

HURRICANE IMPACT RATED

RTS-430I THERMALLY BROKEN STAINLESS STEEL WINDOWS AND DOORS







DESIGNED FOR COASTAL APPLICATIONS TO MEET HVHZ | ENERGY-EFFICIENT | DELICATE SIGHT LINES |

MADE IN THE USA | OPTIMUMWINDOW.COM



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.



RTS430i

Optimum's Thermally Broken Technology in the form of the RTS430i line, is renown for its thin sight lines and beauty. The RTS430i also offers reliability, versatility and thermal efficiency. Having surpassed vigorous testing requirements, the RTS430i 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 STAINLESS STEEL: HURRICANE IMPACT

INSULATED GLASS

UP TO 1 1/2"

304 STAINLESS STEEL PROFILE SECTION

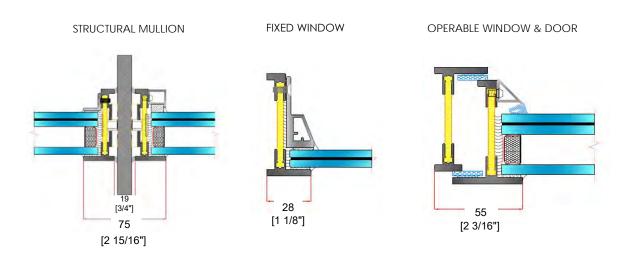
EXTRUDED COMPRESSION GASKET SYSTEM

GLAZING BEAD OPTIONS AVAILABLE

ENGINEERED/CRIMPED, ADHESIVE WITH FULLY WELDED CORNERS



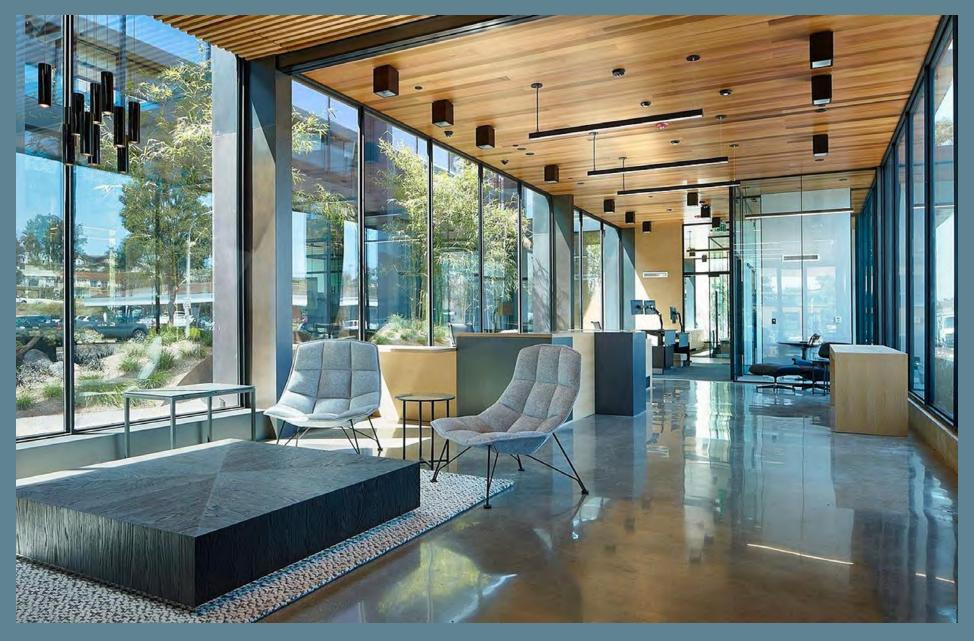
HANDCRAFTED HISTORICAL STEEL PERFECTION



Having been featured in Architectural Digest for numerous appearance 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.

Note: Placement and depth can vary based on design pressures.





RTS430i Series Thermally broken steel windows and doors manufactured in Ellenville, New York by skilled crafstpeople. It provides great energy performance that meets NFRC Rating and exceeds on steel performance (Air & Water).

GLAZING OPTIONS:

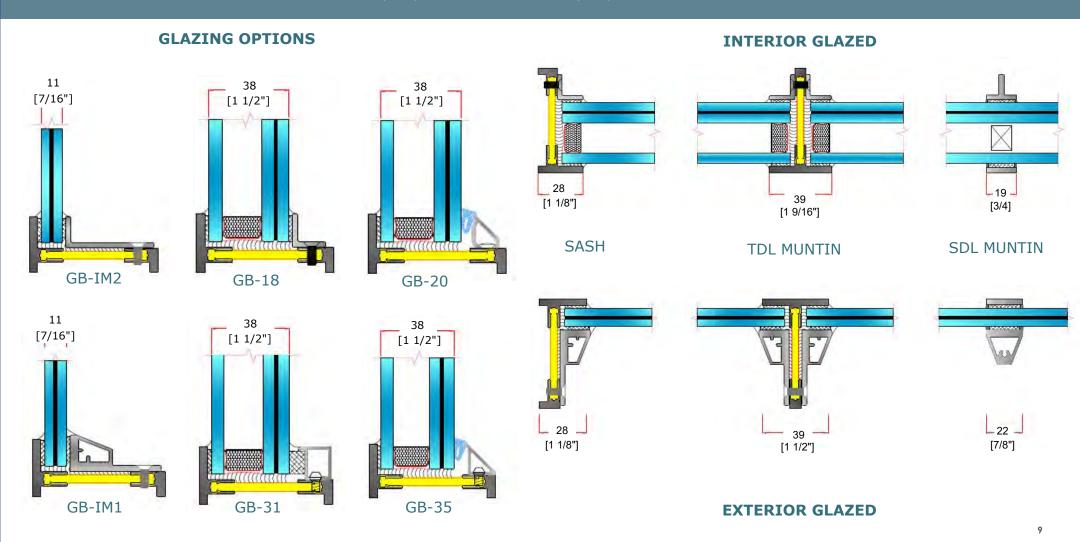
- -MONOLITHIC GLAZED 11/16" Laminated Glass
- -DUAL GLAZED

1/4" individual panes with 5/8" air space for 1 1/8" over all glass thickness (**standard product)

DESIGN FLEXIBILITY

- -TRIPLE GLAZED
- 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 Dual Glazed IGU 7/16" Laminated Glass with 0.90" SGP Interlayer (3/16" HS-0.090" SGP Interlayer 3/16" HS/13/16" Air Space 1/4" Tempered Glass

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: 0.22

Door: 0.22 Door: 0.19

Additional Performance Ratings

Visible Transmittance | Condensation Resistence

Casement: 0.41 Casement: 45
Projected: 0.41 Projected: 46
Fixed: 0.51 Fixed: 51
Door: 0.43 Door: 42

