#### Renovate by Berkowitz, LLC.

Architectural Glazing Guide Specification for RENOVATE by Berkowitz, LLC (RbB) (RbB Platinum Plus) (RbB Platinum Plus II) (RbB Platinum Plus II XL)

### Section 08 51 13-Window Glazing Retrofit

(Note to Specification Writers, the specifications below are offered as desirable inclusions in the window retrofit system specification.

### **PART 1 - GENERAL**

### 1.01 SUMMARY

- A. Section Includes: Renovate by Berkowitz, LLC is available as RbB Platinum, RbB Platinum Plus II, and RbB Platinum Plus II XL.
- B. Related Sections:
  - 1. Drawings, General and Supplementary Conditions of the Contract, Division 1 and the following specifications sections apply to this section.
  - 2. Section 08 44 00 -Curtainwall and Glazed Assemblies
  - 2. Section 08 51 13 Aluminum Windows

### 1.02 REFERENCES

- A. United States
  - 1. ASTM 1036
  - 1. ANSI Z97.1 American National Standard for Glazing Materials Used in Buildings Safety
  - 2. ASTM C1048 Standard Specification for Heat-Treated Glass Kind HS, Kind FT Coated and Uncoated Glass.
  - 3. ASTM C1376 Standard Specification for Pyrolytic and Vacuum Deposition Coatings on Glass.
  - 4. CSPC 16 CFR 1201- Safety Standard for Architectural Glazing Materials.
  - 5. ISO 9001-2008 Certification.

### 1.04 SYSTEM DESCRIPTION

- A. Design Requirements
  - Provide Renovate Window Retrofit Technology system by Berkowitz, LLC hermetically sealed, factory-manufactured, insulating glass units to the existing, inside surface of the exterior, single or monolithic glazing.

## 1.05 SUBMITTALS

- A. Submit 12-inch sample of each type of glass indicated.
- B. Submit glass manufacturer's product sheet and glazing instructions.
- C. Submit sill extender if required
- D. Mockup: A full system mockup is required prior to commencing commercial installation. Mock up not to exceed 150 Square Feet.

# 1.06 QUALITY ASSURANCE

- A. Obtain the RbB Window retrofit system from the manufacturer with installation by a Certified Dealer/Installer only.
- B. Provide a structural engineer analysis of existing framing system and building system to determine proper support prior to installation.
- C. Provide water and air tests of existing framing system prior to installation.
- D. Manufacturer to be ISO 9001-2008 Certified.

# 1.07 DELIVERY, STORAGE AND HANDLING

- A. Comply with manufacturer's instruction for receiving, handling, storing and protecting retrofit system and glazing materials.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
- D. Exercise care to prevent damage to glass and damage/deterioration to coating on glass.

### 1.08 PROJECT SITE CONDITIONS

- A. Do not install glazing when interior glass surface temperature is less than 50 degrees F (10 C)
- B. Field Measurement: Verify field measurements with drawing dimensions prior to fabrication of window retrofit system.

## 1.09 WARRANTY

- A. Provide a written 10-year limited material warranty from date of manufacture for retrofit glazing system.
- B. Provide a two-year limited warranty on labor

### PART 2 - GENERAL

# 2.01 MANUFACTURERS

- A. Acceptable manufacturers:
  - 1. Renovate <sup>TM</sup> by Berkowitz, LLC (1-800-257-7827)
  - 2. No Substitutes permitted.

### 2.02 MATERIALS

(Designer to choose one of three available window retrofit systems.)

#### A. WINDOW GLAZING RETROFIT SYSTEM

RbB Platinum 1) Outboard lite: Existing Glass

- 2) ½" Desiccated structural spacer with permanent Adhesive Sealant, Airspace
- 3) Middle Glass Type: 3/16'' (5mm), Clear PPG Solarban 60 #4, Heat Treated or Guardian SN68 #4 Heat Treated, or equivalent
- 4) Airspace: ½" (12mm) Black 3Seal Spacer, 90% Argon filled
- 5) Inboard Lite: 3/16" (5mm) Clear Float, Heat Treated

RbB Platinum 1) Outboard lire: Existing Glass

Plus II

- 2) 1/2" Desiccated structural spacer with permanent Adhesive Sealant, Airspace
- 3) Middle Glass Type: 3/16" (5mm), Clear PPG Solarban 60 #4, Heat Treated or Guardian SN68 #4 Heat Treated, or equivalent
- 4) Airspace: ½" (12mm) Black 3Seal Spacer, 90% Argon Filled
- 5) Inboard Lite: 3/16" (5mm) pyrolytic Low-, #6 surface, Heat Treated

RbB Platinum

1) Outboard lire: Existing Glass

Plus II XL

- 2) ½" Desiccated structural spacer with permanent Adhesive Sealant, Airspace
- 3) Middle Glass Type: 3/16" (5mm), Clear PPG Solarban 70 #4, Heat Treated or Guardian SN68 #4 Heat Treated, or equivalent
- 4) Airspace: ½" (12mm) Black 3Seal Spacer, 90% Argon Filled
- 5) Inboard Lite: 3/16" (5mm) pyrolytic Low-e #6 surface, Heat Treated

### **B. PERFORMANCE CHARACTERISTICS:**

- 1) Center of Glass. Computed with LBNL Windows 6.3. Assumes clear existing lite.
  - a) RbB Platinum: R-Value 5.56 / SHGC 0.42
  - b) RbB Platinum Plus II: R-Value 6.67 / SHGC 0.35
  - c) RbB Platinum Plus II XL: R Value 6.67 / SHGC 0.27
- 2) Provide hermetically sealed IG units with dehydrated airspace, dual air seal of black polyisobutelyene (PIB), and a secondary seal of black silicone.

### PART 3 - EXECUTIONS

## 3.01 EXAMINATION

- A. Site Verifications and Conditions
  - 1. Verify that site conditions are acceptable for the installation of the glass (see 1.06).
  - 2. Verify openings for glazing are correctly sized within tolerance.
  - 3. Verify that a functioning weep system is present.
  - 4. Verify that the minimum required face and edge clearances are being followed.
  - 5. Do not proceed with retrofit glazing until satisfactory conditions for temperature (see 1.08 A) have been followed and all film (if found) removed.

### 3.02 PREPARATION

#### A. Protection

1. Approved certified Dealer/Installer to clean and prepare existing windows for acceptance of the window retrofit system as determined by Renovate by Berkowitz, LLC.

## 3.03 INSTALLATION

- 1. Dealer/Installer shall be Certified by Renovate by Berkowitz, LLC in accordance with installation procedures
- 2. Do not install window retrofit system when inside glass surface temperature is less than 50 degrees F.

## 3.04 CLEANING

- A. Remove window film if previously installed
- B. Pre- Installation- Clean components per the Renovate by Berkowitz, LLC installation program guidelines.
- C. Glass to be cleaned according to:
  - 1. GANA Glass Informational Bulletin GANA 01-0300 "Proper Procedure for Cleaning Architectural Glass Products."
  - 2. GANA Glass Informational Bulletin GANA TD-02-0402 "Heat Treated Glass Surfaces are Different."
- D. Do not use razor blades, scrapers or metal tools to clean glass.

### **END OF SECTIONS**