

This Specifications Sheet utilizes the Construction Specifications Institute (CSI) MasterFormat™. The 1995 edition numbers are listed first; *numbers in italics are from the 2004 edition*. Options and dimensions are indicated by brackets [ ]. Specifier Notes precede specification text; edit for project requirements or delete in final copy. Metric conversion is calculated by multiplying: Number of Inches x 25.4 = Millimeters, rounded off. Manufactured by Kolbe & Kolbe Millwork Co., Inc., Wausau, Wisconsin.

## SECTION 08213B or 08 14 00.03 HERITAGE SERIES CRAFTSMAN INSWING DOORS

### PART 1 GENERAL

#### 1.01 SECTION INCLUDES

- A. Craftsman Inswing Doors complete with [hardware,] [glazing,] weatherstripping, [jamb extensions] [performance divided lites] [stationary panel] [stationary sidelite] and standard or specified anchorages, trim, attachments, and accessories. [Mulled Transoms] are also available.

#### 1.02 RELATED SECTIONS

SPECIFIER NOTE: Revise sections below to suit project requirements and to include desired options.  
Consult state and local building codes for specific requirements.

The MasterFormat 1995 edition numbers are listed first; *numbers in italics are from the 2004 edition*.

- Section 01330 or 01 33 00 – Submittal Procedures.
- Section 01620 or 01 62 00 – Product Options.
- Section 01630 or 01 25 00 – Product Substitution Procedures.  
(2004 title: *Substitution Procedures*.)
- Section 01650 or 01 65 00 – Product Delivery Requirements.
- Section 01660 or 01 66 00 – Product Storage and Handling Requirements.
- Section 01730 or 01 73 00 – Execution.
- Section 01740 or 01 74 00 – Cleaning.  
(2004 title: *Cleaning and Waste Management*.)
- Section 01760 or 01 76 00 – Protecting Installed Construction.
- Section 06100 or 06 10 00 – Rough Carpentry.
- Section 06200 or 06 20 00 – Finish Carpentry.
- Section 07210 or 07 21 00 – Building Insulation.  
(2004 title: *Thermal Insulation*.)
- Section 07900 or 07 92 00 – Joint Sealants.
- Section 08800 or 08 80 00 – Glazing.
- Section 09900 or 09 90 00 – Paints and Coatings.  
(2004 title: *Painting and Coating*.)

#### 1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM):
1. ASTM E283-04' - Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
  2. ASTM E330-02' - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

3. ASTM E547-00' - Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.
  4. ASTM E1425-07' or AAMA 1801-97 - Certification of Acoustical Performance.
  5. ASTM F588-07' (Windows).
  6. ASTM E 1996-04' - Standard Specification for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Windborne Debris in Hurricanes.
  7. ASTM E 1886-04' - Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors and Storm Shutters Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials.
  8. ASTM E2190-08' - Standard Specification for Insulating Glass Unit Performance and Evaluation.
- B. American Architectural Manufacturers Association/Window and Door Manufacturers Association (AAMA/WDMA), American National Standards Institute/Window and Door Manufacturers Association (ANSI/WDMA), Canadian Standards Association (CSA).
1. AAMA/WDMA/CSA 101/I.S.2/A440-05', 101/I.S.2/A440-08' - Standard / Specification for Windows, Doors and Skylights.
  2. WDMA I.S. 4-07'A Water Repellant Preservative Treatment for Millwork.
- C. National Fenestration Rating Council (NFRC)
1. NFRC 100-2004' & 2010' - Determining Fenestration U-Factor.
  2. NFRC 100-2004' & 2010' - Test Procedure for Thermal Transmittance of Fenestration.
  3. NFRC 200-2004' & 2010' - Determining Fenestration SHGC & Tv.
  4. ASTM E1423-06' - Determining Thermal Transmittance of Fenestration Systems.
  5. NFRC 500-2010' - Determining Fenestration Product Condensation Resistance.
- D. WDMA Hallmark Program
1. WDMA Hallmark Program Procedural Guide C.S.-1.
- E. Consumer Product Safety Commission (CPSC)
1. CPSC 16 CFR 1201 - Safety Glazing Standards.
  2. ANSI Z-97.1 - Safety Glazing Standards for Tempered Glass.

