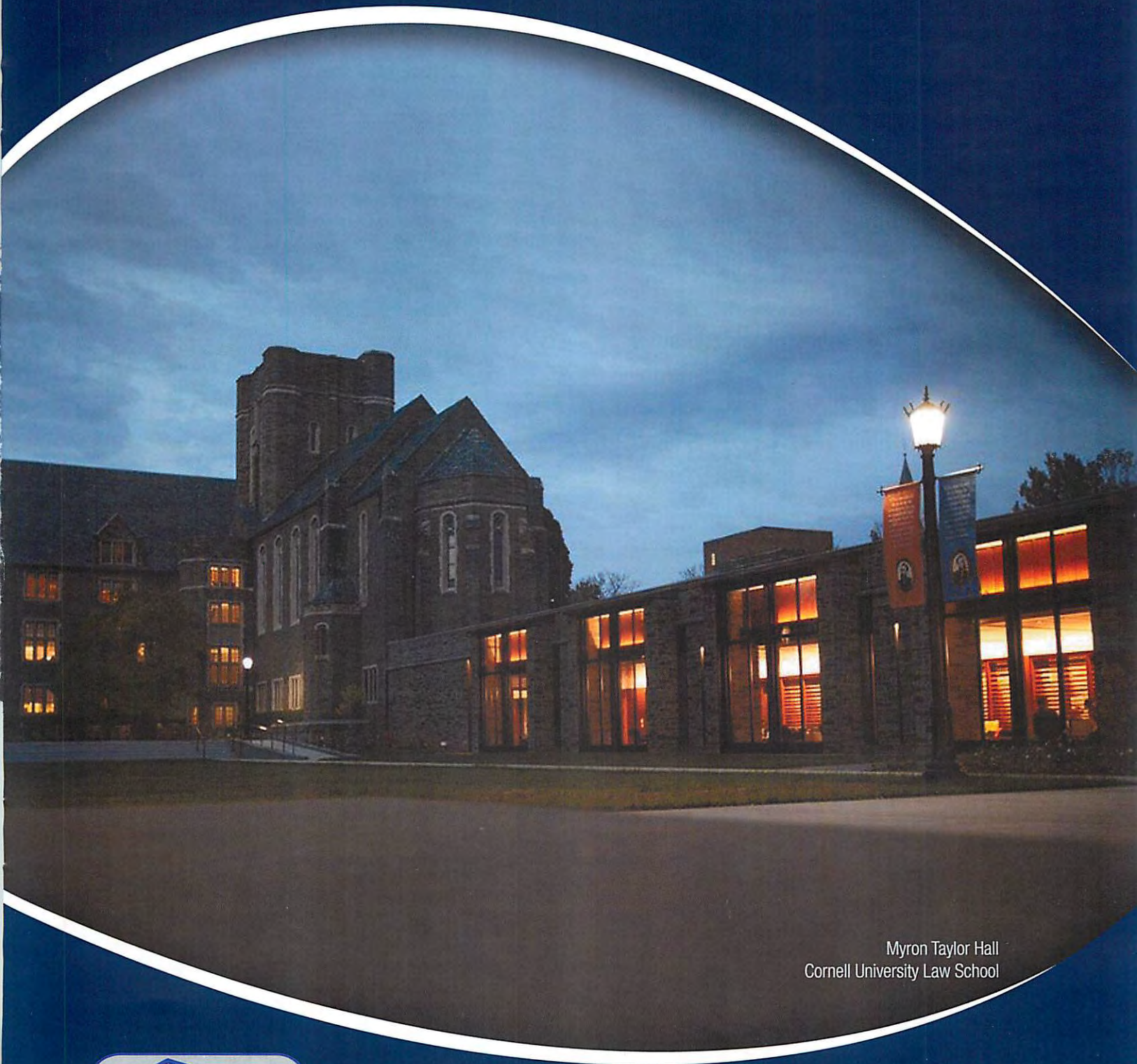
# Custom Engineered Interior Window Systems

Historic Preservation | Custom Shapes | Engineered Window Walls | Specialty Design | Complex Openings



Myron Taylor Hall
Cornell University Law School

edi WINDOW SYSTEMS INC.