Model/Type: RTS-430i Steel Out-Swinging Casement

Summary of Results

Air Filtration Per Area 300 Pa (6.24 psf)	0.06 cfm/f 0.06 cfm/f			
Water Penetration	9.75 psf			
Resistance	9.75 psf			
Design	65 psf			
Pressure	65 psf			



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

ACOUSTICAL (OPERABLE) SPACE

AMAZINGLY ENERGY EFFICIENT



RTS430i

RTS430i-FX

FIXED WINDOW

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 1/2 Insulated Glass

GLAZING FRAME

ORIENTATION: Exterior (interior available)

DETAIL: Sloped Bevel (other glazing beads available)

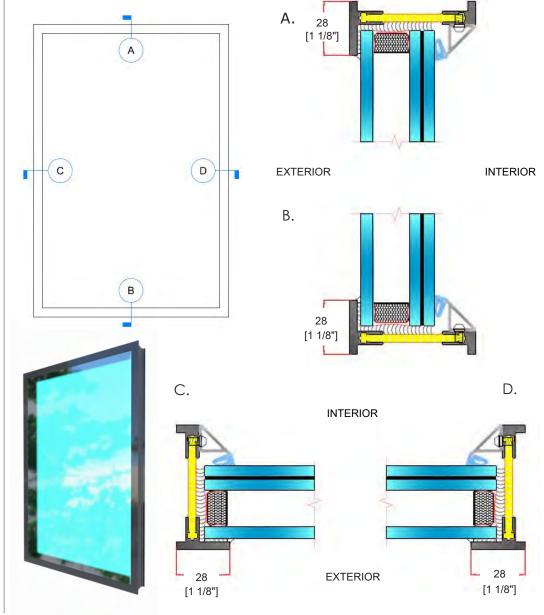
MUNTIN: Specify: None, SDL, and options for TDL upon review

FRAME DEPTH: 1 7/8"

FINISH: Super Durable Powder Coating /Epoxy Primer, Specify

color. Available in 2605 and 2605 Finish options.

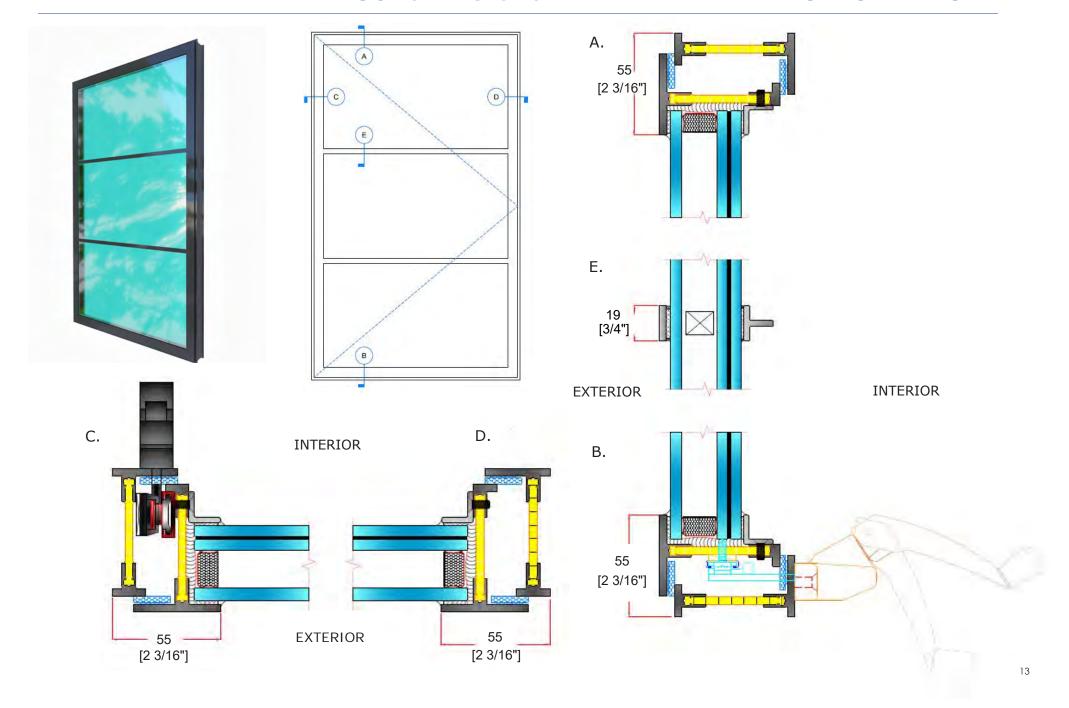




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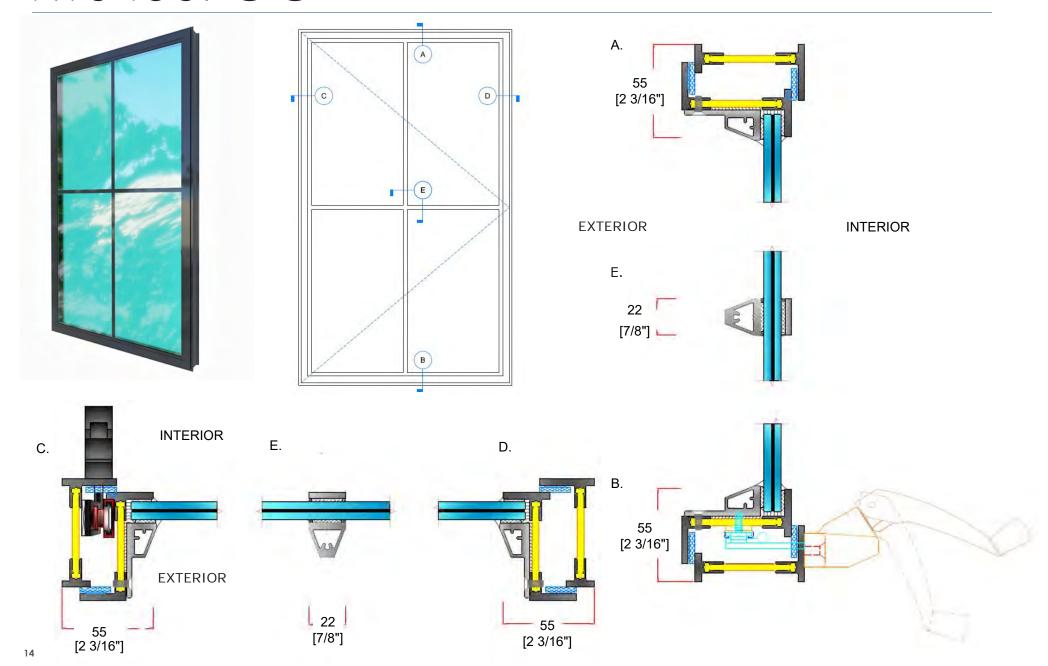
RTS430i-OC

