



Section 08 35 13.13 - Interior Windows

IndowPRO Secondary Glazing System

PART 1 – GENERAL

1.1 SUMMARY

1. IndowPRO by Indow, which provides a modular, site-assembled framing system designed to de-risk commercial retrofits through simplified logistics, accommodation of out-of-square openings, and a data-driven measurement-to-manufacturing process.

1.1.A

A. Section Includes:

1. Interior-mounted secondary glazing system with mechanical or adhesive fastening options for commercial, multifamily, and institutional buildings.
2. System shall include aluminum-PVC modular framing, gasketed perimeter seal, flexible internal sealing corners, optional subdivided assemblies (via IndowPRO Mullion Bar System), and glazing-retaining Cosmetic Cladding.
3. Glazing types include vacuum-insulated glass, acoustic glass, low-E pyrolytic glass, and lightweight Low-E acrylic.

B. Related Sections:

1. Section 08 80 00 – Glazing
2. Section 08 51 00 – Aluminum Windows

C. Basis of Design Product:

1. IndowPRO by Indow, which provides a modular, site-assembled framing system designed to de-risk and improve cost-effectiveness of commercial retrofits



through simplified logistics, accommodation of out-of-square openings, and a data-driven measurement-to-manufacturing process.

1.2 REFERENCES

The following standards, where applicable, shall govern testing and performance:

- A. ASTM E283 – Standard Test Method for Determining Rate of Air Leakage
- B. ASTM E90 – Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss

Note: Performance values are derived from testing at third-party labs and validated computer modeling per applicable ASTM standards. Full NFRC/AERC certification is in process.

1.3 SUBMITTALS

- A. Product Data: Manufacturer's product literature, specifications, and data sheets describing system components, glazing types, and performance characteristics.
- B. Shop Drawings: Submitted upon request for approval, including dimensions, layout details, and installation anchoring strategy.
- C. Samples: Color chips for frame finish (black, white, or custom-painted) if required for architectural review.
- D. Installation Instructions: Manufacturer's standard instructions and guidance documentation.
- E. Warranty: Manufacturer's 20-year limited warranty for frame and framing components, plus glazing manufacturer warranties as applicable.

1.4 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of 10 years of experience in manufacturing secondary glazing systems.
- B. Installer shall follow manufacturer's instructions and have demonstrable experience with fenestration systems or glazing assembly.
- C. Work shall comply with applicable building codes and local jurisdiction requirements.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver components in manufacturer's original packaging with labels intact.
- B. Store glazing panels in their original shipping crates, positioned level and protected



from physical damage or temperature extremes.

C. Store frame components in a clean, dry area.

D. Handle all materials with care to avoid damage to edges, finishes, and seals.

1.6 WARRANTY

A. Indow provides a 20-year limited warranty on IndowPRO frames and non-glazing components against manufacturing defects.

B. Glazing components are covered by pass-through warranties from glazing manufacturers, typically 20 years or more.

C. Warranties do not cover damage from misuse, incorrect installation, structural movement, or glazing defects within industry-accepted tolerances.

D. All warranty claims must be submitted within 60 days of defect appearance.

1.7 SITE CONDITIONS

A. Confirm that opening dimensions and primary window frame conditions conform to manufacturer's requirements prior to installation.

B. Primary windows must be structurally sound, clean, dry, and free from debris.

C. Minimum required depth of mounting surface: 1.125" with unobstructed, continuous perimeter flange.

Part 2: Products

2.1 SYSTEM DESCRIPTION – IndowPRO Secondary Glazing System

A. General:

The secondary glazing system shall be an interior-mounted, site-assembled aluminum-PVC hybrid framing system designed to accommodate high-performance glazing panels and provide thermal and acoustic enhancement to existing commercial window systems. The system shall be designed for screw-in or adhesive-bonded installation into primary window frames and shall not require replacement or modification of the existing glazing.

B. Configuration:



1. System shall consist of the following primary components:
 - Four extruded aluminum frame sections with integrated PVC thermal break and perimeter gaskets
 - Internal Corners with flexible Foam Corner Seals
 - Cosmetic Cladding rails for aesthetic interior finish
 - Snap-fit Corner Covers or crewed on or and cosmetic screw caps
 - Mounting blocks and alignment marks for glazing installation
2. System shall be site-assembled using interlocking aluminum frame pieces which slide onto internal corners.
3. System shall be installed using either mechanical fasteners... or a high-strength, non-structural adhesive tape system (VHB) as specified by the manufacturer..