## 1.04 SYSTEM DESCRIPTION

See the Technical Information section at the beginning of this manual for Air, Water, Structural Test Reports and Energy Rating Reports. For updated reports, please visit our website at <http://www.kolbe-kolbe.com>.

- A. Design and Performance Requirements
1. Applications of windows include:
    - a. Residential application (design pressure required \_\_\_\_\_ psf).
    - b. Light commercial application (design pressure required \_\_\_\_\_ psf).
  2. Air, water, structural, and forced entry resistance shall be at levels which meet the specified design pressure as per AAMA/WDMA/CSA 101/I.S.2/A440-05', 101/I.S.2/A440-08'.
  3. Unique, non-listed unit's performance, when not tested, may be addressed by a manufacturer's Statement of Qualification.
  4. Mullion design can be adequate for specified design pressure.
- B. Energy Ratings
- All units tested are one-lite, residential, LoE<sup>2</sup>-270, argon filled, with Kolbe ID No. as listed on the NFRC label adhered to each unit. Values are certified per NFRC and units are labeled per state requirements.
1. Unique, non-listed units may have U & SHGC determined by NFRC procedures and listed on a manufacturer's Statement of Qualification.

## **1.05 SUBMITTALS**

- A. Shop Drawings: Submit shop drawings in accordance with Section 01330 Submittal Procedures *or* Section 01 33 23 – *Shop Drawings, Product Data, and Samples*.
- B. Product Data: Submit catalog data in accordance with Section 01330 Submittal Procedures *or* Section 01 33 23 – *Shop Drawings, Product Data, and Samples*.
- C. Samples: Submit corner section in accordance with Section 01330 Submittal Procedures *or* Section 01 33 23 – *Shop Drawings, Product Data, and Samples*. Include glazing system, quality of construction, specified finish, and color.
- D. Installation Instructions.
- E. Quality Control Submittals: Certificates: Submit performance test results reported by independent laboratory or manufacturer's Statement of Qualification indicating compliance with specified performance and design requirements.

## **1.06 QUALITY ASSURANCE**

- A. Insulating Glass – two certification programs: IGCC and IGMAC. Possible IGMA Certification (harmonized IGMAC & SIGMA).
- B. NFRC Certification Program for Energy Rating of Fenestration.
- C. WDMA Hallmark Program. Be sure to check the Air-Water-Structural Test Reports Manual on our website at <http://www.kolbe-kolbe.com>.
- D. IGMAC-Insulating Glass Manufacturer's Association Canada.
- E. [If required: Mock Up: Provide sample installation for field testing unit performance requirements for approval - Contractor to perform tests in accordance with AAMA 502-02 using Method A and/or Method B.]

## **1.07 DELIVERY, STORAGE AND HANDLING**

- A. Proceed in accordance with Section 01650 *or* 01 65 00 – Product Delivery Requirements, Section 01660 *or* 01 66 00 – Product Storage and Handling Requirements, and Installation Instructions.
- B. Deliver in original packaging, store in an upright position off the ground in a clean, dry area. Protect from weather and construction activities.
- C. Prime or seal wood surfaces, including surfaces to be concealed by wall construction if more than 30 days will expire between delivery and installation.

## **1.08 WARRANTY**

- A. Glass: See Kolbe & Kolbe Glass Warranty for details and exclusions.
  - B. Pre-finishing: See Kolbe & Kolbe Finish Warranty for details and exclusions.
  - C. Product Defects: See Kolbe & Kolbe Product Warranty for details and exclusions.
  - D. International: See Kolbe & Kolbe International Warranty for details and exclusions.
- These warranties are available on our website at <http://www.kolbe-kolbe.com>

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURED UNITS**

- A. Description: Inswing doors, sidelites, and transoms are factory assembled, as manufactured by Kolbe & Kolbe Millwork Co., Inc., Wausau, Wisconsin. Website: [www.kolbe-kolbe.com](http://www.kolbe-kolbe.com).
- B. Units available: [Standard Performance]

