# **MAGNUS**WINDOWS



700/1800 NORTH-AMERICAN STYLE SYSTEM



#### **About Crystal**





**Crystal Window & Door Systems** is an award-winning national manufacturer of quality, energy efficient vinyl and aluminum windows, and high-end fenestration systems for residential, commercial and institutional buildings. Crystal's product and service benefits are many: Quality Workmanship, Broad Product Line, Energy Efficiency, Innovative Product Features, Green Manufacturing and Extraordinary Value. The extended Crystal family of companies includes not only fenestration manufacturing, but aluminum extrusion and solar energy.

Crystal<sup>®</sup> Window & Door Systems, offers industry proven quality, with state-of-the-art manufacturing in Queens, New York; Chicago, IL; St. Louis, MO; Scranton, PA; and Riverside, CA to best serve our customers. The company's wide array of products offers architectural designers fenestration solutions that enhance green sustainable design initiatives, with high performance, energy efficient Architectural Aluminum and Residential Vinyl Crystal<sup>®</sup> and NFRC Certtified products and Crystal<sup>®</sup> Energy Star<sup>®</sup> Certified products.

Celebrating more than 30 years of operations, Crystal has grown from startup in 1990 to one of the top window manufacturers in the nation. The company and its subsidiaries operate over 400,000-ft2 of manufacturing space at four plants. Crystal's main production facility and corporate headquarters are in New York City, and additional plants are in Chicago, St. Louis, Scranton and Riverside. Crystal employs over 400 people at its main factory, regional branches, subsidiaries and affiliate firms. Crystal branch offices are located in Pennsylvania (Scranton), Illinois (Chicago), Ohio (Cleveland area) and Missouri (St. Louis area). Crystal products are distributed in more than 35 states.



MAGNUS window designs are comprehensive providing styles with a variety of design and performance options. These versatile designs are an excellent choice for upscale residential and light commercial applications.

Available in white, beige or clay and can be laminated with solid color or wood-grain foils.

MAGNUS windows are designed to truly go beyond the standard performance requirements in both commercial and residential enviroments while offering distinct fenetration solutions for each.

## **Features**

- Multichambered profiles for increased performance.
- Increase structural capacity and better stability.
- Greater versatility to meet higher performance standards.
- High-definition finish for weather and stain resistance.

# A Wider Range of Styles

- Single Hung-Tilt
- Casement • Double Hung-Tilt
  - Awning
  - Fixed •

 Single Slider Double Slider

## **Superior Profiles**

MAGNUS windows resist fading and corrosion. The proprietary unplasticized polyvinyl cloride (uPVC) formulation and extrusion process result in superior profiles that outlast and outperform material like aluminum and wood. Plus, uPVC is a natural insulator. It resists heat loss in the winter and heat gain in the summer.

# **COMPREHENSIVE DESIGN & HIGH PERFORMANCE**



# **UPVC FORMULATION**

Formula includes above-average quantities of titanium dioxide stabilizers and impact modifiers to protect against fading from solar radiation.



## **FUSION-WELDED CORNERS**

In addition to benefits of uPVC's thermal properties, fusion-welded corners greatly reduce leakage potential.



# **MULTICHAMBERED PROFILES**

A sophisticated multichamber design accomodates steel reinforcement and allows for big window elements.



# **D**RAINAGE **S**YSTEM

A hidden integral water drainage system allows rain water to drain from the window system to the building exterior without entering the building envelope.



# **H**IGH-DEFINITION FINISH

Only occasional cleaning thanks to the ability to repel dirt and retain color with UV stability, is needed to keep the surfaces looking like new, even years after installation.



# **ENERGY EFFICIENT GLASS**

Insulated glass units with a high-performance spacer system provide energy efficiency and options to increase acoustical and energy performance.

# MAGNUS WINDOWS CUSTOMIZABLE & STYLISH

The **MAGNUS** System allows for a wide selection of window styles. In addition, extensive design variations with brilliant colors and patterns will liven up any building. **Get creative with countless design options.** 



# MAGNUS 700 - HUNG-SLIDER WINDOWS

NAFS: up to Class LC-PG40

U-factor: down to 0.16\*

STC: up to 39 dB

COMPREHENSIVE DESIGN & HIGH PERFORMANCE

4 | MAGNUS 700 - Hung Slider

# MAGNUS 700 - HUNG-SLIDER WINDOW

## **COMPREHENSIVE DESIGN & HIGH PERFORMANCE**

The MAGNUS 700 Hung-Slider Windows design are one of the most comprehensive hung-slider replacement window designs on the market.

