivaling high performance wood windows

CONDENSATION RESISTANCE

- Thermally Broken design greatly reduces the chance of condensation seen with most steel and aluminum window constructions
- Product has gone through condensation resistance "CR" testing with results similar to high-performance windows.

RECYCLED STAINLESS STEEL CONSTRUCTION

- Steel is a very eco-friendly product. Optimum's aim is to provide the best windows & doors while protecting our environment.

THIRD PARTY TESTING

- Our product has gone through extensive independent engineering testing for air Infiltration, water Infiltration, and structural testing.
 - Optimum Window Mfg. meets or exceeds steel windows industry standards in all of these categories
-



RTS430

GENERAL STEEL SPECIFICATIONS

MATERIAL: 304 stainless steel

GLAZING

TYPE: Single / Double / Triple

GLASS: 3/16 Solar Ban 70 3/16 Sungate 500 Argon Gas .24 SPACER:

Warm-edge, Dark Bronze

THICKNESS: 1 1/8 to 1 3/8 Insulated Glass

GLAZING FRAME

ORIENTATION: Exterior (interior available)

DETAIL: Sloped Bevel (other glazing beads available)

MUNTIN: Specify: None, SDL, TDL

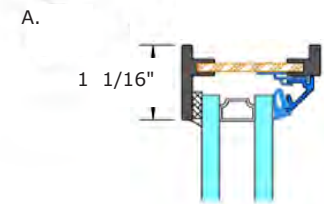
FRAME DEPTH: 1 7/8"

FINISH: Super Durable Powder Coating /Epoxy Primer, Specify color

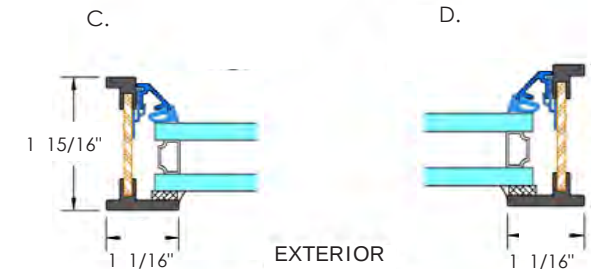
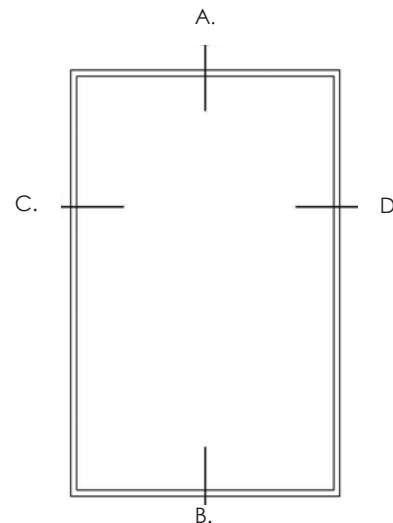
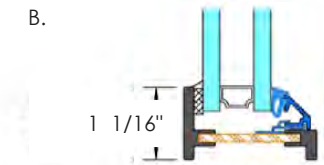