OUT-SWING CASEMENT WITH ADVANTAGE FORK LATCH



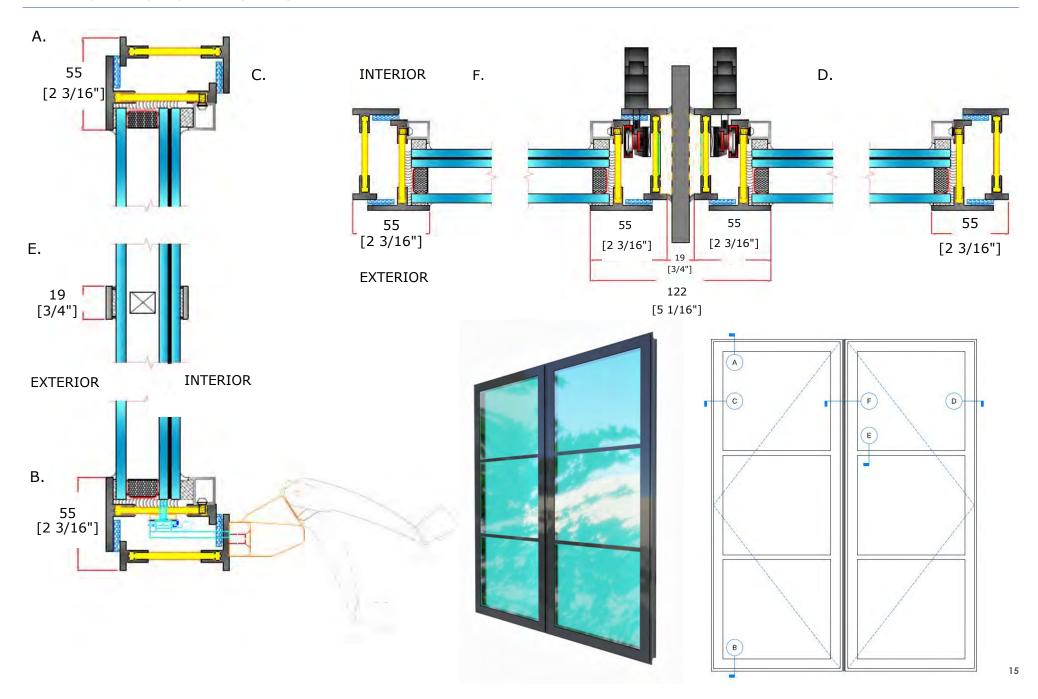
RTS430i-OC

OUT-SWING CASEMENT



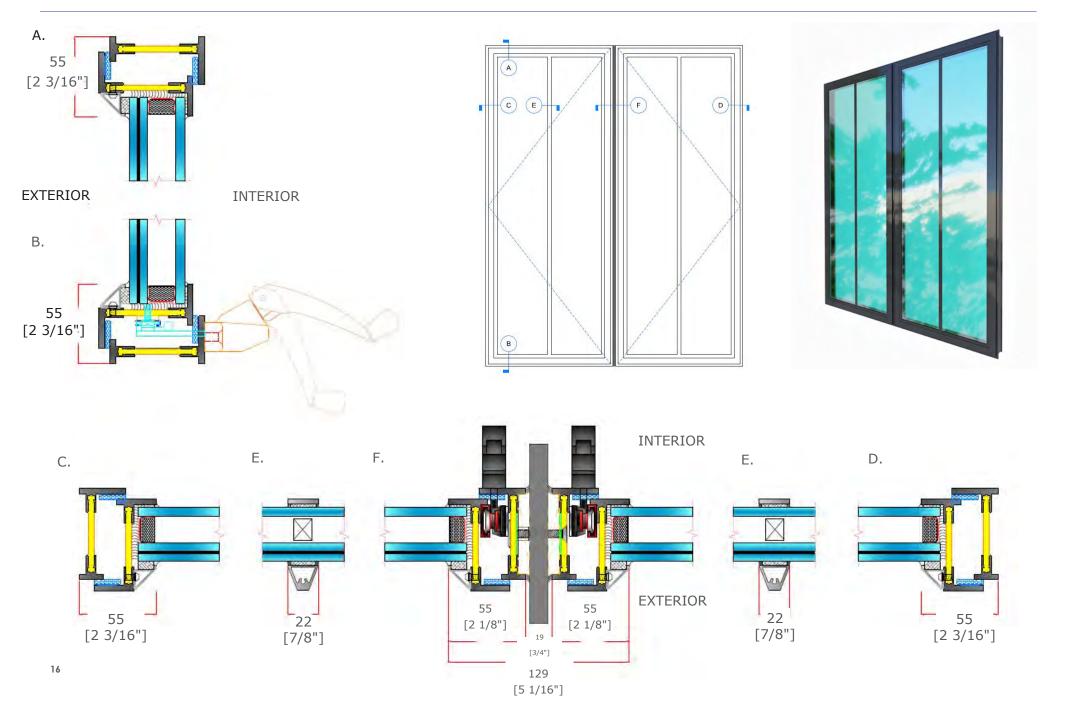
RTS430i-OC

SINGLE CASEMENT MULLED TO FIX



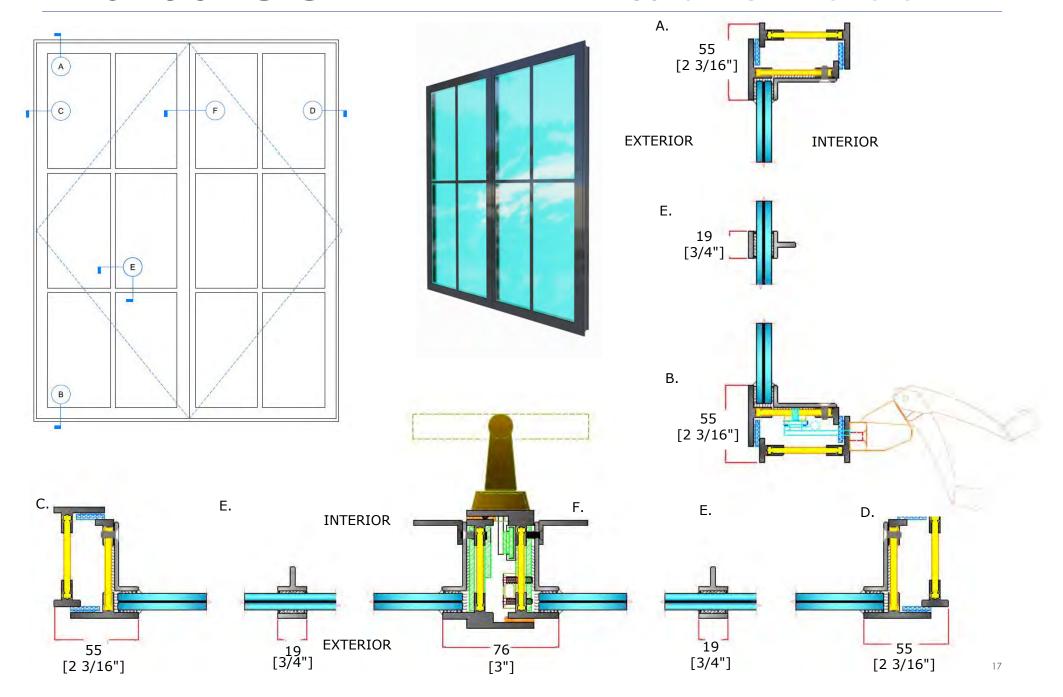
RTS430i-OC