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1-800-462-6088 • 607-729-9131

# edi Custom Engineered Interior Window Systems

## PRIME/plus Concept

Exterior Prime Window

Interior Prime Plus Window

### Interior Retrofit Window Systems

edi is a specialty manufacturer of interior window systems for architecturally significant window retrofit projects. edi custom windows will maintain the traditional appearance of the original window, while achieving the modern energy standard required today.

### PRIME/plus Concept

**The prime window functions as a storm window, while edi becomes the new prime window on the inside.**

edi PRIME/plus concept is an interior window working in tandem with the original prime window. The resulting window system becomes double glazed. The cost and job problems associated with obtaining high architectural standards through window replacement may now be avoided. Likewise, by mounting to the inside, aesthetic difficulties common with exterior storms are circumvented.

### Historic Restoration

With more architectural emphasis being placed on the proper planning and treatment of historically significant buildings, edi Window Systems specializes in concept, design and specifications for each aspect of any historic preservation project. While architects and preservation groups are becoming more concerned with preserving the original windows, edi becomes the quality solution to window retrofit planning. Such features as our low profile framing and customizing sightlines allow edi to meet stringent historic requirements, while still being undetectable from the exterior. For interior considerations, special paint finishes are available upon request.

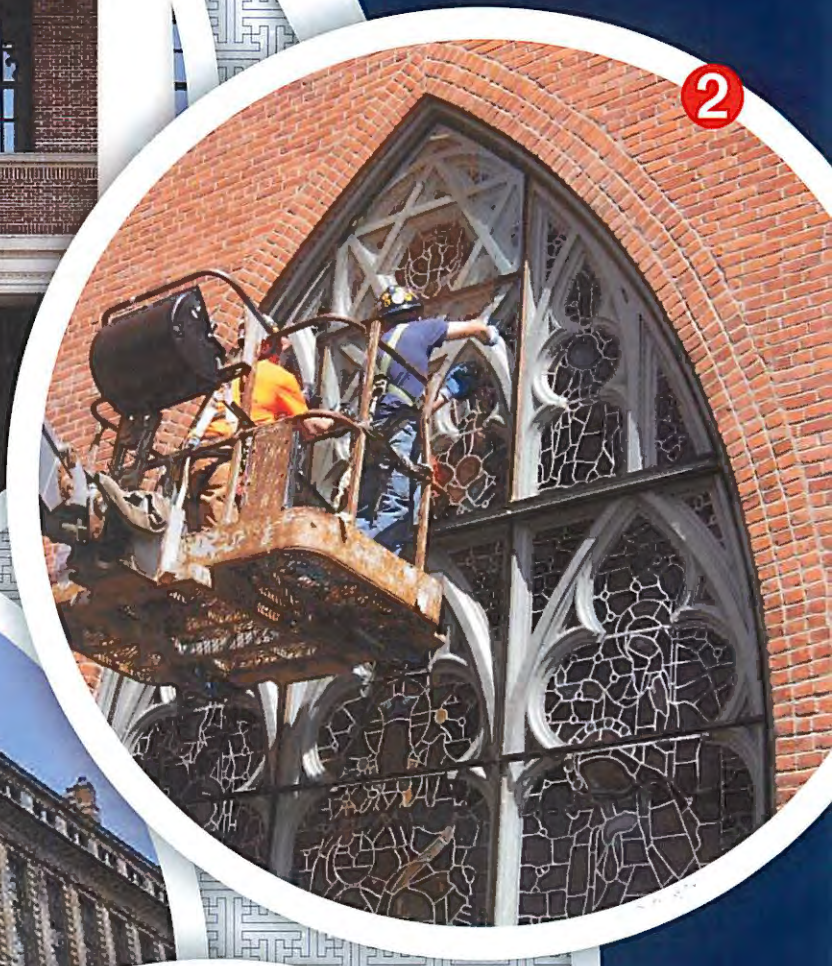
### Custom Engineering & Specialty Bending