RTS430-FX

FIXED WINDOW

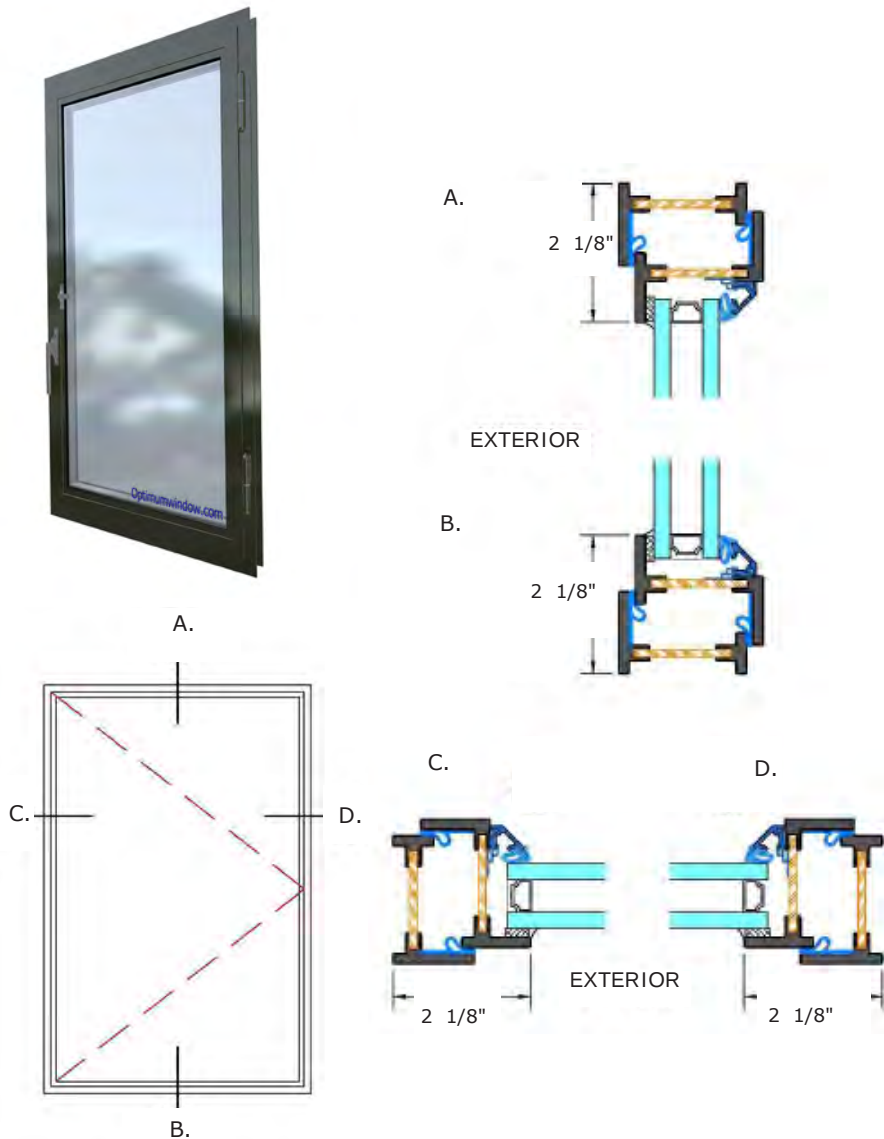


EXTERIOR



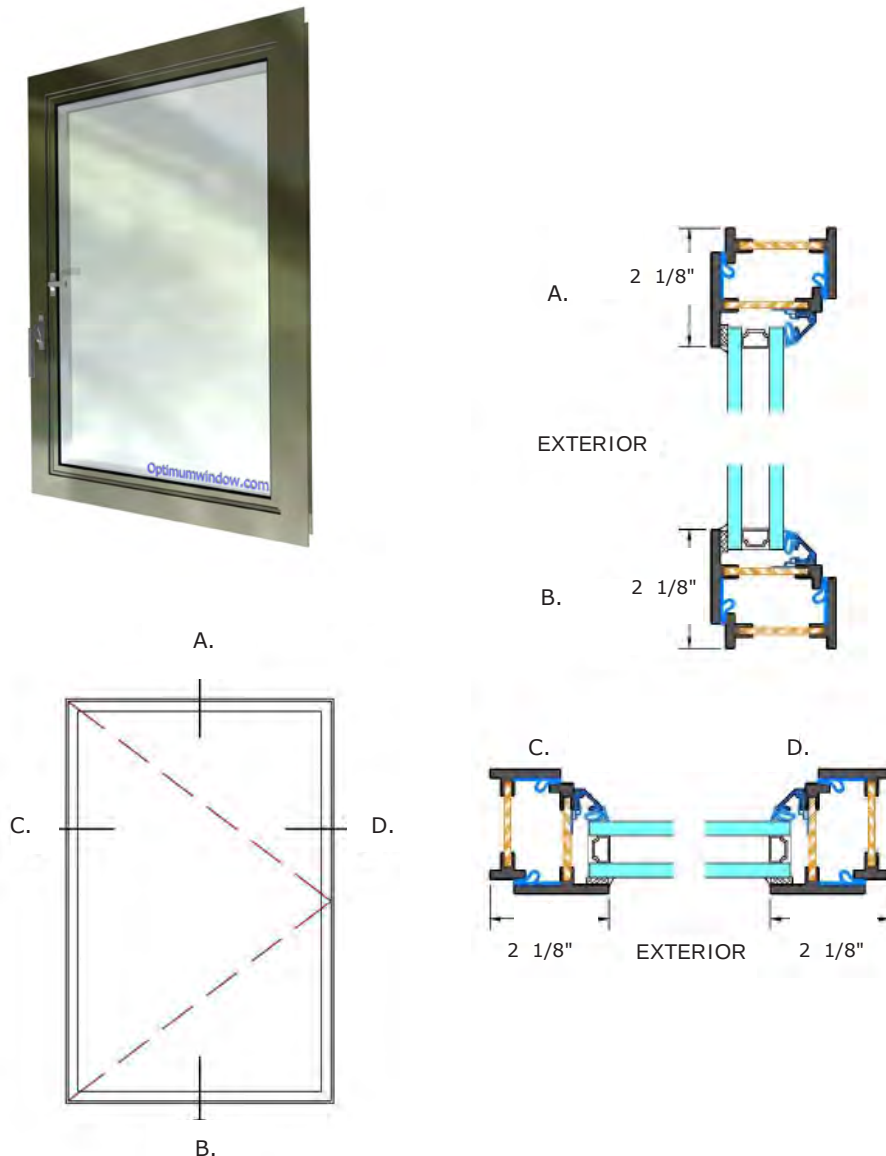
RTS430-IC

IN-SWING CASEMENT



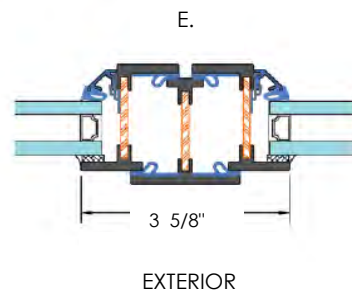
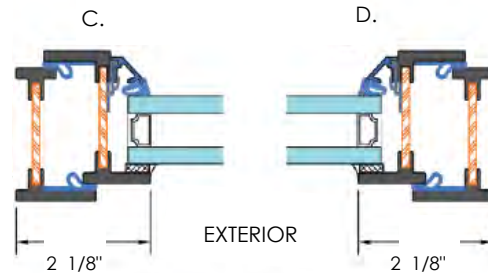
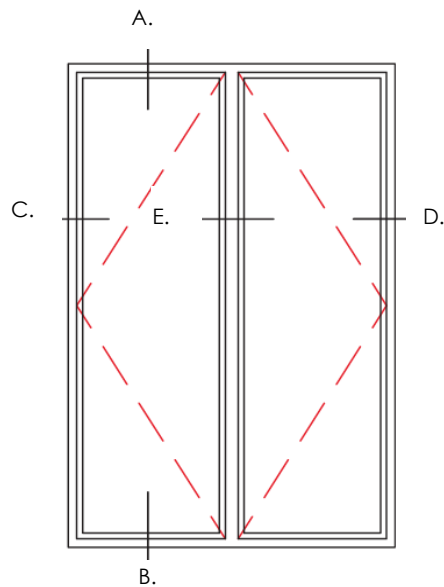
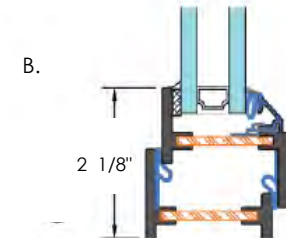
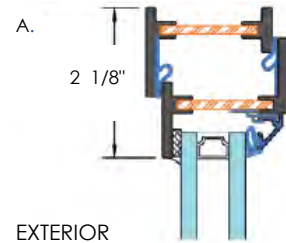
RTS430-OC

OUT-SWING CASEMENT



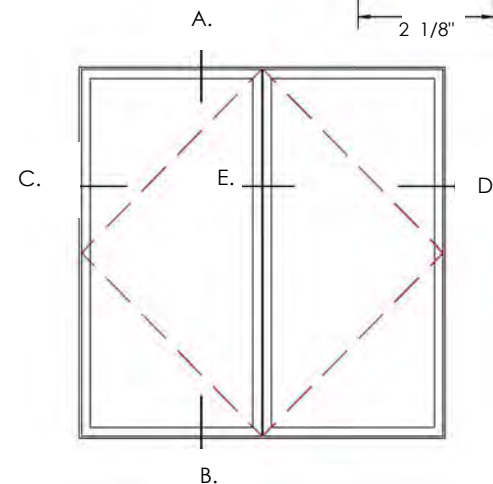
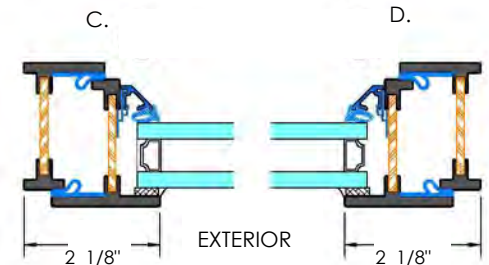
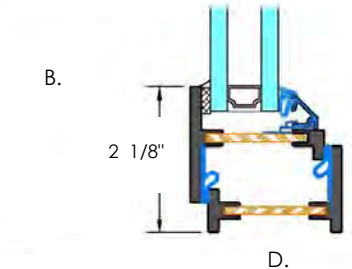
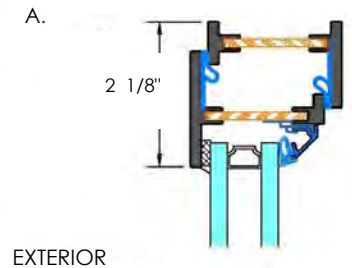
RTS430-IC