DOUBLE CASEMENT MULLED



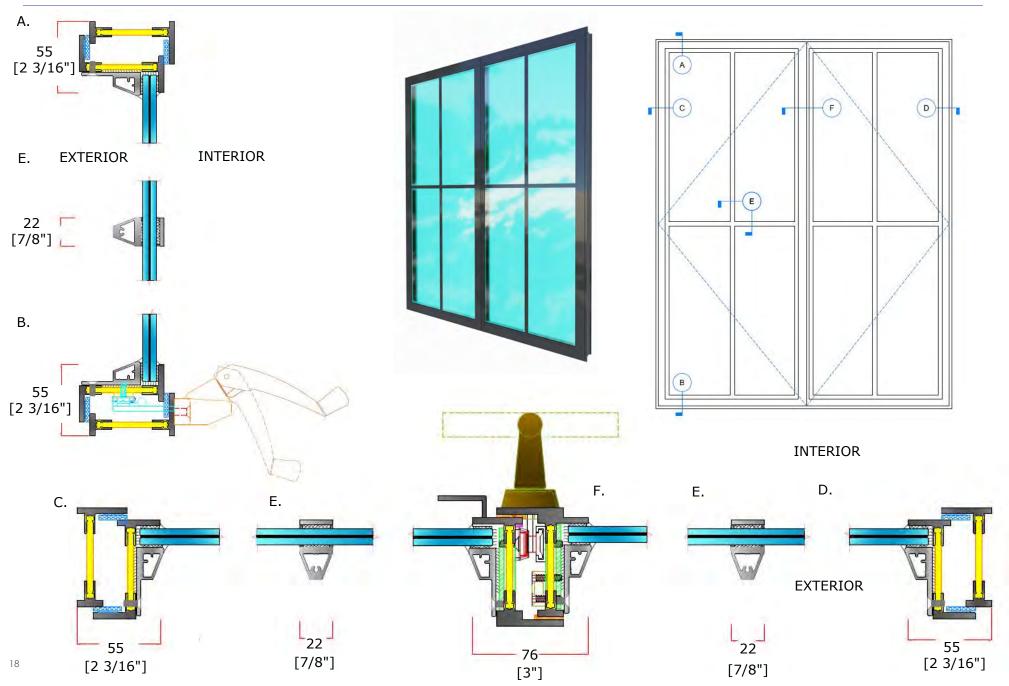
RTS430i-OC

OUT-SWING FRENCH CASEMENT



RTS430i-OC

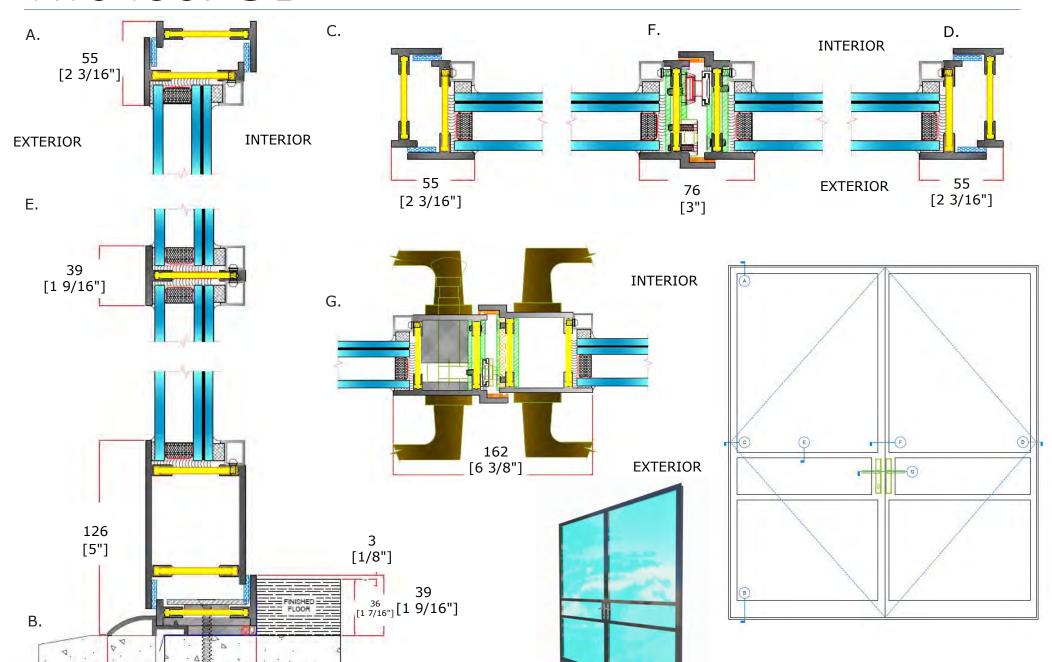
OUT-SWING DOUBLE CASEMENT



RTS430i-OD

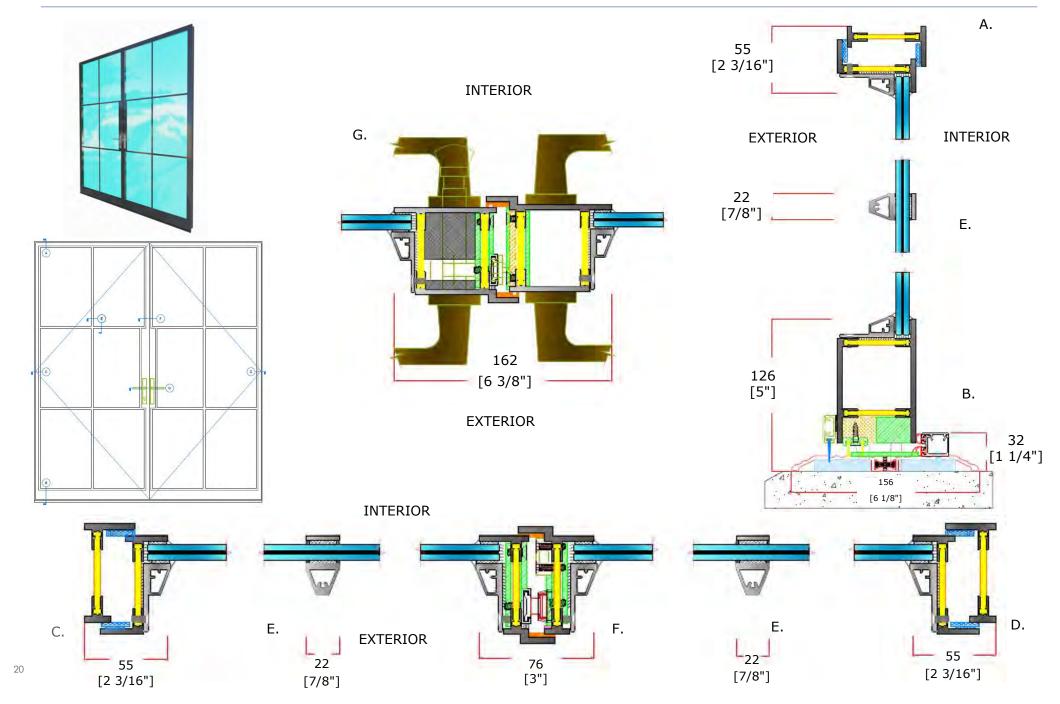
[3 13/16"]

