	<b>HISTORIC PRESERVATION COMMISSION AGENDA ITEM EXECUTIVE SUMMARY</b>			
	<b>Agenda Item Title/Address:</b>	COA: 109 S 4 <sup>th</sup> Street (replace windows)		
	<b>Petitioner:</b>	Steven Kolanowski		
<b>Please check appropriate box (x)</b>				
	<b>PUBLIC HEARING</b>		<b>MEETING 3/7/12</b>	<b>X</b>
<b>AGENDA ITEM CATEGORY:</b>				
X	Certificate of Appropriateness (COA)		Façade Improvement Plan	
	Preliminary Review		Landmark/District Designation	
	Discussion Item		Commission Business	
<b>ATTACHMENTS:</b>				
Architectural Survey page				
Information on existing window condition				
Production information on proposed window replacements				
<b>EXECUTIVE SUMMARY:</b>				
<p>Proposed is the replacement of all double-hung windows in the building at 109 S 4<sup>th</sup> Street. This building was rated as “Contributing” in the 1994 architectural survey.</p> <p>The existing windows are 1-over-1 wood sash in plastic or vinyl tracks. Storm windows are aluminum with some wood. Photos have been submitted showing the condition of the existing windows.</p> <p>The proposed replacement windows are Marvin Ultimate Insert Double Hung wood sash with aluminum exterior cladding. No exterior trim will be removed or altered for installation.</p> <p>The materials show divided lights in the upper sash. The applicant is considering using no divided light pattern or using a true divided light that is consistent with the Stick style architecture of the house, such as a two-over-two divided light.</p>				
<b>RECOMMENDATION / SUGGESTED ACTION:</b>				
Provide feedback and recommendations for approval of the COA.				



**ARCHITECTURAL SURVEY**  
**CENTRAL HISTORIC DISTRICT**  
**ST. CHARLES, ILLINOIS**

**ST. CHARLES HISTORIC PRESERVATION COMMISSION**

**Primary Structure**

ADDRESS 109 S 4<sup>th</sup> St

1994 Photo  
 Roll: 3  
 Negative: 32, 33

Photo: Aug. 2003



**ARCHITECTURAL SIGNIFICANCE**

- Significant
- Contributing
- Non-Contributing
- Potential for Individual National Register Designation

**BUILDING CONDITION**

- Excellent
- Good
- Fair
- Poor

**ARCHITECTURAL INFORMATION**

Architectural Style/Type: <u>Stick</u>	Exterior Walls (Current): <u>Clapboard</u>
Architectural Features: _____	Exterior Walls (Original): <u>Clapboard</u>
Date of Construction: <u>1860-1890</u>	Foundation: _____
Source: _____	Roof Type/Material: <u>Gable/Asphalt</u>
Overall Plan Configuration: _____	Window Material/Type: _____

**ARCHITECTURAL FEATURES:** Steeply pitched front gabled roof with double window on second floor and picture window with shingled hood on first floor.

**ALTERATIONS:** None

# HISTORIC PRESERVATION

## “CERTIFICATE OF APPROPRIATENESS” (COA) REVIEW

109 S. 4<sup>th</sup> Street, St. Charles, IL: Window Replacement

### CERTIFICATE OF APPROPRIATENESS

#### REVIEW CRITERIA

The Historic Preservation Commission is guided by the following criteria when determining whether to approve or to recommend to the City Council denial of a Certificate of Appropriateness:

#### 1. Significance of a Site, Structure or Building

All properties within Historic Districts and landmark sites have been surveyed for architectural and/or historic significance. Properties within districts are classified as one of the following:

- Significant to the Historic District (Least Flexibility with Review Criteria)
- Contributing to the character of the Historic District **Applies to 109 S. 4<sup>th</sup> Street Residence**
- Non-contributing to the Historic District (Greatest Flexibility with Review Criteria)

The classification of an individual property determines the flexibility with which the Historic Preservation Commission can apply the standards of the Historic Preservation Ordinance.

Survey information on individual properties is available for review in the Planning Division.