IN-SWING TWIN CASEMENT



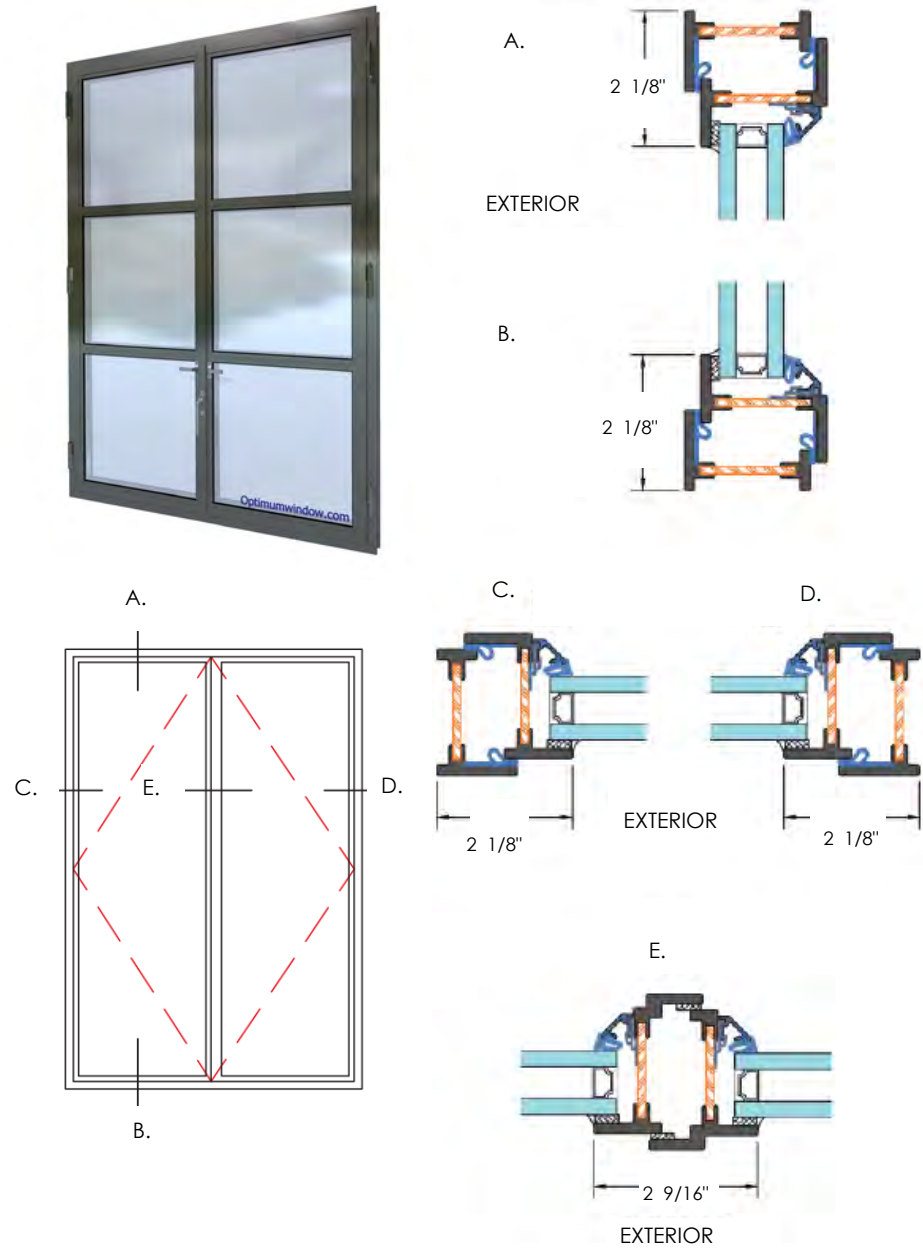
RTS430-OC

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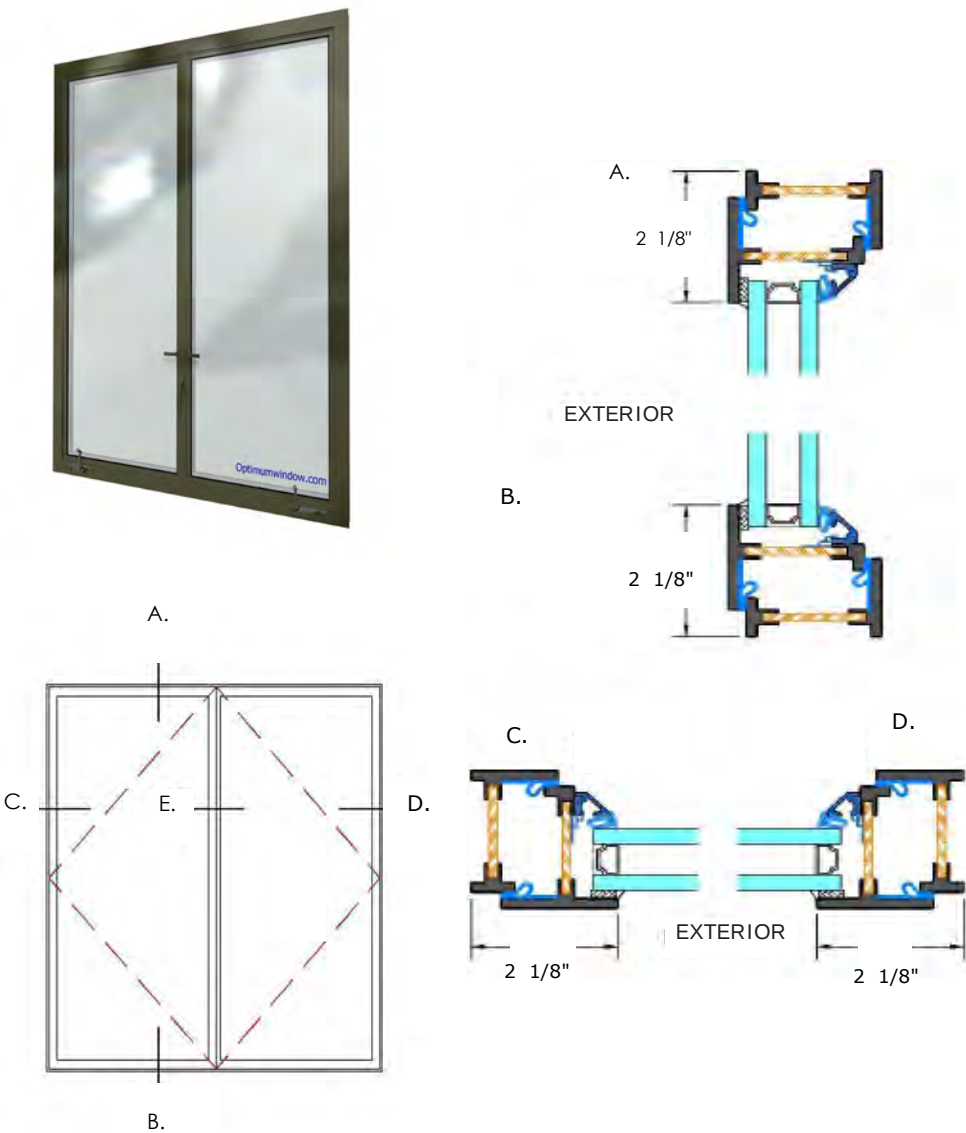
RTS430-IC