OUT-SWING FRENCH DOOR



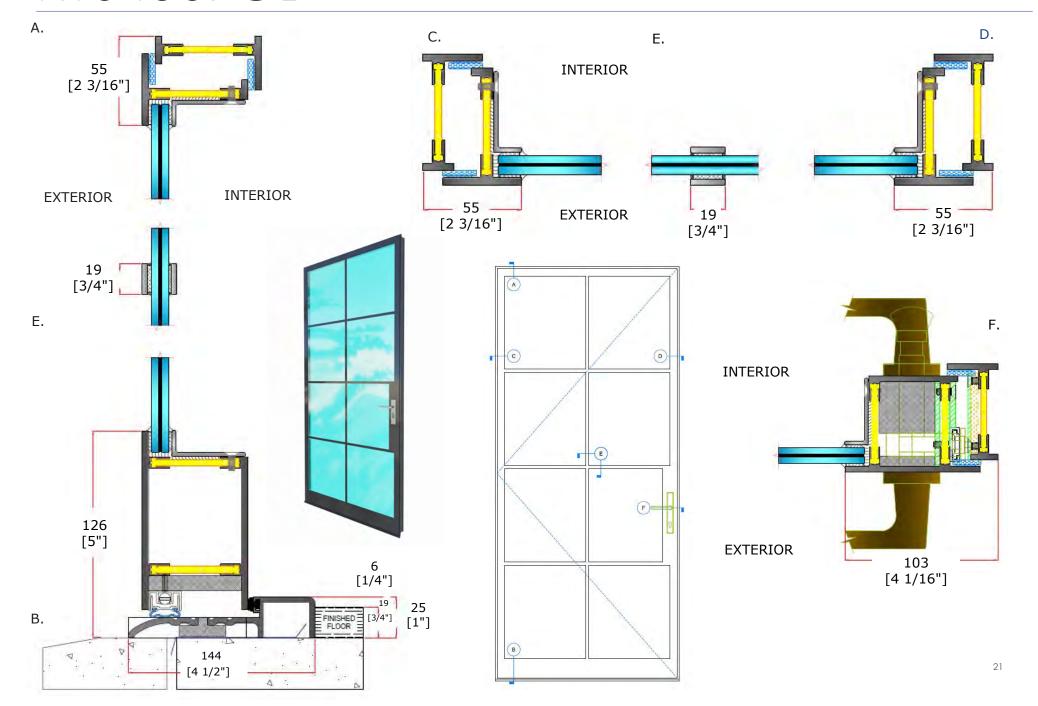
RTS430i-OD

OUT-SWING FRENCH DOOR



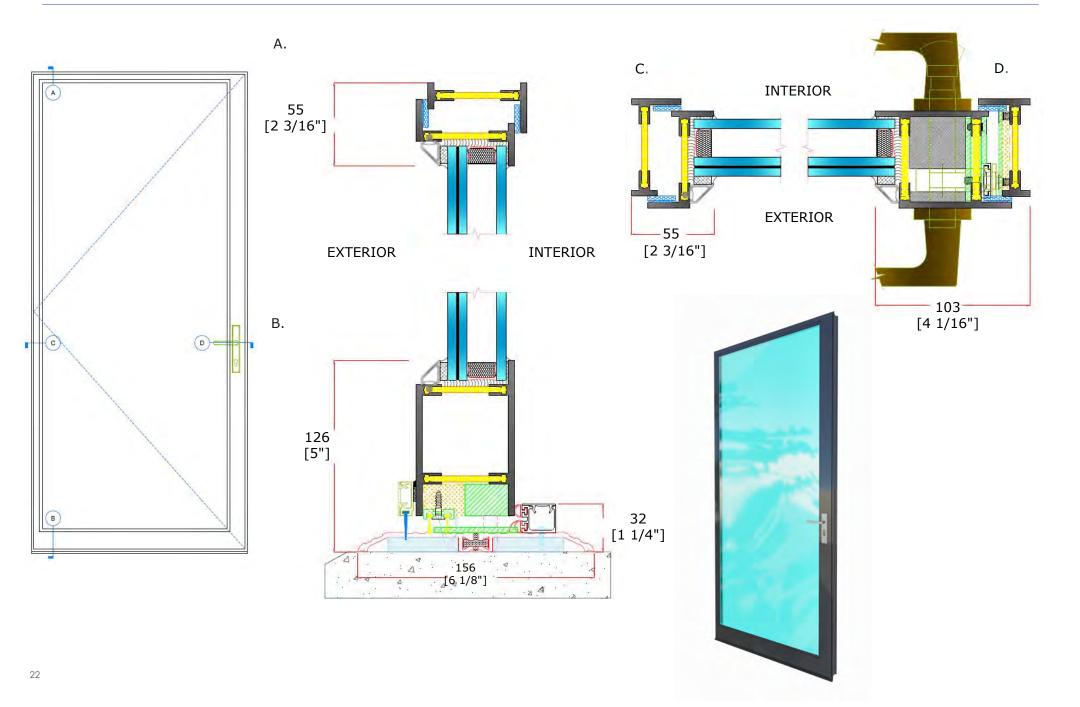
RTS430i-OD

OUT-SWING DOOR



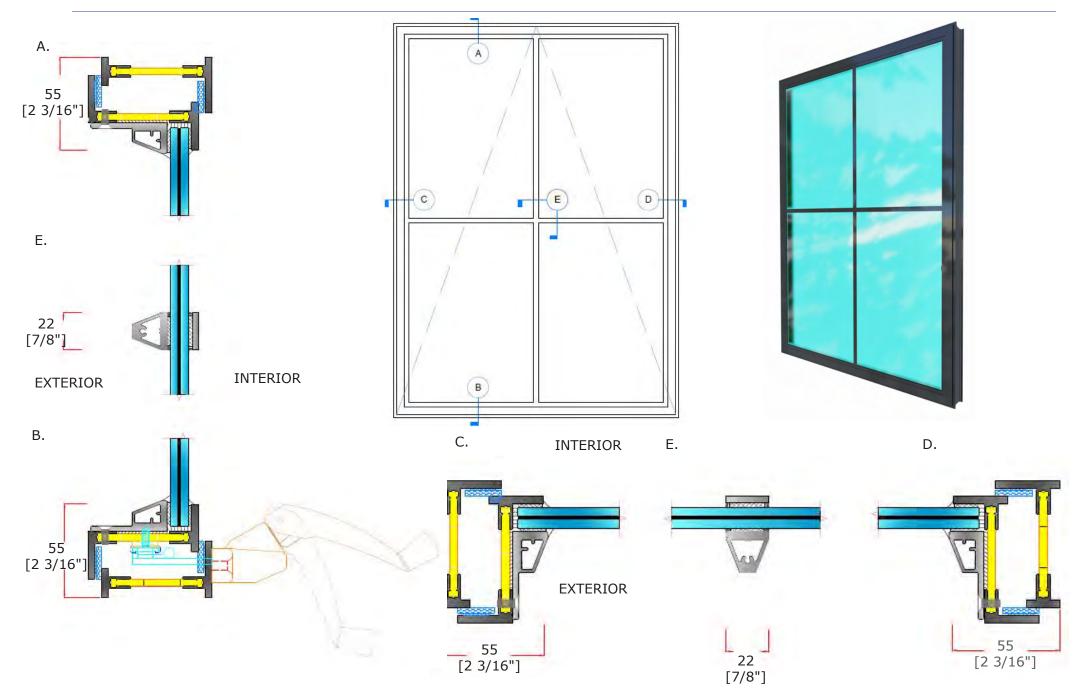
RTS430i-OD

OUT-SWING DOOR WITH LOCK RAIL



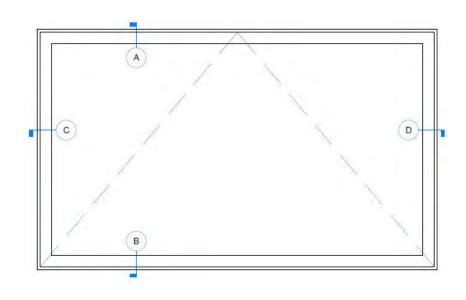
RTS430i-PO

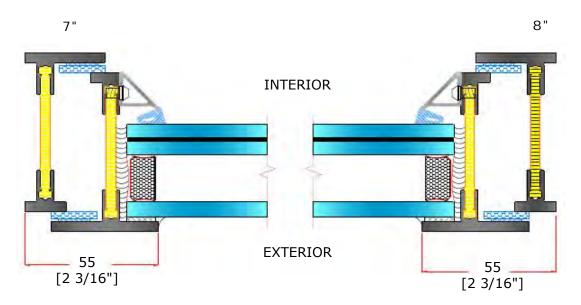
OUT-SWING HOPPER WITH ROTO OR FORK LATCHES