Providing styles with a variety of design and performance options, this versatile design is an excellent choice for upscale residential and light-commercial applications.

Available in white, beige or clay and can be laminated with solid color or wood-grain foils.





#### Features:

- Durability and longevity with unique uPVC formulation and high definition finish
- Multiple chambers for increased strength, energy performance and efficient water drainage.
- Energy-efficient insulated glass units with a high-performance spacer system.

# MAGNUS 700 - HUNG-SLIDER WINDOWS

## **COMPREHENSIVE DESIGN & HIGH PERFORMANCE**

Types Double Hung-Tilt, Single Hung-Tilt, Double Slider, Single Slider, Fixed

Frame Depth 3 1/4 in (82.5 mm)

Overall Glass Up to 1 in (25.4 mm)

U-values Down to 0.16\*

STC Up to 39 dB

Structural Ratings Single Hung-Tilt: LC-PG40 Single Slider: R-PG55 Double Hung-Tilt: R-PG60 Double Slider: R-PG60 Fixed: CW-PG70



Single Hung-Tilt window with an internally glazed sash and a pocket sill.

\* based on simulation

#### AVAILABLE COLORS

# Features & Benefits

Reinforcements for main profiles boost structural performance and element sizes

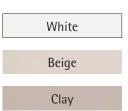
Up to 1 in (25 mm) glazing capability provide excellent acoustical and energy performance properties

Main profiles engineered with multiple chambers increase strength, energy performance, and allow efficient water drainage

3 1/4 in (83 mm) frame depth with accessory grooves provide flexibility for new construction and replacement applications

Internal slash glazing

increases ease and safety of glass replacement (glass can be replaced from the inside)



# MAGNUS 1800 CASEMENT-AWNING WINDOWS Superior Seal Technology & Outstanding Performance



# MAGNUS 1800 CASEMENT-AWNING WINDOWS

# SUPERIOR SEAL TECHNOLOGY & OUTSTANDING PERFORMANCE

Magnus 1800 Windows have better energy performance, simpler multi-lite configurations, installation flexibility and superior air and water tightness for increased comfort and longevity.

MAGNUS 1800 Windows are not just casement-awning commercial windows. They are a unique combination of superior material formulation, structural integrity and outstanding performance - thermal, acoustic, air and water.





#### Features:

- Proprietary triple-seal technology for optimal air and water tightness.
- Continuous frame concept for multi-lite configurations within one frame.
- Durability and longevity with unique uPVC formulation and high-definition finish.

# MAGNUS 1800 CASEMENT-AWNING WINDOWS

## SUPERIOR SEAL TECHNOLOGY & OUTSTANDING PERFORMANCE



\* based on simulation

Types Casement, Awning, Fixed

Frame Depth 3 1/4 in (82.5 mm) or 3 1/2 in (88.9 mm)

Overall Glass Up to 1 3/8 in (34.9 mm)

U-values Down to 0.17\*

STC Up to 40 dB

Structural Ratings Casement: CW-PG70 Awning: LC-PG70 Fixed: CW-PG60

#### AVAILABLE COLORS



Proprietary, highly engineered triple-seal technology provides optimal compression to improve the system's insulating properties and to ensure long service life

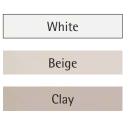
Continuous frame design

allows for greater design flexibility with multi-lite configurations in one frame

Up to 1 3/8 in (35 mm) glazing capability provides excellent acoustical and energy performance properties

Main profiles engineered with multiple chambers increase strength and energy performance while allowing efficient water drainage

3 1/2 in (89 mm) frame depth with internal accessory grooves provide flexibility for new construction and replacement applications





# **TRIPLE-SEAL TECHNOLOGY**

Innovative continuous triple seal technology ensures otimal compression and the high elastic, load-resistant material provides a long service life.



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