IN-SWING FRENCH CASEMENT



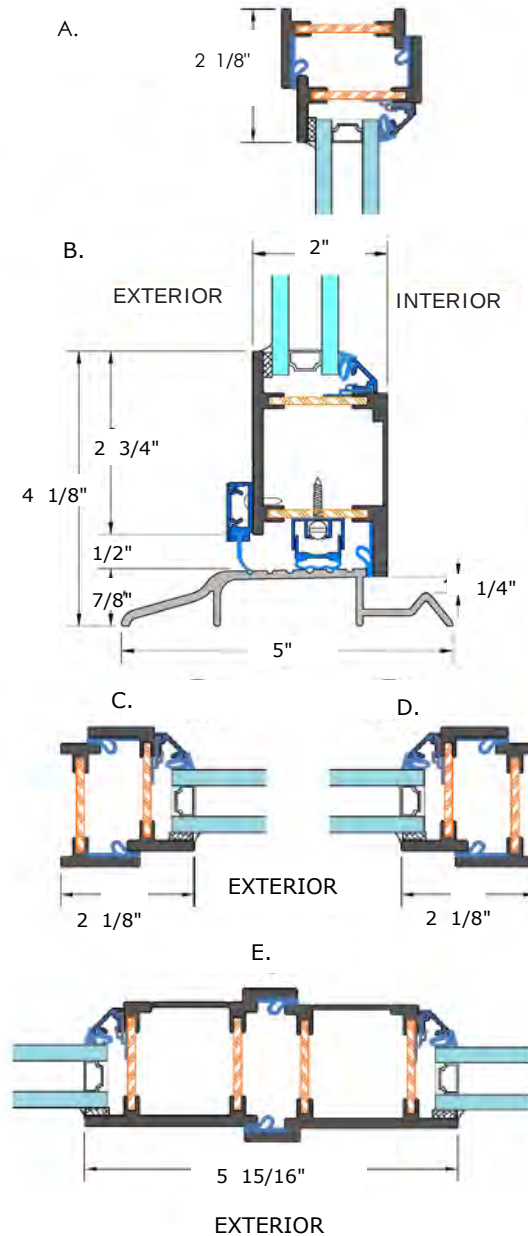
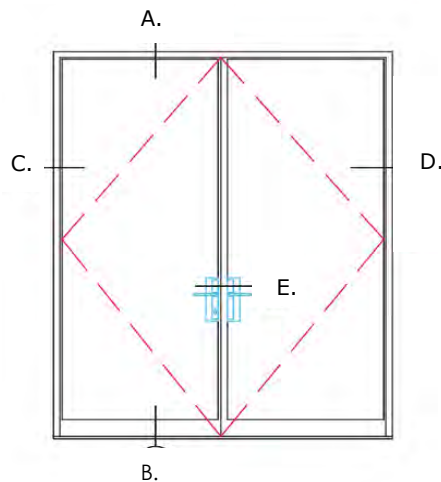
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OUT-SWING FRENCH CASEMENT



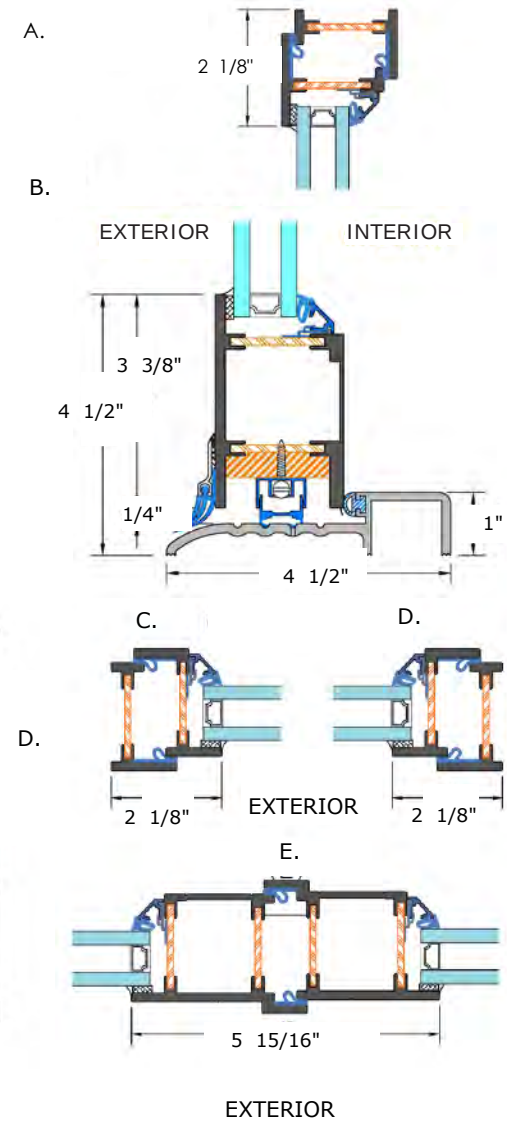
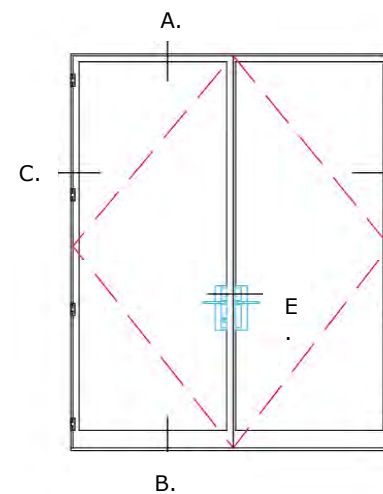
RTS430-ID

IN-SWING FRENCH DOOR



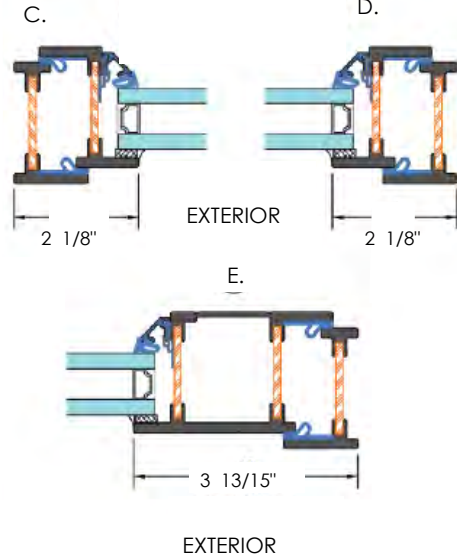
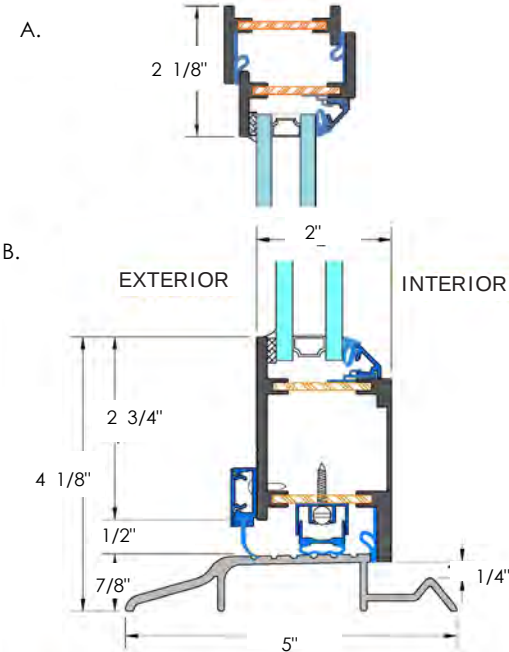
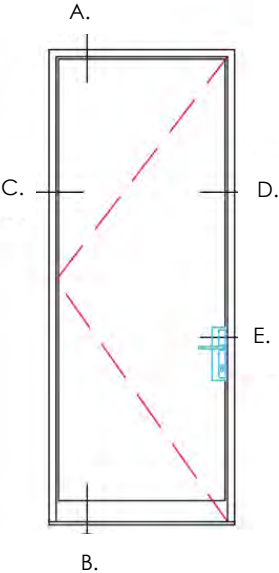
RTS430-OD