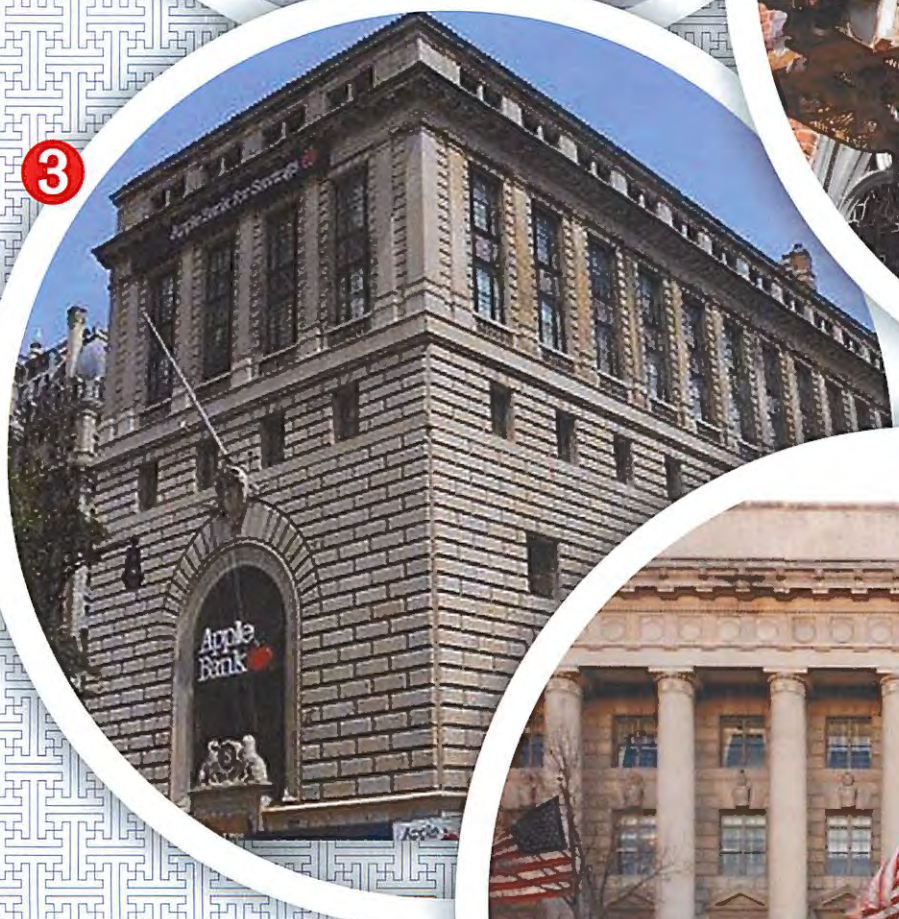
edi products may be custom engineered and designed to cover openings of virtually any size or shape. An interior window must be extremely flexible in its engineering capacities to accomodate the thousands of different window designs and shapes present in our country's architecture. edi will design a window to meet your needs. Custom shapes such as gothic or arched heads, whether operable or fixed, can easily be installed.

### Designed for Maintenance

All edi Windows are designed to compliment the existing window for aesthetics and natural ventilation requirements. We'll insure easy access to both inner and outer windows for cleaning and maintenance purposes. All inserts, regardless of size or series, are removable, requiring no storage.

# Prime Plus Projects





1. **Widener Library at Harvard University**
2. **St. Patrick's Church, Binghamton, NY**
   *Exterior Fixed Removal*
   *Prime Plus for Stained Glass Protection*
3. **Apple Bank, 73rd St., New York, NY**
4. **U.S. Department of Commerce**
   **Washington, D.C.**

# Horizontal Sliding | 1000 & 2000 Series

| 1000 Series Glazing Options | | Max.* sq. ft. |
|---|---|---|
| 1/8 in. Float or Tempered | Clear Bronze Gray | 24 |
| 1/8 in. Polycarbonate | | |
| **2000 Series Glazing Options** | | **Max.* sq. ft.** |
| Above Options | Clear Bronze Gray | 48 |
| 3/16 in. and 1/4 in. Float or Tempered | | |
| 3/16 in. and 1/4 in. Polycarbonate | | |

**WINDOW CLEARANCES ± = 1/4 in.**

| Series | Head | Jamb | Sill | Frame Depth |
|---|---|---|---|---|
| 1000 | 1-1/4 in.± | 1 in.± | 1-1/4 in. | 1-3/8 in. |
| 2000 | 2-5/8 in.± | 1-1/2 in.± | 1-5/16 in. | 2-5/16 in. |