#### 2. General Architectural and Aesthetic Guidelines

a. **Height:** The height of any proposed alteration or construction should be compatible with the style and character of the structure and with surrounding structures. **Height of windows will not be changed.**

b. **Proportions of the Front Façade:** The relationship between the width of a building and the height of the front elevation should be compatible with surrounding structures. **Proportions of the Front Façade will not be changed.**

c. **Proportions of Windows and Doors:** The proportions and relationships between doors and windows should be compatible with the architectural style and character of the building. **Proportions of Windows and Doors will not change.**

d. **Relationship of Building Masses and Spaces:** The relationship of a structure to the open space between it and adjoining structures should be compatible. **No proposed change of relationship of building Masses and Spaces.**

e. **Roof Shapes:** The design of the roof, fascia and cornice should be compatible with the architectural style and character of the building and with adjoining structures. **No proposed change to the roof shape.**

f. **Scale:** The scale of the structure after alteration, construction or partial demolition should be compatible with its architectural style and character and with surrounding structures. **Scale will not change.**

g. **Directional Expression:** Facades in historic districts should blend with, and reflect, the dominant horizontal or vertical expression of adjacent structures. The directional expression of a building after

alteration, construction or partial demolition should be compatible with its original architectural style and character. **No proposed change in directional Expression**

h. **Architectural Details:** Architectural details, including types of materials, colors and textures, should be treated so as to make a building compatible with its original architectural style and character, and to enhance the inherent characteristics of surrounding structures. **Architectural detailing will be improved, as current low quality plastic windows will be replaced with top of the line Marvin Ultimate Double hung windows with high levels of architectural detailing.**

i. **New Structures:** New structures in an historic district shall be compatible with, but need not be the same as, the architectural styles and general designs and layouts of the surrounding structures. **No new structure is proposed.**

### **3. Secretary of the Interior's Standards for Rehabilitation**

a. Every reasonable effort shall be made to provide a compatible use for a property that requires minimal change to the defining characteristics of the building, structure or site, and its environment, or to use the property for its originally intended purpose. **No change is proposed.**

b. The distinguishing original qualities or historic character of a building, structure or site, and its environment, shall be retained and preserved. The removal or alteration of any historic materials or distinctive architectural features should be avoided when possible. **No change is proposed to the distinguishing historic character of the building.**

c. All buildings, structures or sites shall be recognized as physical records of their own time, place and use. Alterations that have no historical basis, or which seek to create an earlier appearance, shall be avoided. **No change is proposed.**

d. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved. **No change is proposed.**

e. Distinctive stylistic features, finishes and construction techniques or examples or skilled craftsmanship, which characterizes a building, structure or site, shall be preserved. **No change is proposed to the overall character of the building.**

f. Deteriorated historical features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture and other visual qualities and, where possible, materials. Replacement of missing features shall be based on accurate duplications substantiated by documentary, physical or pictorial evidence, and not conjectural designs or the availability of different architectural elements from other buildings or structures. **No change is proposed to either repair or replace deteriorated historical features. Current windows are of no historical value to the house.**

g. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible. Sandblasting and other physical or chemical treatments which will damage the historic building materials shall not be used. **No surface cleaning is proposed.**

h. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken. **No archaeological resources will be affected by changing windows.**

i. New additions, exterior alterations or related new construction shall not destroy historic materials that characterize a property. Contemporary design for the new work shall not be discouraged when such alterations and additions are differentiated from the old, and are compatible with the massing, size, scale, color, material and character of the property and its environment. **No new addition is proposed.**

j. New additions, and adjacent or related new construction, shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired. **No new additions are proposed.**

#### **4. Code Conflicts**

Where there are irreconcilable differences between the requirements of the building code, life safety code, or other codes adopted by the City and the requirements of this Chapter, conformance with those codes shall take precedence, and therefore the Historic Preservation Commission shall approve a Certificate of Appropriateness. In so doing, however, the Historic Preservation Commission shall be obligated only to approve those portions of the proposed work that are necessary for compliance with the applicable codes, as determined by the Building Commissioner or Fire Chief.