### **2.02 MATERIALS**

## Edit for Project Requirements.

- A. Frame: Constructed of kiln dried vertical grain Douglas Fir or Knotty Alder, with Fir/Alder interior stops and mull casings on mull units, water repellent, preservative treated in accordance with WDMA I.S. 4-07'A. As standard, wood units have 1-15/16 inch (51mm) brickmould applied.
  - 1. Jamb thickness: 3/4 inch (19mm) interior; 1-5/16 inch (33mm) exterior. [One-piece sash set transom jamb for wood units is 3/4 inch (19mm) at the head, side, and sill.]
  - 2. Basic jamb width: 4-9/16 inch (116mm).
  - 3. Sill height: 1-27/32 inch (47mm). [ADA-compliant sill with thermal break is 1/2 inch (13mm).]
  - 4. Sill: [Weep sills will be made to match jamb width. Constructed of Bronze anodized .062 inch (1.6mm) thick 6063 extruded aluminum alloy with an oak interior threshold.] [For units with 4-9/16 inch (116mm) wide jambs, [Oak] [Mahogany] sill measures 6 inch wide (152mm).] [For units with jambs greater than 4-9/16 inch (116mm) wide, [Oak] [Mahogany] sill measures 8-5/8 inch wide (219mm).] [ADA-compliant sill is 8-1/8 inch (206mm) wide with thermal break, made of bronze anodized 1/8 inch (3.2mm) thick 6063 extruded aluminum alloy.]
  - 5. Corner construction: Head and sill are dadoed with side jambs fastened by staples.
  - 6. Other wood species available: [Pine] [Alder] [Maple] [Oak] [Cherry] [Mahogany] [Walnut] [Bamboo] [other] on exposed wood frame components.
  - 7. [FSC Certified wood requiring Chain of Custody (COC) label].
- B. Panels: Constructed of kiln dried vertical grain Douglas Fir or Knotty Alder, water repellent, preservative treated in accordance with WDMA I.S. 4-07'A.
  - 1. Thickness: 1-23/32 inches (44mm). [Sash set sidelite thickness is 1-23/32 inches (44mm).]
  - 2. Top rail: Face dimension is 4-1/2 inch (114mm). [Sash set sidelite face dimension is 4-1/2 inch (114mm).] [Sash set transom rail face dimension is 2-7/16 inch (62mm).]
  - 3. Stiles: All lock stiles are constructed of laminated veneer lumber (LVL) with solid wood edge banding. Face dimension is 5-1/2 inch (140mm). [Sash set sidelite face dimension is 2-5/8 inch (67mm).] [Sash set transom rail face dimension is 2-7/16 inch (62mm).]
  - 4. Bottom rail: Face dimension is 7-9/16 inch (192mm). [Sash set sidelite rail face dimension is 7-9/16 inch (192mm).] [Sash set transom rail face dimension is 2-7/16 inch (62mm).]
  - 5. Cross rail: Face dimension is 7-1/2 inch (191 mm).
  - 6. Corner construction: Joined by wood dowels and glue.
  - 7. Other wood species available: [Pine] [Alder] [Maple] [Oak] [Cherry] [Mahogany] [Walnut] [Bamboo] [other] on exposed wood sash components
  - 8. [FSC Certified wood requiring Chain of Custody (COC) label].
  - 9. Interior glazed.
  - 10. Fixed panels are installed with panel spacers to ensure proper margin.
  - 11. Raised panels: 1-1/4 inch (32mm) thick [Raised] [Flat].
  - 12. Sticking Options: [standard-ovolo sticking] [square sticking]
  - 13. Prep for [locks] [hinges] [handle boring] [no prep].
- C. Surface Finish:
  - 1. Exterior Finish - Wood:
    - a. Standard: Exterior wood is to be treated bare wood with no primer coat applied.
    - b. [Exterior wood is to be treated bare wood with a primer coat applied.]
    - c. [Optional Exterior Paint Colors: Exterior wood is to have K-Kron II three-step coating process.] Color is to be [Abalone] [Alabaster] [Antique Red]

[Basil] [Bay Leaf] [Beige] [Butterscotch] [Camel] [Cape Cod] [Chutney]  
 [Coal Black] [Frosted Jade] [Gingersnap] [Green Tea Leaf] [Hartford  
 Green] [Kiwi] [Manchester] [Merlot] [Mudpie] [Mystic Ivy] [Natural Cotton]  
 [Patriotic Blue] [Pumpkin Spice] [Rustic] [Sand] [Slate] [Spiced Vinegar]  
 [Timberwolf] [Truffle] [Ultra Pure White] [Waterford] [White].