## General:

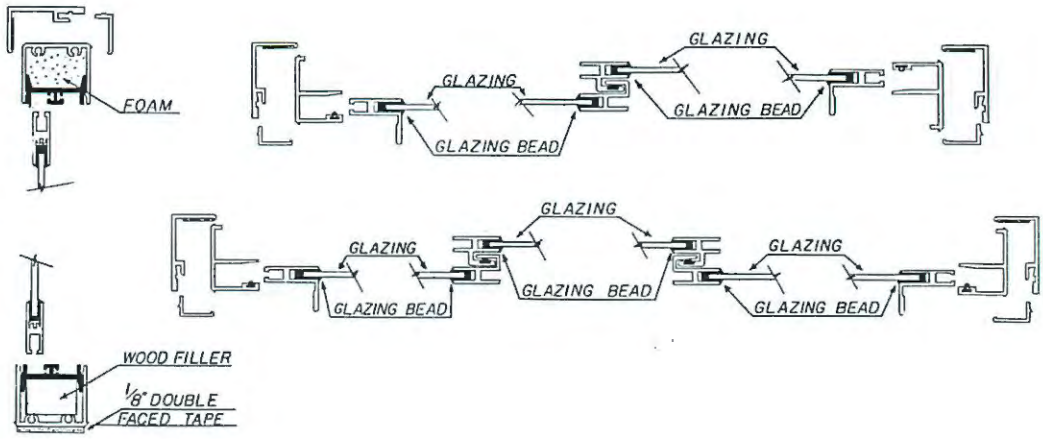
Our horizontal sliding Series are the windows to specify for doubleglazing window walls or punched openings. This Series easily conforms to multiple lite and complex openings requiring special treatments. Due to extreme flexibility in our design, the 2000 Series can be combined with other edi components to meet the natural ventilation and operational requirements of large openings.

## Features:

- Accomodates large openings
- Custodian locks available
- Available in 2 Lite & 3 Lite Sliders

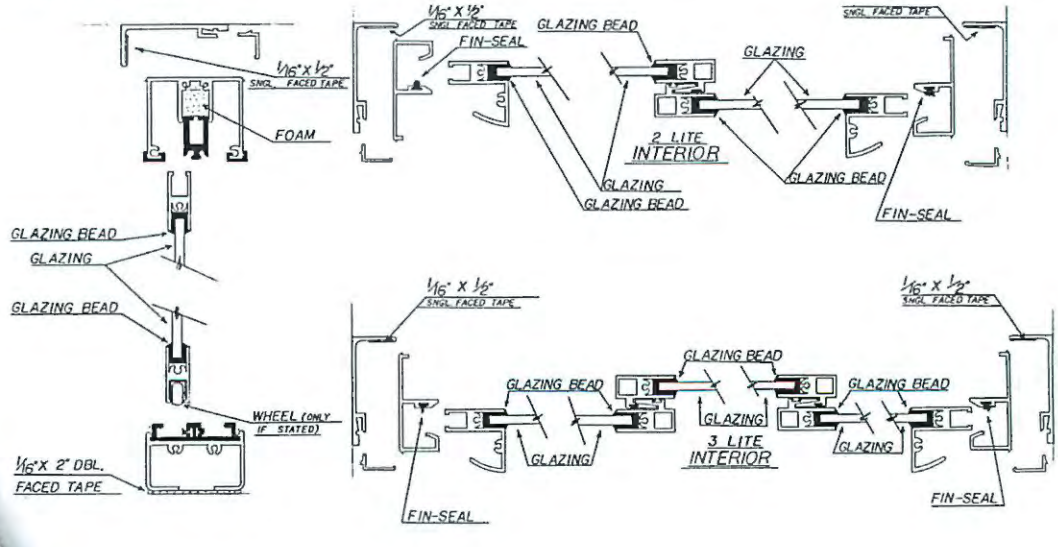
## 1000 Series

- 1/8 in. glass or polycarbonate
- 1⅜ in. frame depth
- Air infiltration of .214
- Can be combined with other series