## Assessing Architectural or Historical Significance of Windows

The first step in planning for any window project is to determine how a window contribute to the architectural significance of a structure. There are four important basic window functions to be considered:

Windows:

- Admit light
- Provide ventilation
- Create a visual link to the outside world
- Enhance the appearance of a building

Windows are significant to a building if they:

- Are original to the building
  - **Windows at 109 S. 4<sup>th</sup> Street are not original to the house**
- Reflect period or regional styles or construction practices
  - **Windows at 109 S. 4<sup>th</sup> Street reflect economical replacement windows circa late 1970's**
- Reflect the original design intent for the building
  - **Current windows do not reflect the original design intent for the building**
- Reflect changes to the building resulting from major periods or events
  - **Current windows do not reflect any changes from major periods of events**
- Are examples of exceptional craftsmanship or design
  - **Current windows are an example of poor craftsmanship, see attachments.**

### *Recommended*

- Retain the number, location, size or glazing pattern of the windows, by abstaining from cutting new openings, blocking-in windows, or installing a replacement sash which does not fit the historic window opening. **Number, location, size will be retained. Glazing patterns will be mimicked to represent original design intent.**
- Maintain the historic material of the window such as wood, iron, cast iron, and bronze. **Marvin Ultimate Double Hung windows are proposed.**

### *Not Recommended*

- Changing the historic appearance of windows through the use of inappropriate designs, materials, finishes, or colors which radically change the sash, depth of reveal, muntin configuration, reflectivity/color of the glazing, or the appearance of the frame. **No change to appearance of windows. Color will be wineberry to match the color bouquet of the house paint scheme. Divided lights will even be added to add additional historical character to the house.**
- Obscuring historic window trim with metal or other substitute material. **No trim will be covered.**



## Current Status:

Spring loaded plastic replacement windows with storm windows. Some windows have stained glass inserts (not integrated into the window) which will be re-inserted into the new replacement window. No divided lights are currently in any of the windows. Most windows have aluminum storm windows. A few windows have broken wooden storm windows.



A: Windows must be screwed shut as they cannot remain closed on their own

B: Windows are spring loaded replacement windows – not original to the house. Estimated circa 1970's



Another example of how the windows must be screwed shut. If they are not screwed shut, a large air gap forms . Note how the clasp cannot be fully engaged due to window failure.



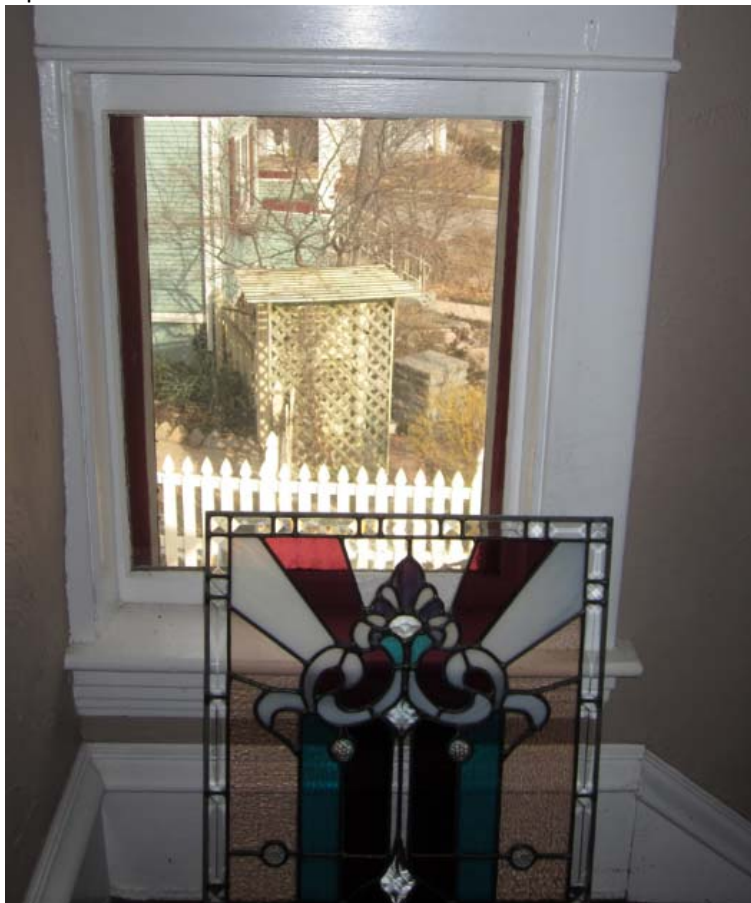
Windows have an approximate 1/2" air gap around edges.