OUT-SWING FRENCH DOOR



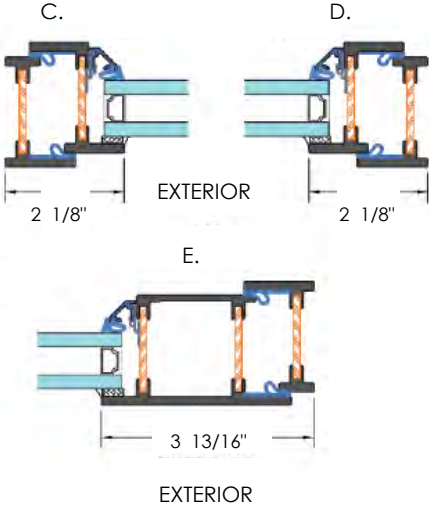
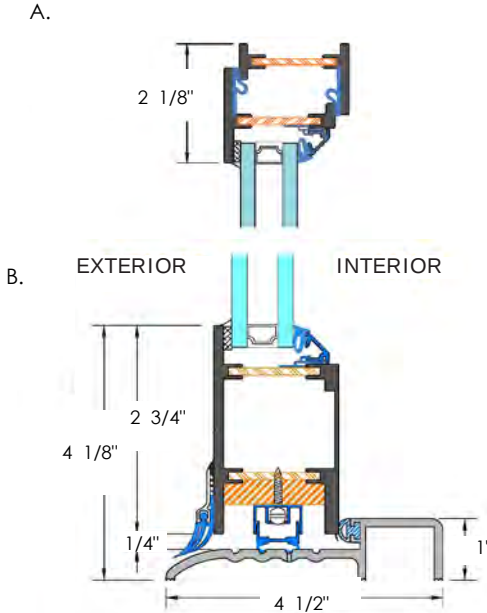
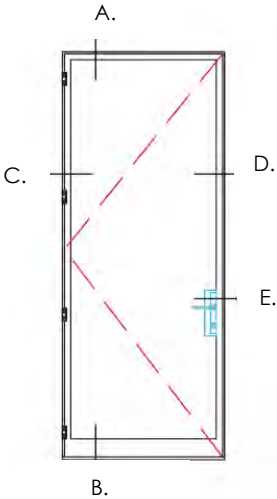
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IN-SWING DOOR



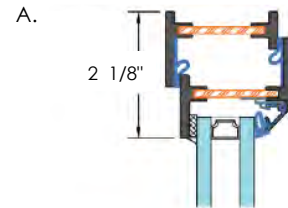
RTS430-OD

OUT-SWING DOOR

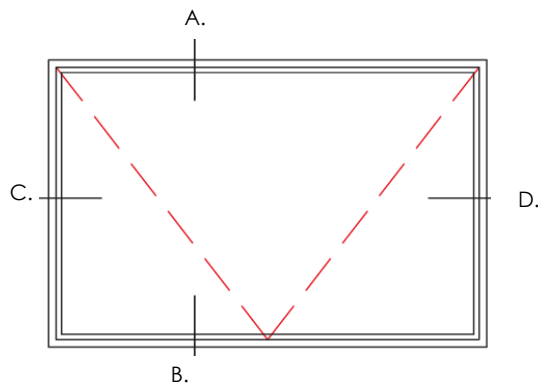
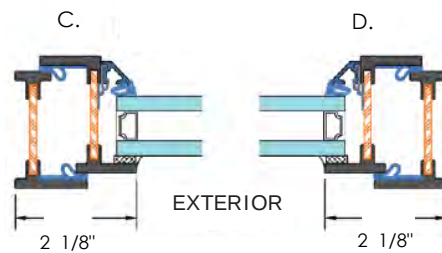
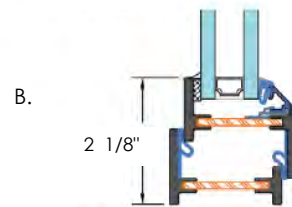


RTS430-PI

IN-SWING HOPPER

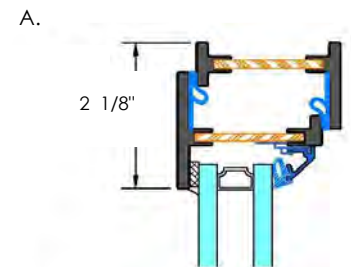


EXTERIOR

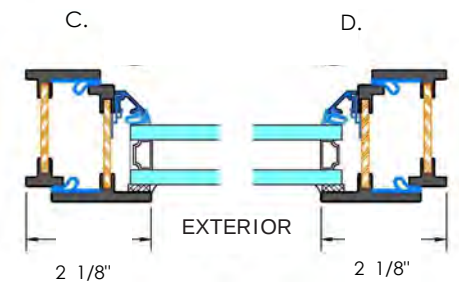
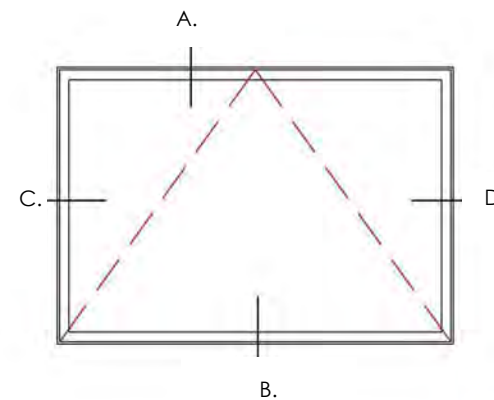
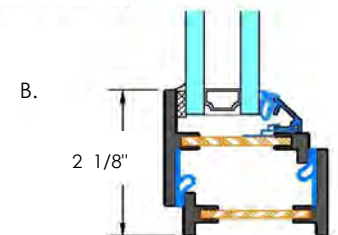


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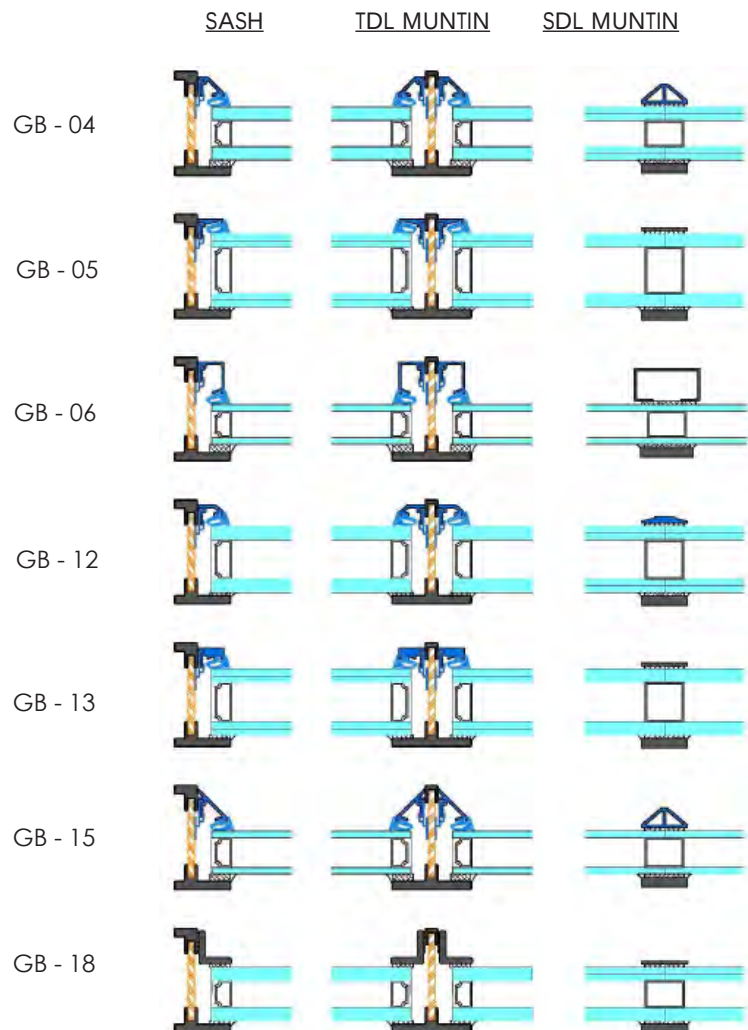
OUT-SWING AWNING