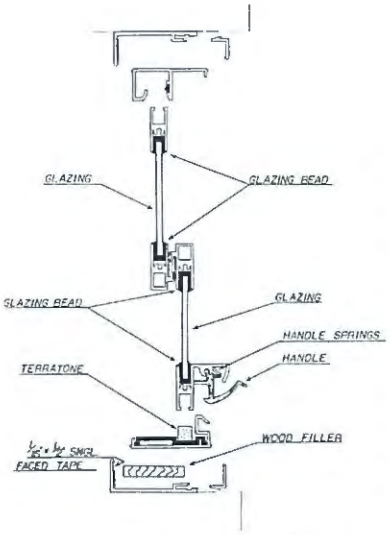



## 2000 Series

- 1/8 in., 3/16 in, 1/4 in. glass, safety, polycarbonate
- 2⅜ in. frame depth
- Air infiltration of .199
- Can be combined with other series
- Window rollers are standard



# 2100 Series Double Hung




**Features:**
- Fully balanced
- Curved heads
- Multiple configurations
- Laminated safety available for sound reduction

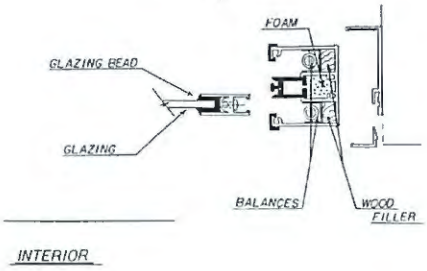
**2100 Series**
- 1/8, 3/16, 1/4 in. glass, polycarbonate
- 2 3/8 in. frame depth
- Air Infiltration of .164 c.f.m.
- Max. sq. ft. of 40 unless adaptions are made
- Can be combined with other series

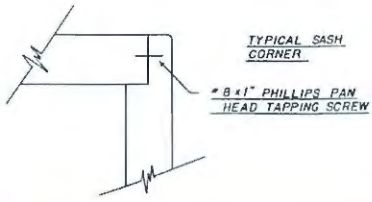
| 2100 Series Glazing Options | | Max.* sq. ft. |
|---|---|---|
| Above Options | Clear Bronze Gray | 40 |
| 1/8 in. Float or Tempered | | |
| 3/16 in. and 1/4 in. Float or Tempered | | |
| 3/16 in. and 1/4 in. Polycarbonate | | |

**WINDOW CLEARANCES ± = 1/4 in.**

| Series | Head | Jamb | Sill | Frame Depth |
|---|---|---|---|---|
| 2100** | 1-1/2 in.± | 2 in.± | 1-1/2 in.± | 2-5/16 in. |

Due to weight restrictions in balanced units, please consult edi.




# Fixed Removable 1200-2200 Series

**General Description**
edi interior fixed removable windows are uniquely designed for retrofiting windows that require no ventillation, but require ease of maintenance and access to the existing window. Specialty design allows for custom shapes and large combination openings. Architectural appearance is preserved by the low profile framing.

**Features:**
- Curved heads
- Gothic shapes
- No exposed fasteners

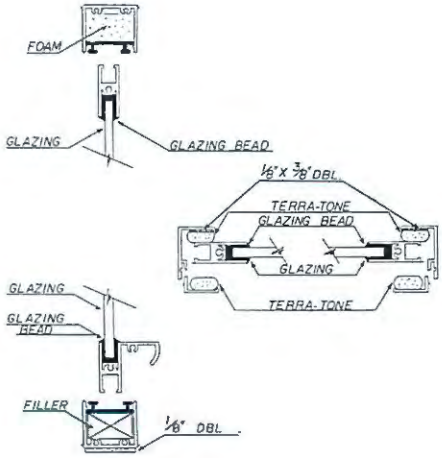
**1200 Series**
- 1/8, 3/16, 1/4 in. glass, safety, polycarbonate
- 1 3/8 in. frame depth
- Air infiltration of .158 c.f.m.
- Max. sq. ft. of 25 unless adaptions are made
- Can be combined with other series