Stained glass is an insert, and not an original window. Stained glass insert will be maintained in new replacement windows.





Most windows are covered with aluminum storm windows.



Some windows have broken wooden storm windows.

## Proposed Future State:

Remove current aluminum storm windows and current plastic framed spring loaded windows. Replace with: Marvin Ultimate Double Hung Replacement Windows with divided lights, top window. (Some windows) Wineberry exterior



Wineberry

## Ultimate Insert Replacement Double Hung Window

Add quality craftsmanship, beauty and energy efficiency to your home without compromising architectural integrity with the Ultimate Insert Replacement Double Hung window. Its frame-in-frame design is built precisely to your unique window opening, so there's no need to remove the existing frame or disturb the exterior or interior trim of your house. With a vast array of hardware finishes, wood species and clad color options, Ultimate Insert Double Hung windows always fit perfectly into your existing space.

- Tilt or remove the sash for easy cleaning
- Wood Ultimate Insert Double Hung is designed to meet historic design criteria
- Choose from a full range of options, including divided lite patterns, to replicate your existing window designs

## Standard Features

- One-lite Low E<sup>2</sup>-272 with argon insulating glass
- Satin Taupe sash lock
- Bare wood interior
- 3 1/4" jambs (clad only)
- 4 9/16" jambs (wood only)

- 8° sill bevel
- Installation hardware

CE [This product is CE certified.](#)

### Divided Lite Option:

- **Simulated Divided Lite (SDL)** - SDL bars are permanently adhered to both sides of the glass.



Simulated Divided Lite (SDL)





**Sample Exterior View:**



**Sample Inside view: White Trim**



## SECTION 08 52 13

### ALUMINUM CLAD WOOD ULTIMATE INSERT DOUBLE HUNG WINDOW

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

- A. Aluminum clad wood ultimate insert double hung, single hung (and related picture or transom window) complete with hardware, glazing, weather strip, insect screen, removable grille, simulated divided lite, grilles-between-the-glass, and standard or specified anchors, trim, and attachments.

##### 1.2 RELATED SECTIONS

- A. Section 01 33 23—Submittal Procedures: Shop Drawings, Product Data, and Samples
- B. Section 01 62 00—Product Options
- C. Section 01 65 00—Product Delivery
- D. Section 01 66 00—Storage and Handling Requirements
- E. Section 01 71 00—Examination and Preparation
- F. Section 01 73 00—Execution
- G. Section 01 74 00—Cleaning and Waste Management
- H. Section 01 76 00—Protecting Installed Construction
- I. Section 06 22 00—Millwork: Wood trim other than furnished by window manufacturer
- J. Section 07 92 00—Joint Sealants: Sill sealant and perimeter caulking
- K. Section 09 90 00—Paints and Coatings: Paint or stain other than factory applied finish

##### 1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM):
  - 1. E 283: Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
  - 2. E 330: Standard Test Method for Structural Performance of Exterior Windows, Curtains Walls, and Doors by Uniform Static Air Pressure Difference.
  - 3. E 547: Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.
  - 4. E 2190: Specification for Sealed Insulated Glass Units.
  - 5. C 1036: Standard Specification for Flat Glass.
- B. WDMA I.S.4: Industry Standard for Water Repellent Preservative Treatment for Millwork.
- C. American Architectural Manufactures Association / Window and Door Manufactures Association (AAMA / WDMA): AAMA/WDMA/CSA 101/I.S.2/A440-05. Standard/Specification for Windows, Doors, and Unit Skylights. AAMA/WDMA/CSA 101/I.S.2/A440-08. NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights.
- D. Window and Door Manufacturers Association (WDMA): 101 / I.S.2 WDMA Hallmark Certification Program.
- E. Sealed Insulating Glass Manufactures Association / Insulating Glass Certification Council (SIGMA / IGCC).
- F. American Architectural Manufacturers Association (AAMA): 2605: Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels.
- G. National Fenestration Rating Council (NFRC): 101: Procedure for Determining Fenestration Product Thermal Properties.