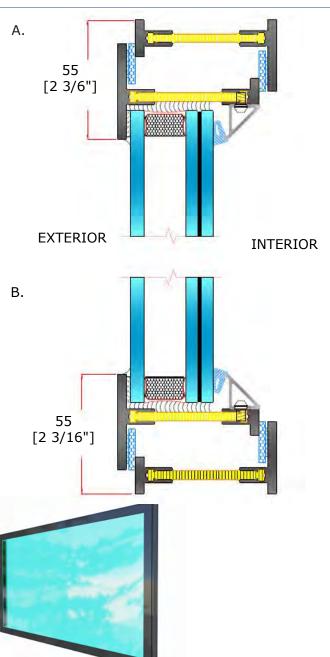


RTS430i-PO

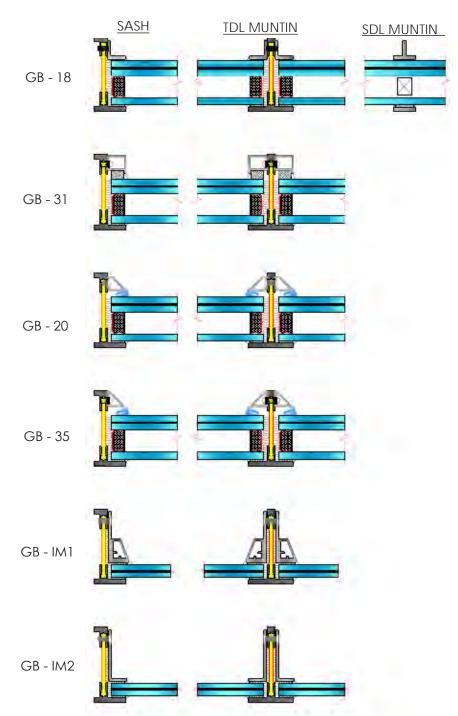
OUT-SWING AWNING WITH PUSHOUT

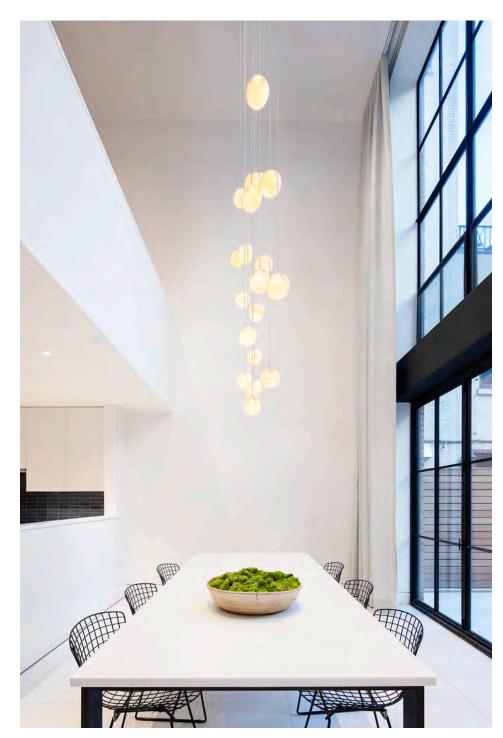






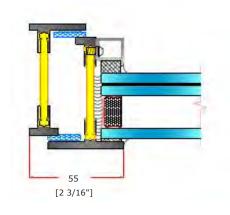
GLAZING FRAME OPTION



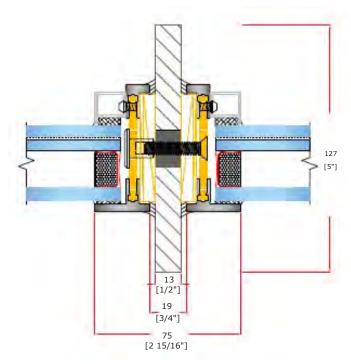


STANDARD FRAME

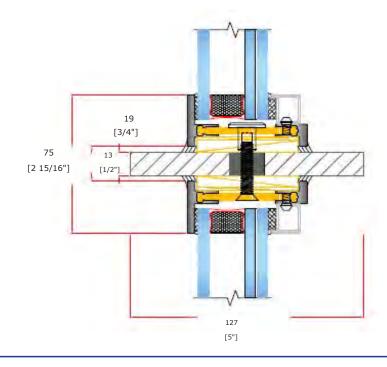
INTEGRAL FRAME LEG EXTENSIONS



VERTICAL MULLIONS

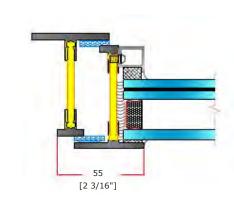


HORIZONTAL MULLIONS

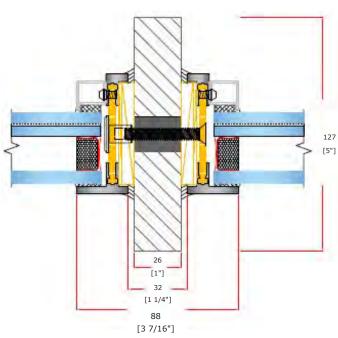


INTERIOR FLANGE

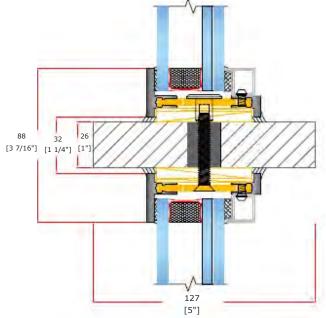
INTEGRAL FRAME LEG EXTENSIONS



VERTICAL MULLIONS



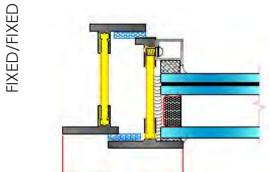
HORIZONTAL MULLIONS



FIXED / OPERABLE

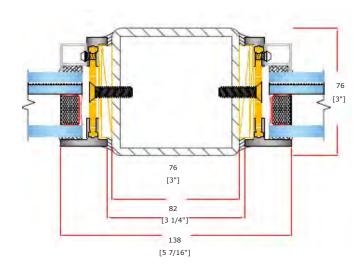
EXTERIOR FLANGE

INTEGRAL FRAME LEG EXTENSIONS

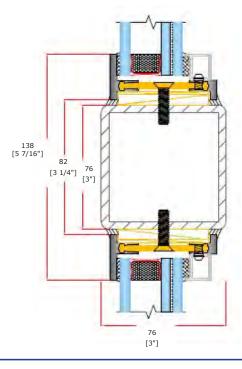


[2 13/16"]

VERTICAL MULLIONS

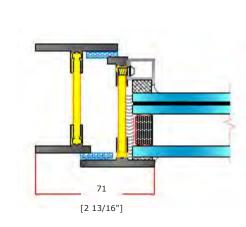


HORIZONTAL MULLIONS



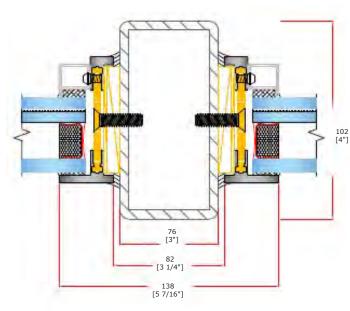
LARGE FRAME

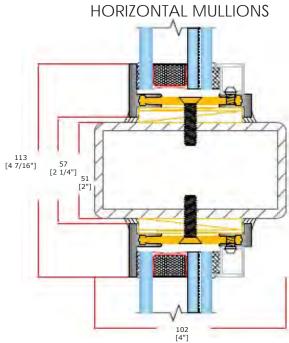
INTEGRAL FRAME LEG EXTENSIONS



FIXED / OPERABLE

VERTICAL MULLIONS







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

THE PROCESS

- Stainless Steel profiles are run through an abrasive blasting treatment producing an anchor bond for primer and paint adhesion
- 2. Zinc Enriched Epoxy Primer Coating, Standard 2604 Finish. Options for 2605
- 3. Electrostatic Powder Coating Top applied and Cured





4000 hours Salt Spray