- d. [Specify a custom paint color.]
2. Interior Finish - Wood:
  - a. [Interior wood is to be treated bare wood without stain or top coat.]
  - b. [Interior wood is to be treated bare wood with an acrylic based double clear coat.]
  - c. [Interior wood is to have a water based stain with a clear water based top coat. Stain color is to be [Cherry] [Chestnut] [Coffee Bean] [Ebony] [Library Red] [Light Oak 998] [Red Wheat] [Spiced Walnut] [Sunset Oak] [Wheat].
  - d. [Specify a custom stain color.]
  - e. [Interior wood is to have acrylic type paint applied. The interior paint color is to be [Abalone] [Bright White] [Coal Black] [Graystone] [Ivory Tusk] [Misty Gray] [Natural Cotton] [Silk] [Ultra Pure White].]
  - f. [Specify a custom paint color.]
  - g. [Interior wood is to have a primer coat only] [High-performance urethane primer]
- D. Hardware:
  1. Handles and escutcheon plates: Active handle, inactive handle, interior and exterior escutcheon plates are made of solid brass. Gasket is made of Black Neoprene. All handles are shipped loose for field installation.
    - a. Toronto handle set - standard. Optional handle sets: [München] [Verona] Color options: standard is Bright Brass PVD [Antique Brass] [Oil Rubbed Finish] [Satin Nickel PVD] [Antique Nickel PVD] [Rustic Umber] [Matte Black] [Smoky Gray PVD]. [Optional keyed cylinder.]
    - b. Optional Dallas handle set is available in [Bright Brass PVD] [Satin Nickel PVD] [Smoky Gray PVD] [Matte Black]. [Optional keyed cylinder.]
  2. Locking hardware has a 1 inch (25mm) throw deadbolt with Schlage® key lock cylinder. Color options: [Bright Brass] [Antique Brass] [Oil Rubbed Finish] [Satin Nickel] [Antique Nickel] [Rustic Umber] [Matte Black]. [Double keyed cylinder is available in Bright Brass.]
  3. Locking system options: All components are corrosion resistant.
    - a. [Single Point: On single door. Made of stainless steel. For Three Point and Five Point locks: Lock strikes are color coordinated as indicated, to compliment handle and escutcheon color. Please indicate color of lock strike if a different color is required.
    - b. [Three Point: On single door. Center gear strike [standard tongue strike] [extended tongue strike [for heavy architectural trim] [for standard trim] is made of solid Brass. Color options: both parts are lacquer coated [Solid Brass] [Stainless Steel] [Oil Rubbed Brass].
    - c. [Five Point: On French double doors. [Two point: On secondary active panels only. Made of stainless steel. Head and Sill strike plates are made of Light Bronze anodized aluminum.] [Three point: On primary active panels. Center gear strike [Standard tongue strike] [Extended tongue strike [for heavy architectural trim] [for standard trim] is made of solid Brass. Color Options: both parts are lacquer coated [Solid Brass] [Stainless Steel] [Oil Rubbed Brass].
    - d. [Two Point Flush Bolt: On secondary active panel. Top and bottom threaded shoot rods are made of stainless steel and die cast parts, with a stainless steel finish. Lever face plate is stainless steel. Head and sill strike plates are made of Light Bronze anodized aluminum.]