##### 1.4 SYSTEM DESCRIPTION

A. Design and Performance Requirements:

1. Window units shall be designed to comply with AAMA/WDMA/CSA 101/I.S.2/A440-05 and AAMA/WDMA/CSA 101/I.S.2/A440-08.NAFS
  - a. Double Hung: LC-PG30-H up to 45 X 77.375 frame size.
  - b. Transom: LC-PG30-H up to 75.625 X 27.625 frame size.
  - c. Picture: CW-PG40-FW up to 68 X 77.625 frame size.
2. Air leakage shall not exceed the following when tested at LC-30 & LC-40 & CW-40 - 1.57 psf- according to ASTM E 283: LC-30 & LC-40 & CW-40 - 0.30 cfm per square foot of frame.
3. No water penetration shall occur when units are tested at the following pressure according to ASTM E 547: LC-30 - 4.5 psf and LC-40 & CW-40 – 6psf.
4. Window assembly shall withstand the following positive or negative uniform static air pressure difference without damage when tested according to ASTM E 330: LC-30 - 45 psf and LC-40 & CW-40 – 60psf.

1.5 SUBMITTALS

- A. Shop Drawings: Submit shop drawings under provisions of Section 01 33 23.
- B. Product Data: Submit catalog data under provisions of Section 01 33 23.
- C. Samples:
  1. Submit corner section under provisions of Section 01 33 23.
  2. Include glazing system, quality of construction, and specified finish.
- D. Quality Control Submittals: Submit manufacturer's certifications indicating compliance with specified performance and design requirements under provisions of Section 01 33 23.

1.6 QUALITY ASSURANCE

- A. Regulatory Requirements: Emergency Egress or Rescue: Comply with requirements for sleeping units of [IBC International Building Code] [BOCA Basic Building Code] [Southern Building Code] [Uniform Building Code] [\_\_\_\_\_].

1.7 DELIVERY

- A. Comply with provisions of Section 01 65 00.
- B. Deliver in original packaging and protect from weather.

1.8 STORAGE AND HANDLING

- A. Prime or seal wood surfaces, including surface to be concealed by wall construction, if more than thirty (30) days will expire between delivery and installation.
- B. Store window units in an upright position in a clean and dry storage area above ground and protect from weather under provisions of Section 01 66 00.

1.9 WARRANTY

- A. Windows shall be warranted to be free from defects in manufacturing, materials, and workmanship for a period of ten (10) years from purchase date.
- B. Insulating glass shall be warranted against visible obstruction through the glass caused by a failure of the insulating glass air seal for a period of twenty (20) years from the date of original purchase.

## PART 2 PRODUCTS

### 2.1 MANUFACTURED UNITS

- A. Description: Clad Ultimate Insert Double Hung, Single Hung, Stationary as manufactured by Marvin Windows and Doors, Warroad, Minnesota.

### 2.2 FRAME DESCRIPTION

- A. Finger jointed edge-glued pine head and side jambs with clear pine interior veneer; finger jointed edge glued Douglas fir head and side jambs with clear Douglas fir interior veneer; finger jointed edge glued white oak head and side jambs with clear white oak interior veneer; finger jointed edge-glued cherry head and side jambs with clear cherry interior veneer; finger jointed edge-glued mahogany head and side jambs with clear mahogany interior veneer; finger jointed edge-glued vertical grain Douglas fir head and side jambs with clear vertical grain Douglas fir interior veneer. Finger jointed (clear) sill.
  - 1. Kiln dried to a moisture content no greater than twelve (12) percent at the time of fabrication.
  - 2. Water repellent preservative treated in accordance with WDMA I.S.4.
- B. Frame thickness: 21/32 inch (17 mm) head jamb, 1-5/16 inch (33 mm) composite side jamb, 21/32 inches (17 mm) sill, 14 degree bevel, 8 degree bevel, 1 5/32 inches (29 mm) flat sill available.
- C. Frame width: 3 1/4 inches (83 mm). Exterior extruded aluminum clad 0.050 inch (1.3 mm) thick.