C. Glazing Accommodation:

System shall support the insertion of a wide range of glazing materials post-frame installation, including:

- Vacuum Insulated Glass (R-6 to R-18 rated)
- Pyrolytic Low-E single glazing
- Laminated acoustic glass
- Lightweight low-E coated acrylic panels

D. Installation Sequence (General Overview):

1. Assemble aluminum frame with internal corners & foam corner seals and snap rear corner covers in place.
2. Position assembled frame in existing primary window opening; fasten each frame side using screws through pre-drilled holes, compressing perimeter gasket to create air seal.
3. Remove desiccant-sealant tape before glazing installation to activate integrated desiccant chamber.
4. Insert glazing panel into frame using leveling shims and mounting blocks.



5. Install Cosmetic Cladding rails at bottom, top, and sides to secure glazing.
6. Attach and screw corner covers for aesthetic and structural completion.

E. System Performance (when installed with R-18 VIG and steel primary window frames. (Final assembly performance is dependent on the specified glazing type. The IndowPRO frame is engineered to enable exceptional performance from specified glazings.):

- U-value: **As low as 0.125**
- Air infiltration: **0.01 CFM/ft² at 1.57 psf (ASTM E283)**
- STC Rating: **Up to 45+**
- Typical installation time: **<15 minutes per window**

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Verify that window openings are suitable for IndowPRO installation prior to frame assembly.
- B. Confirm presence of sufficient mounting depth: minimum **1.125 inches** of unobstructed frame step within the primary window frame.
- C. Inspect for excessive warping, deterioration, or obstruction of existing window surfaces.
- D. Confirm all field measurements have been gathered using manufacturer-approved laser measuring process with diagonal confirmation.
- E. Notify architect or responsible party of any conditions that prevent proper installation. Do not proceed until conditions are corrected.



3.2 PREPARATION

- A. Clean primary window frame surfaces with standard glass cleaner; if windows are cold, dry the surfaces immediately prior to glazing installation.
- B. Protect adjacent construction and finishes from damage during installation.
- C. Ensure accurate measurement documentation is available onsite for reference.

3.3 INSTALLATION

A. Assemble IndowPRO frame components onsite per manufacturer's written instructions.

1. Insert Interior Corners with Foam Corner Seals and assemble aluminum frame.
2. Secure Rear Corner Covers and confirm all joints are flush.
3. Mount the frame inside the existing window opening using the appropriate fasteners:
 - a. Use wood screws for wood frames; use self-tapping or appropriate metal screws for metal frames.
 - b. Fasteners must penetrate a minimum of 1 inch into substrate.
 - c. For adhesive-mounted systems, apply VHB tape to frame perimeter and install per manufacturer's instructions, ensuring proper surface preparation and bond.
4. Insert pre-specified glazing panel into frame
5. Place glazing on leveling/mounting blocks within the frame.
6. Install Cosmetic Cladding rails on top, bottom, and sides to secure the glazing.

OPTIONAL: SUBDIVIDED ASSEMBLIES

A. For windows requiring mullion division, field-install Indow Mullion Bar System per manufacturer instructions:

1. Measure and mark placement based on architectural layout or existing mullions.
2. Assemble IndowPRO frame, inclusive of mullion bars prior to mounting frame into Primary Window Frame. Install glazing into each opening and then install



Cosmetic Cladding to secure the glazing.

3.4 TOLERANCES

- A. System accommodates primary window bowing up to **.55 inch** across vertical or horizontal spans.
- B. Diagonal measurement difference tolerance: **up to 0.67 inch** between opposite corners without loss of air seal integrity.
- C. Installed units shall be plumb and level within **1/8 inch per 4 feet**.

3.5 ADJUSTMENTS

- A. If glazing is not sitting flush in frame, adjust mounting blocks as necessary.
- B. Inspect all screw caps, cladding seams, and corner joints for proper seating.
- C. Visually inspect perimeter seal for continuity.

3.6 CLEANING

- B. Clean glass glazing with typical glass cleaners.
- C. Clean acrylic glazing with diluted soap and water only.
- D. Wipe anodized aluminum frames with damp cloth.

3.7 PROTECTION

- A. Protect installed glazing units from ongoing construction activities.
- B. Follow same dust and masking protocols as required for primary glazing.
- C. Perform a final visual inspection before project handoff to confirm there are no visible air gaps or unsealed joints.