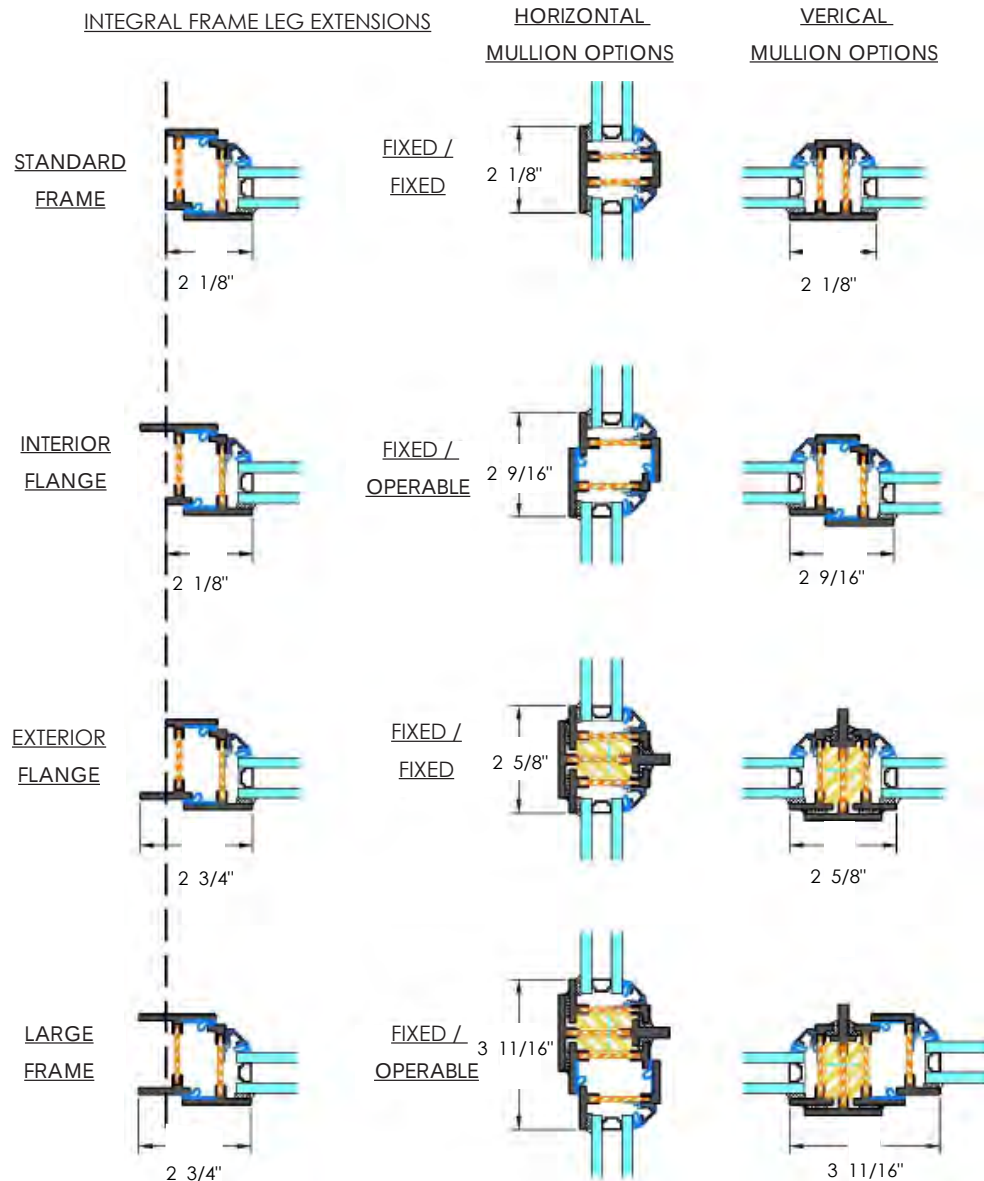
EXTERIOR



GLAZING FRAME OPTION



MULLIONS & FRAME LEGS







STATE-OF-THE-ART TECHNOLOGY & SUPERIOR CRAFTSMENSHIP

-
- Steel windows and doors are stronger than any alternative building material.
 - Hardware fastened to steel windows and doors will NOT pull out and ventilators do not distort or rack with age.
 - Superior Performance Welding surpasses traditionally welded steel windows and are inspected by skilled craftspeople.
 - The aesthetic virtues that can be achieved by use of steel cannot be duplicated in aluminum, wood, or vinyl alternatives.
-



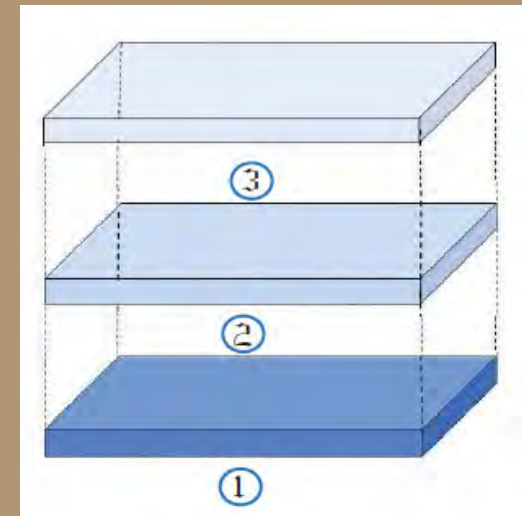
FINISH



4000 hours Salt Spray

Dry Adhesion Number	Gen App	Scribe Max	Rust Mean	Scribe Small	Blister Lasrge	Unscribe Rust	Area Blister	Adh. Loss	Edge Corros.
PF41701 Bone White	10	10	10	10	10	10	10	10	10
PF4575H Hartford Green	10	10	10	10	10	10	10	10	10
PF4922B Black	10	10	10	10	10	10	10	10	10

Q-LAB Weathering Research Services Test No: SCT-0021



THE PROCESS

1. Steel profiles are run through an abrasive blasting treatment producing an anchor bond for primer and paint adhesion.
2. Zinc Enriched Epoxy Primer Coating
3. Electrostatic Powder Coating Top applied and Cured

FINISH

With a proven track record of hardness and durability, Optimum Window applies its powder coatings in-house, allowing for better quality control of its finishes, all while streamlining the process. Optimum Window is a certified Powder Coat Applicator. Your steel windows and doors will be powder coated to your desired color on the **R.A.L. Chart (Reichs-Ausschuss für Lieferbedingungen)**. Color matching is never a concern. Our paints are designed to withstand damaging UV rays and even coastal salt regions. We take pride in providing our clients unparalleled high quality products. We also offer a variety of Patina finishes, as well.

Warranty: Limited 10 Year Warranty on finish, adhesion and caulking. Please ask an Optimum Window Representative for complete warranty information.



Powder Coating Finishes

Enhanced Durability

- Proven track record of hardness and durability
- Inherently resistant to damage
- Resilient to chemical and corrosive attack
- Provides maximum protection of the substrate
- Excellent results with spray and humidity testing

Green Design

- Environmentally friendly
- Integral to contemporary building design/construction
- Ideal for government compliance
- Green alternative to liquid coatings
- Powder does not require high VOC solvents as used in liquid paints
- Zero VOC's (Volatile Organic Compounds)

State of the Art Technology

- Cutting edge "GREEN" technology
- Small-batch, custom color capability
- Unparalleled high quality and durable finish

Color Customization

- Wide range of colors
- Optimum's standard colors meet AAMA2604

Certified Quality

- Optimum applies its powder coatings in-house, allowing for better quality control of its finishes
- Optimum is a certified Powder Coat Applicator

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Optimum reserves the right to change content within, without prior notification.