### 2.3 SASH DESCRIPTION

- A. Materials: Clear pine; Douglas fir; white oak; cherry; mahogany; vertical grain Douglas fir.
  - 1. Kiln dried to a moisture content no greater than twelve (12) percent at the time of fabrication.
  - 2. Water repellent preservative treated in accordance with WDMA I.S.4.
- B. Composite sash thickness: 1-9/16 inches (40 mm) for operating units. Corners slot and tenoned.
- C. Sash exterior extruded aluminum clad 0.045 inch (1.1 mm) thick. Operable sash tilt to interior for cleaning or removal.

### 2.4 GLAZING

- A. Select quality complying with ASTM C 1036. Insulating glass SIGMA/IGCC certified to performance level CBA when tested in accordance with ASTM E 774.
- B. Glazing method: Insulating glass (Altitude adjusted).
- C. Glass type: Clear; Bronze; Gray; Reflective bronze; Tempered; Obscure; Laminated; 11/16" LoE<sup>2</sup> 180™ with or without Argon; LoE<sup>2</sup> 272<sup>®</sup> with or without Argon; LoE<sup>3</sup> 366<sup>®</sup> with or without Argon; 7/8" tri-pane LoE<sup>2</sup> 180™ with Argon; Tri-pane LoE<sup>2</sup> 272<sup>®</sup> with Argon; Tri-pane LoE<sup>3</sup> 366<sup>®</sup> with Argon; Tri-pane LoE<sup>2</sup> 180™ with Krypton/Argon; Tri-pane LoE<sup>2</sup> 272<sup>®</sup> with Krypton/Argon; Tri-pane LoE<sup>3</sup> 366 with Krypton/Argon.
- D. Glazing seal: Silicone bedding on interior; acrylic foam adhesive tape on exterior.

### 2.5 FINISH

- A. Exterior: Fluoropolymer modified acrylic topcoat applied over primer. Meets or exceeds AAMA 2605 requirements.
  - 1. Standard Color: Stone White; Bahama Brown; Bronze; Pebble Gray; Evergreen.
  - 2. Select Color: Sierra White; Coconut Cream; French Vanilla; Cashmere; Desert Beige; Cumulus Gray; Cadet Gray; Ebony; Arctic White; Cascade Blue; Cobalt Blue; Hampton Sage; Sherwood Green; Wineberry; Custom color – contact your Marvin representative.
- B. Interior: Treated bare wood; Latex prime coat, white – available for pine wood species only.
- C. Painted Interior Finish: Optional factory applied water based acrylic paint over compatible primer. Available on Pine products only. Color – White

### 2.6 HARDWARE

- A. Balance system: Coil spring block and tackle with nylon cord and fiber filled nylon clutch.
- B. Jamb track: Vinyl extrusion. Color: Beige; White.
- C. Lock: High pressure zinc die-cast cam lock and keeper.
  - 1. Finish: Phosphate coated and electrostatically painted Satin Taupe; Bronze; White; Brass; Satin Chrome; Satin Nickel; Antique Brass; Oil Rubbed Bronze.

### 2.7 WEATHER STRIP



- A. Unit is weather stripped at jambs with a foam type material for added long-term performance to seal against both the bottom sash and top sash stiles. The bottom sash has a weather strip to seal against the sill, the top check rail has a weather strip to seal against the bottom check rail, and the top rail seals against a weather strip on the head-jamb parting stop.
- B. Stationary units: Continuous, bulb weather strip at perimeter of sash, concealed slotted bulb weather strip on exterior of sash, pile weather strip on interior of blind stop, dual durometer bulb weather strip at bottom rail. Color: Beige.