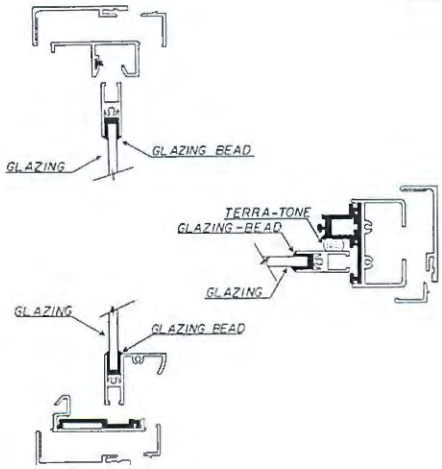
**2200 Series**
- 1/8, 3/16, 1/4 in. glass, safety, polycarbonate
- 2 3/8 in. frame depth
- Air infiltration of .23 c.f.m.
- Max. sq. ft. of 25 unless adaptions are made
- Can be combined with other series

| 1200 Series Glazing Options | | Max.* sq. ft. |
|---|---|---|
| 1/8 in. Float or Tempered | Clear Bronze Gray | 16 |
| 1/8 in. Polycarbonate | | |
| 3/16 in. and 1/4 in. Float or Tempered | | |
| 3/16 in. and 1/4 in. Polycarbonate | | |
| **2200 Series Glazing Options** | | **Max.* sq. ft.** |
| 1/8 in. Float or Tempered | Clear Bronze Gray | 24 |
| 1/8 in. Polycarbonate | | |
| 3/16 in. and 1/4 in. Float or Tempered | | |
| 3/16 in. and 1/4 in. Polycarbonate | | |

**WINDOW CLEARANCES ± = 1/4 in.**

| Series | Head | Jamb | Sill | Frame Depth |
|---|---|---|---|---|
| 1200 | 1-1/4 in. | 1 | 1-1/4 in. | 1-3/8 in. |
| 2200 | 1-1/2 in.± | 2 in.± | 1-1/2 in.± | 2-5/16 in. |




**Please Note:**
Due to our system's flexibility, size limitations should be considered only as guidelines rather than strict limitations.

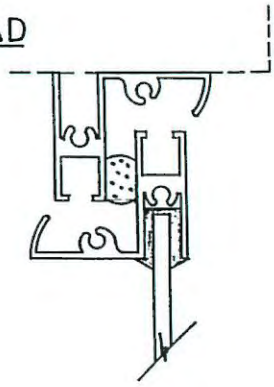
Please feel free to call our engineering department should your windows exceed these ranges.

# 2300 Series Casement

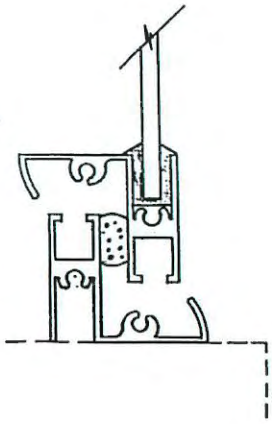
**2300 Series**
- 1/8, 3/16, 1/4 in. glass, safety, polycarbonate
- 2 3/8 in. frame depth

**Myron Taylor Law School at Cornell University**
*Prime Plus Interior Casement Window for Sound Reduction & Heat Loss Protection*

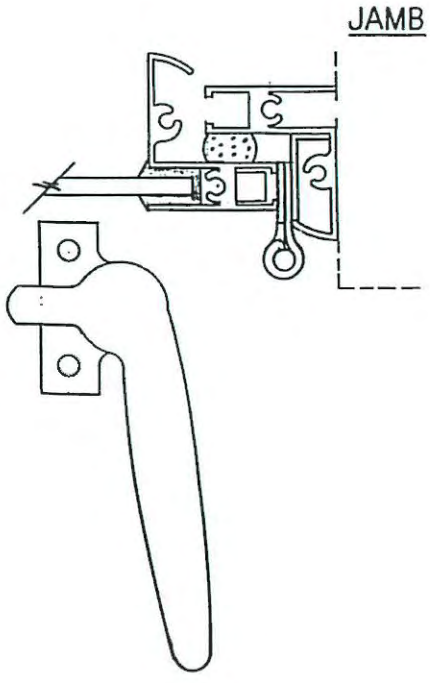
HEAD



SILL



JAMB



# Technical Data & Short Form Architectural Specifications

## PRIME/plus Window Systems Series 1000, 2000

### General

The PRIME/plus window system is to be installed on the interior casing of the existing energy inefficient prime window. It is designed to work in tandem with, but independent of, the prime window.

All inserts are to be fully removable without detaching expanders or main frame members from the opening.