DRY ADHESION NUMBER	GENERAL APPLICATION	SCRIBE MAX	RUST MEAN	SCRIBE SMALL	BLISTER LARGE	UNSCRIBE RUST	AREA BLISTER	ADHESION LOSS	EDGE CORROSION
RELA ESPRESSO	10	10	10	10	10	10	10	10	10
SOFT TOUCH SMOOTH BLACK	10	10	10	10	10	10	10	10	10
QUAKER BRONZE	10	10	10	10	10	10	10	10	10
STANDARD WHITE	10	10	10	10	10	10	10	10	10

FINISH

With a proven track record of hardness and durability, Optimum Window applies its powder coatings in-house, allowing for better quality control of it's 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.



Enhanced Durability

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

Green Design

- Environmentally friendly
- Integral to contemporary building design and 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
- · Unparalled high quality and durable finish

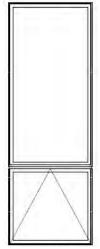
Color Customization

- Wide range of color selections and options to match
- Our standard colors meet AAMA2604 with options for 2605

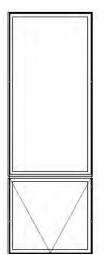
Certified Quality

- Optimum applies all powder coating in-house, allow for better quality control
- OWM is a certified powder coat applicator

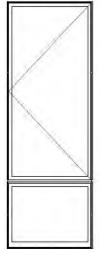
WINDOW TYPICAL ELEVATIONS



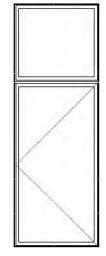




FIXED OVER HOPPER



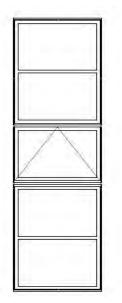
OPERABLE OVER FIXED



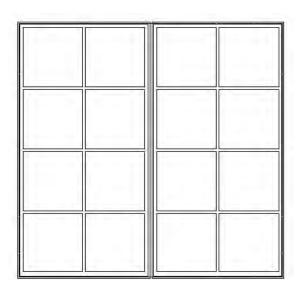
FIXED OVER OPERABLE



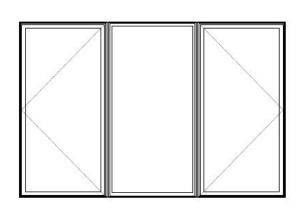
OPERABLE OVER OPERABLE



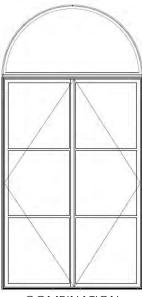
COMBINATION: FIXED OVER & UNDER OPERABLE