WINDOW TYPICAL ELEVATIONS



FIXED OVER
AWNING



FIXED OVER
HOPPER



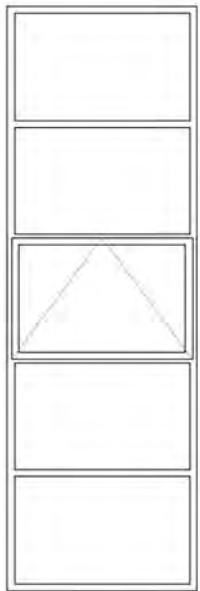
OPERABLE
OVER
FIXED



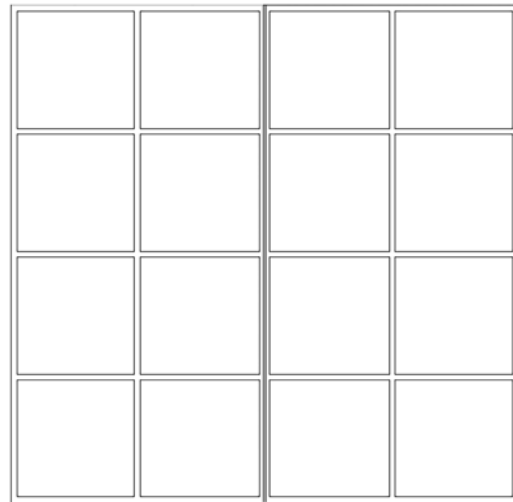
FIXED OVER
OPERABLE



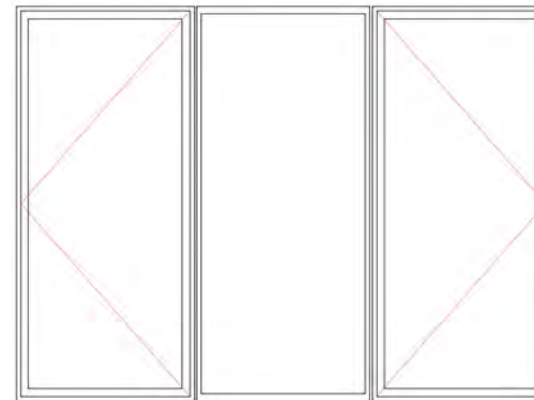
OPERABLE
OVER
OPERABLE



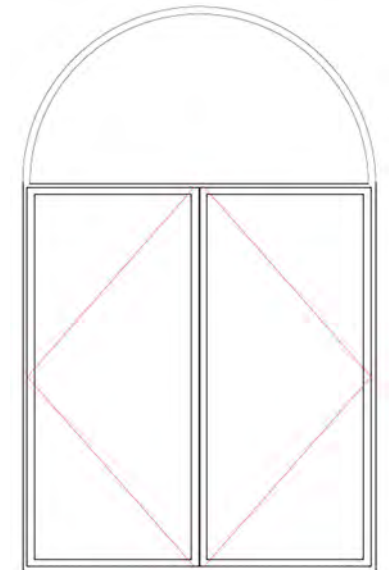
COMBINATION:
FIXED OVER &
UNDER OPERABLE



COMBINATION:
FIXED MULTI-LITE



COMBINATION:
LEFT OPERABLE,
MIDDLE FIXED &
RIGHT OPERABLE



COMBINATION:
1/2 ROUND
TRANSOM OVER
OPERABLE

WINDOW HARDWARE

HINGE TYPES

STANDARD

PREMIUM

				
BUTT HINGE / H-200 (ALUMINUM)	HINGE STANDARD / H-2025(STAINLESS STEEL)	SQUARED WELD-ON (STAINLESS STEEL)	BULLET HINGE /H-2004 (BRONZE)	LIMIT SCREEN STAY UPGRADE
AVAILABLE FOR OUT-SWING, IN-SWING	AVAILABLE FOR OUT-SWING, IN-SWING	AVAILABLE FOR OUT-SWING, IN-SWING	AVAILABLE FOR OUT-SWING, IN-SWING	AVAILABLE FOR PROJECT OUT WINDOW

			
ROTO OPERATOR/ H-1015	4 BAR HINGE / H-2005	NYC APPROVED LIMIT ARM (H-3004)	DOUBLE BAR ADJUSTER (H-3003)
AVAILABLE FOR OUT-SWING *UPON REQUEST	AVAILABLE FOR OUT-SWING, IN-SWING *RESTRICTED ON SIZE	AVAILABLE FOR OUT-SWING *STANDARD UPON REQUEST	AVAILABLE FOR OUT-SWING