The system shall be designed in such a manner that its performance characteristics shall meet the following:

**A. Air Infiltration:** Stand alone air infiltration rates shall not exceed the following air infiltration levels when tested at 1.56 psf (25 m.p.h. – equivalent) per ASTM: E283-73.

| Window Type | Test Unit Size | Infiltration Per Lineal Ft. of Crack |
|---|---|---|
| 2200 non-venting (1 Lite) | 54" x 76" | .23 c.f.m. |
| 2100 double hung (2 Lite) | 45" x 76" | .164 c.f.m. |
| 2000 slider (2 Lite) | 72" x 60" | .199 c.f.m. |
| 1200 non-venting (1 Lite) | 48" x 48" | .158 c.f.m. |
| 1000 slider (2 Lite) | 60" x 48" | .214 c.f.m. |

**B. Combined U-value:** Combined U-value shall not exceed .59 Btu/hr/ sq. ft./°F when tested by use of heat flow meter methods at a minimum of 18°F inside/ outside temperature differential.

**C. Uniform Load:** The inside system shall show no damage when subjected to a load of 15 psf exterior and 15 psf interior when tested per ASTM E 330-70. The test sample shall be 42 x 60 inches, with two inserts (2000 series).

### Materials

**A. Metal:** 6063T5 aluminum alloy
**B. Finish:** Clear Anodized (201R1), Quaker Bronze or White baked-on enamel. Special colors available upon request.

**Main Frame:** (1000 and 2000 series)
**Design Purpose:** To provide a fully sealed operating environment for the inserts.

**A. Metal:** 6063T5 aluminum alloy
**B. Finish:** Same as previous
**C. Track System:** Rigid Black PVC
**D. Seals:** Schlegel Fin-Seal to 50% compression or Q-Lon®*
**E. Springs:** 1-4 lb. density polyethersulfone foam

**Balances:** (2100 series) Jamb mounted block and tackle balances as required by insert size and weight to hold the inserts in an open position.

**Inserts:** (1000, 2000 series)
**Design Purpose:** To provide operable full perimeter sealing sash members.

A. Metal (frames) 6063T5 alloy

B. Metal (fasteners) stainless steel screws

C. Finish (aluminum) – same as previous

D. Vinyls – soft PVC marine glazing bead

E. Seals – Schlegel Fin-Seal Q-Lon® or equal

F. Glazing Materials:
1000 Series: Any ⅛ in. material listed on glazing chart (see glazing chart).

2000 Series: Any ⅛, 3/16, or ¼ in. material listed on glazing chart (see glazing chart).

### Installation

Expanders shall be further attached with mechanical fasteners on 12 in. centers. Any gaps between expanders and the casing shall be filled with Sonneborn Sonolastic® sealant or equal.

The main frame shall be true and square inside the opening without regard to out-of-square and run-out in the casing.

All inserts must close smoothly and tightly. Meeting rails between inserts must seal completely upon closing.

All system glazing materials, as well as the inside glazing surface of the original prime window, shall be left clean.

Where necessary, appropriate matching touch-up paint shall be used to repair scratches to painted surface.

**Q-Lon® weather seal is a registered trademark of Schlegel Corporation.*

## Special Services

- On-site consultations by factory representatives available.

## Optional Accessories

- Special paint colors
- Custodial locks
- Sill rollers for ease of operation
- Aluminum mesh insect screens
- Glazing options
  - ⅛, 3/16, ¼ in. float or tempered glass
  - Polycarbonates
  - Low "E" glazing for increased energy performance

## Special Features

- Specialty engineered curves and gothic shapes
- Custom extrusions
- Expander system designed to accommodate existing conditions
- Weatherseals
  - Q-Lon® weatherseal, the tested leader for air infiltration, thermal variance, and acoustics
  - Gaskets and airseals used throughout for air tight construction
  - Balancing systems for large openings

## 101 Jefferson Ave., Endicott, NY

...Before

...After
Prime Plus Exterior Application

## Our Mission Statement

edi Window Systems, Inc. has been a family owned and operated business for over 26 years. We serve our customers to commitment to service and value. We appreciate your interest and look forward to earning your business.

Established in 1989, edi Window Systems has experience and expertise to get the job done right the first time. We completely guarantee our work and your satisfaction. Throughout the past 26 plus years, our main goal is to deliver quality products, excellent service and most of all we value your business.

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