COMBINATION: FIXED MULTI-LITE



COMBINATION: LEFT OPERABLE, MIDDLE FIXED & RIGHT OPERABLE



COMBINATION: 1/2 ROUND TRANSOM OVER OPERABLE

SINGLE CASEMENT WINDOW HARDWARE

LINEAR HANDLE OPTIONS FOR PROJECTED UNITS

BRONZE LINEAR HANDLE OC 8200R-BNZ



NEUTRAL LINEAR HANDLE OC 8200R-CN



SILVER LINEAR HANDLE OC 8200R- SLV



WHITE LINEAR HANDLE OC 8200R-WT



SATIN NICKEL LINEAR HANDLE OC 8200R-SN



HANDLE OPTIONS (5J 5-45649) - B C5HB 5B8 DC 46C+98: B-6C+90L

OM HDI @@ B 6@57?!7C5H



OM HDI @@ B POLISHED M9@@C K '6F C B N9



OM T-PULL IN POLISHED RED BRONZE



OM T-PULL IN POLISHED WHITE BRONZE



OM T-PULL IN OIL RUBBED BRONZE



CONCEALED HARDWARE AND HINGES

CAM HANDLE (Same finish options as T-Pulls)



90 DEGREE LIMIT ARM



DOUBLE BAR ADJUSTER



ROTO CRANK



ROUND OR SQUARE HINGE





FRENCH CASEMENT WINDOW HARDWARE



PROJECTED WINDOW HARDWARE

LINEAR HANDLE OPTIONS FOR PROJECTED UNITS

BRONZE LINEAR HANDLE OC 8200R-BNZ



SILVER LINEAR HANDLE OC 8200R- SLV



SATIN NICKEL LINEAR HANDLE OC 8200R-SN











ROTO CRANK



CAM HANDLE (Available finishes same as T-Pulls)



ROUNDED FORK LATCH



SQUARED FORK LATCH



CONCEALED HARDWARE AND HINGES

STORM HINGE



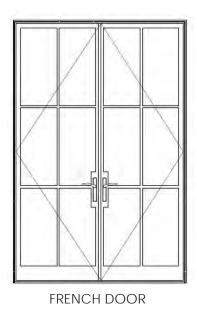
DOUBLE BAR ADJUSTER



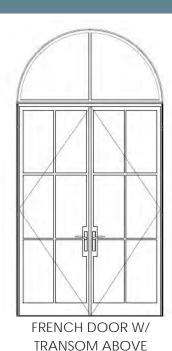
PROJECTED HINGE



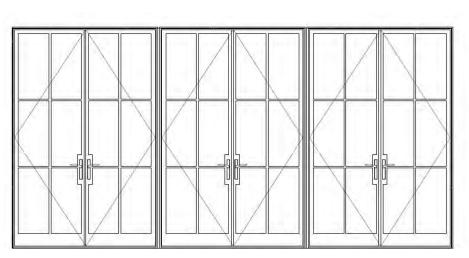
TYPICAL DOOR ELEVATIONS







FRENCH DOOR W/ SIDE LITES
AND TRANSOM ABOVE



MULLED FRENCH DOOR SYSTEM

DOOR LEVERS

SINGLE DOOR HARDWARE

OR ASTRA



-Polished Varnish

- -Matte Black
- -Chrome



OR DESY



-Polished Varnish -Chrome -Scratched Bronze





OR VIENNA



Antique

-Rustic -Polished Varnish

-Old Silver





OR FLORIDA



-Matte Black -Satin Chrome

-Polished Varnish





OR SPRING



-Matte Black -Chrome





OR CHARME



Rustic

-Old Silver -Antique -Oxid Brass





OR PRAGA



Old Silver



-Rustic

-Antique

-Oxid Brass



OR Q-MINI



Satin Chrome

-Chrome

-Matte Black

-Polished Varnish

-Matte Scratched Bronze





OR GINEVRA



Satin Chrome

-Polished Varnish

-Rustic

-Scratched Bronze

Old Silver

-Black California





Polished Varnish



Black

Chrome









Silver







Satin Chrome



Antique



Oxid Brass



SINGLE AND FRENCH DOOR HARDWARE



OH RODOS





OH MUNCHEN

- -Brass Resista -Antique Brass
- -Brushed Chrome
- -Polished Chrome
- -Oil Rubbed Brass
- -Rustic Umber
- -Satin Nickel
- -Matte Black
- -Dark Bronze Metallic



- -Brushed Chrome
- -Oil Rubbed Brass
- -Matte Black
- -Satin Nickel
- -Rustic Umber
- -Dark Bronze Metallic

DOOR LEVERS AND ESCUTCHEONS



Escutcheon options:







Arched Rounded

HARDWARE FINISH OPTIONS



POLISHED CHROME



-Brushed Chrome Resista

-Oil Rubbed Brass

-Matte Black

- Satin Nickel

-Rustic Umber

















BRASS RESISTA

RUSTIC UMBER

BRUSHED CHROME

ANTIQUE BRASS

ANTIQUE NICKEL

DARK BRONZE

SATIN NICKEL

OIL RUBBED

BRASS

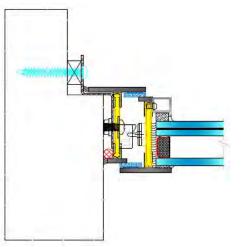
SINGLE AND FRENCH DOOR HARDWARE

PREMIUM SELECTIONS



TYPICAL INSTALLATION DETAILS

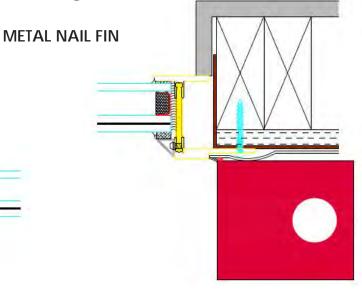
METAL INSTALLATION CLIPS



Masonry opening w/ unequal interior leg w/ installation straps

IVILIA

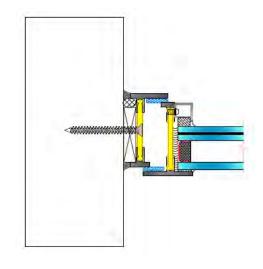
Flange frame in wood black framing w/ siding



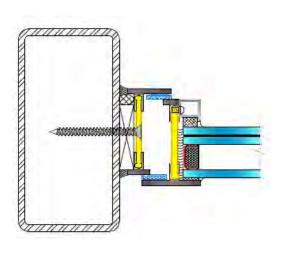
Flange frame in black framing w/ Exterior Brick

Direct set installation into Framed Blocking

DIRECT ANCHOR



Direct set installation into masonry



Direct set installation into steel building



AMERICA'S MOST DIVERSIFIED STEEL WINDOW & DOOR MANUFACTURER



28 CANAL STREET, ELLENVILLE, NEW YORK 12428 P: 845.647.1900 F: 845.647.1494

optimumwindow.com