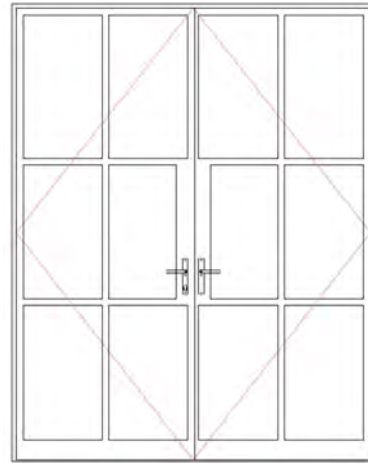
CASEMENT / MULTI-POINT EL DORADO



SASH LOCK OPTIONS - NOT MULTIPOINT



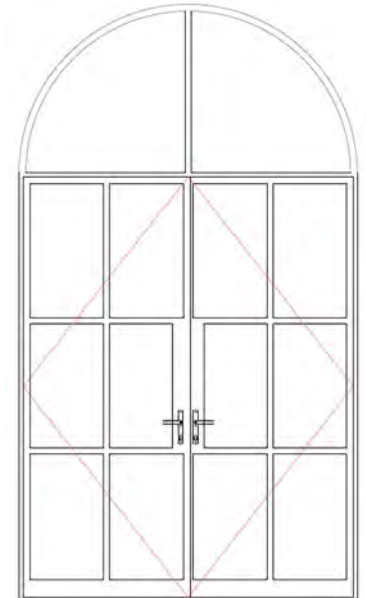
TYPICAL DOOR ELEVATIONS



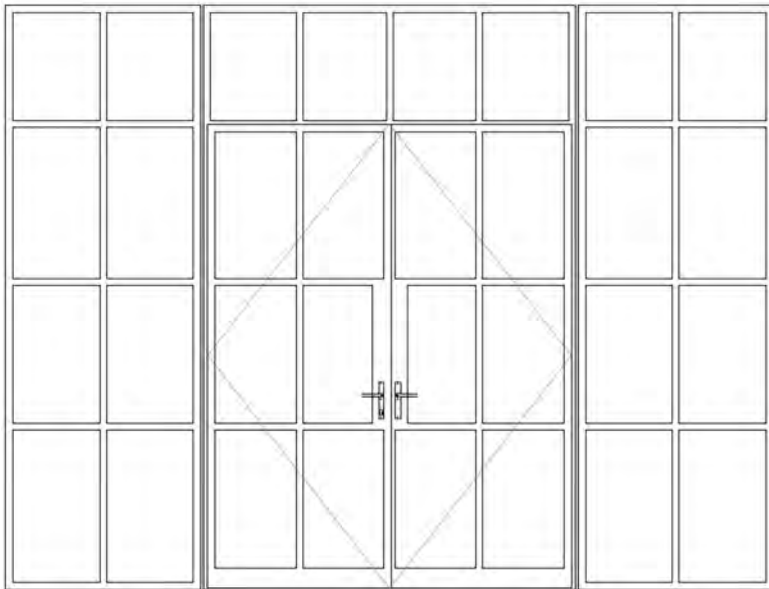
FRENCH DOOR



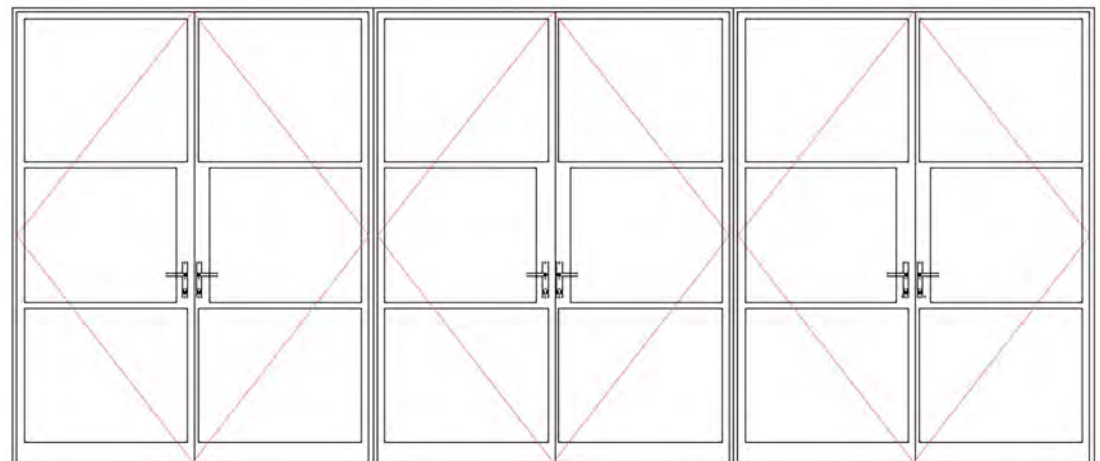
SINGLE DOOR



FRENCH DOOR W/
TRANSOM ABOVE



FRENCH DOOR W/ SIDE LITES
AND TRANSOM ABOVE



MULLED FRENCH DOOR SYSTEM

CONCEALED THROW BOLTS



DOOR LEVERS



OR FLORIDA 016



OR GRAZIA 070



OR DANTA 159



OR FUTURA 164



OR PRAGA 166



OH RODOS



OH TORONTO



OH ATHINIA



OH MUNCHEN



OH NEW ORLEANS



OH VERONA



91680



009BY



QB6R0



B003BY



002R0



B003BY



*Handles and Plates are interchangeable upon request.

HARDWARE FINISH OPTIONS



Oil Rubbed Bronze



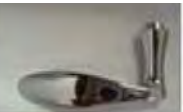
Rustic Umber



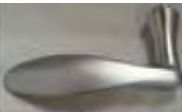
Polished Brass



Satin Nickel



Polished Chrome



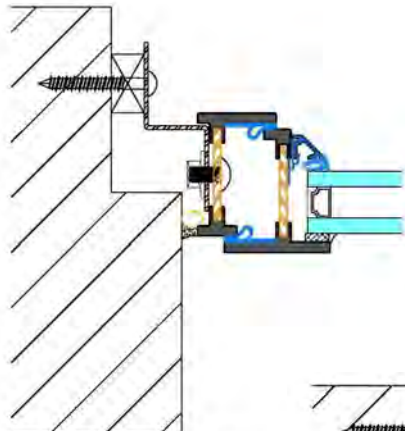
Brushed Chrome



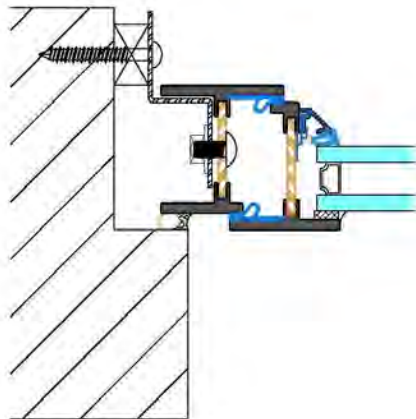
Antique Brass

TYPICAL INSTALLATION DETAILS

METAL INSTALLATION CLIPS

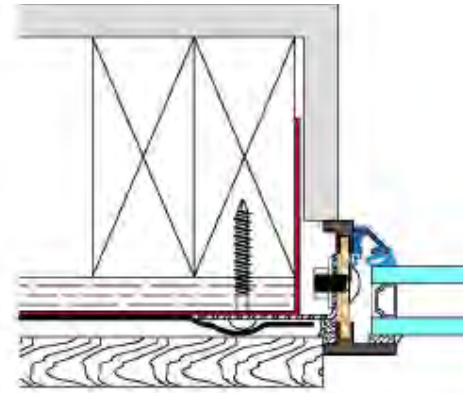


BRICK - FLUSH
INSTALLATION

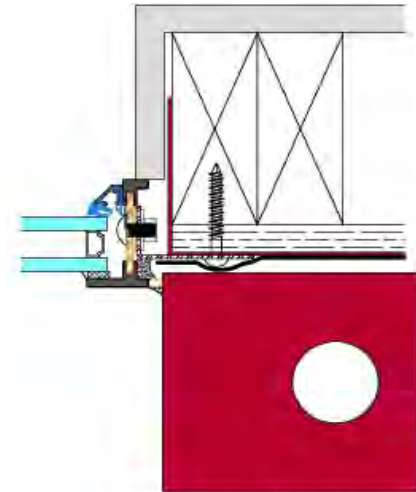


BRICK - LAP
INSTALLATION

METAL NAIL FIN

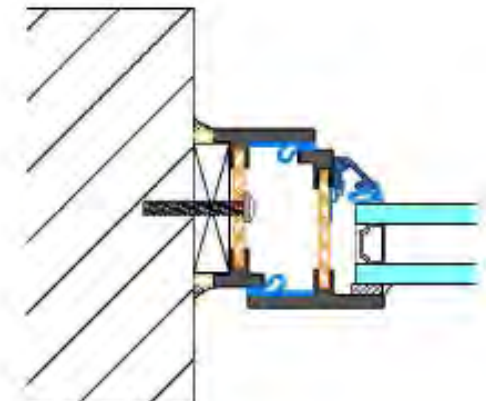
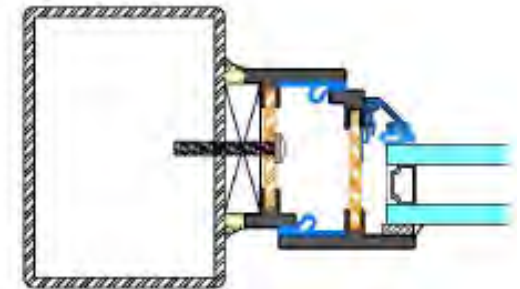
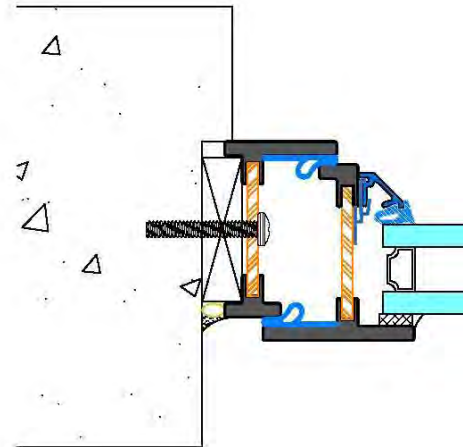


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INSTALLATION



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