## 2.8 INSECT SCREENS

- A. Factory installed half screen, full screen. Half screen covers bottom sash opening. Screen cloth, 18 X 16 mesh: Charcoal fiberglass; Charcoal aluminum wire; Black aluminum wire; Bright aluminum wire; Bright bronze wire, HI-Tran fiberglass mesh.
  - 1. Aluminum frame finish:
    - a. Standard Color: Stone White; Bahama Brown; Bronze; Pebble Gray; Evergreen.
    - b. Select Color: Sierra White; Coconut Cream; French Vanilla; Cashmere; Desert Beige; Cumulus Gray; Cadet Gray; Ebony; Arctic White; Cascade Blue; Cobalt Blue; Hampton Sage; Sherwood Green; Wineberry; Custom color – contact your Marvin representative.

## 2.9 REMOVABLE GRILLES

- A. 3/4 X 15/32 inch (19 mm X 12 mm); 1-1/8 X 15/32 inch (29 mm X 12 mm); Pine only.
  - 1. Pattern: Rectangular; Custom lite layout.
  - 2. Finish: Match interior sash finish.

## 2.10 SIMULATED DIVIDED LITES (SDL)

- A. 5/8 inch (16 mm) wide; 7/8 inch (22 mm) wide; 1-1/8 inch (29 mm) wide; (with internal spacer bars).
  - 1. Exterior muntins: 0.055 inch (1.4 mm) thick extruded aluminum.
  - 2. Interior muntins: Pine; Douglas fir; white oak; cherry; mahogany; vertical grain Douglas fir. Muntins adhered to glass with double coated acrylic foam tape.
  - 3. Pattern: Rectangular; Custom lite layout. Finish: Match sash finish.

## 2.11 GRILLES-BETWEEN-THE-GLASS (GBG)

- A. 11/16" (17 mm) white contoured aluminum bar. Optional flat aluminum spacer bar, contact your Marvin representative.

## 2.12 ACCESSORIES AND TRIM

- A. Installation Accessories:
  - 1. Package of installation hardware consisting of: Factory installed vinyl sill fin.
    - a. Two 5/16 inch - #10 x 2 1/2 inch jamb jack screws
    - b. Four #7 x 2 inch Phillips pan head installation screws
    - c. Two jamb liner check rail pads
    - d. Two color matched clad jamb plugs (exterior)
    - e. Two wood flat head plugs (interior)
  - 2. Sash lifts: High pressure zinc die-cast. Color: Satin Taupe; Bronze; White; Brass; Satin Chrome; Satin Nickel; Antique Brass; Oil Rubbed Bronze.
- B. Aluminum Extrusions:
  - 1. Profile: Frame expander; Extruded panning; Mullion cover; as indicated on drawings.
  - 2. Finish: Fluoropolymer modified acrylic topcoat applied over primer. Meets or exceeds AAMA 2605 requirements.
    - a. Standard Color: Stone White; Bahama Brown; Bronze; Pebble Gray; Evergreen.
    - b. Select Color: Sierra White; Coconut Cream; French Vanilla; Cashmere; Desert Beige; Cumulus Gray; Cadet Gray; Ebony; Arctic White; Cascade Blue; Cobalt Blue; Hampton Sage; Sherwood Green; Wineberry; Custom color – contact your Marvin representative.

# PART 3 EXECUTION

## 3.1 EXAMINATION

- A. Verification of Conditions: Before installation, verify openings are plumb, square, and of proper dimension as required in Section 01 71 00. Report frame defects or unsuitable conditions to the General Contractor before proceeding.

- B. Acceptance of Conditions: Beginning of installation confirms acceptance of existing conditions.

### 3.2 INSTALLATION

- A. Comply with Section 01 73 00.
- B. Assemble and install window unit according to manufacture's instructions and reviewed shop drawings.
- C. Install sealant and related backing materials at perimeter of unit or assembly in accordance with Section 07 92 00 Joint Sealants. Do not use expansive foam sealant.
- D. Install accessory items as required.

### 3.3 CLEANING

- A. Remove visible labels and adhesive residue from glass according to manufacture's instructions.
- B. Leave windows and glass in a clean condition. Final cleaning as required in Section 01 74 00.

### 3.4 PROTECTING INSTALLED CONSTRUCTION

- A. Comply with Section 01 76 00.
- B. Protect windows from damage by chemicals, solvents, paint, or other construction operations that may cause damage.

END OF SECTION