- e. [6 inch (152mm) Flush Bolt: For sizes up to 6'-8" in height will receive 6 inch on both top and bottom, on secondary active panel. Top and bottom flush bolt is made of solid brass with a lacquer coated Bright Brass finish. Head and sill strike plates are lacquer coated solid Brass.] Color options: [Antique Brass] [Dull Chrome] [Oil Rubbed Finish] [Satin Nickel] [Antique Nickel] [Matte Black].
- f. [12 inch (305mm) Flush Bolt: For sizes 7'-0" and taller in height will receive 6 inch flush bolt at the bottom and 12 inch at the top, on secondary active panel. Solid Brass top strike plate, main latch, and head jamb strike plate. Extension rod, head, and top flush bolt cover are made of steel. Standard color is lacquer coated Bright Brass.] Color options: [Brushed Chrome] [Oil Rubbed Finish] [Satin Nickel] [Antique Nickel] [Black].
- 4. Adjustable Shoot Bolt Strike: made of [Solid Brass] [Stainless Steel] [Oil Rubbed Brass].
- 5. Hinge options:
  - a. Standard adjustable set hinge: 4" x 3-5/8" (102 x 92mm) hinge with 5/8 inch (16mm) radius corners [with removable pin] [with non-removable pin]. Steel reinforced and corrosion resistant. Color Options: Gold painted is standard. [Bright Brass] [Bright Brass PVD] [Satin Nickel] [Satin Nickel PVD] [Antique Nickel] [Antique Brass] [Brushed Chrome PVD] [Oil Rubbed Finish] [Matte Black] [Rustic Umber] [Smoky Gray PVD].
  - b. Standard adjustable guide hinge: 4" x 3-5/8" (102 x 92mm) with 5/8 inch (16mm) radius corner with removable pin. Steel reinforced and corrosion resistant. Color Options: Gold painted is standard. [Bright Brass] [Bright Brass PVD] [Satin Nickel] [Satin Nickel PVD] [Antique Nickel] [Antique Brass] [Brushed Chrome PVD] [Oil Rubbed Finish] [Matte Black] [Rustic Umber] [Smoky Gray PVD].
  - c. Optional residential hinges: non-adjustable solid Brass base 4" x 4" (102 x 102mm) with 1/4 inch (6mm) radius corner in Bright Brass [with removable pin] [with non-removable pin]. Hinges with non-removable pin are also available in [Antique Brass] [Stainless Steel] [Oil Rubbed Finish] [Satin Nickel] [Antique Nickel] [Matte Black].
  - d. Optional commercial grade hinges: solid Brass 4" x 4" (102 x 102mm) ball bearing square corner with non-removable pin. Color Options: [Bright Brass] [Antique Brass] [Stainless Steel] [Oil Rubbed].
  - e. Optional commercial grade hinges: available for Entrance doors only. Solid Brass 4-1/2" x 4-1/2" (114 x 114mm) ball bearing square corner with non-removable pin in [Bright Brass] [Stainless Steel] [Oil Rubbed Finish].
  - f. Optional construction (commercial type) hinges: 4" x 4" (102 x 102mm) primed steel with square corners.
- E. Weatherstripping: On all units except transoms.
  - 1. Frame head and side jambs: full perimeter vistaflex skin/santoprene foam/polypropylene rigid santoprene flex kerf-mounted weatherstrip, available in [Beige] [Brown].
  - 2. Weep sill: Brown foam-filled heavy bulb vistaflex skin/santoprene foam/polypropylene weatherstripping on the exterior of the bottom panel, with a rigid and flexible Beige PVC fin weatherstripping on the interior of the panel bottom.
  - 3. Sweep: on oak and ADA-compliant sill. Made of Beige santoprene.
  - 4. Panel: Along bottom panel is a leaf-type weatherstrip made of rigid and flexible Beige PVC.
  - 5. Stationary panel filler: made of Beige rigid and flexible PVC.
  - 6. Stationary panel filler cover: made of rigid and flexible PVC.

7. Corner pad: for optional oak or ADA-compliant sills. Made of Gray pile.
  8. Lock side corner pad: for optional oak sill. Made of gray closed cell foam.
  9. Weatherstrip backer rod: made of Black PVC foam.
  10. Stationary astragal weatherstrip: leaf is made of Black rigid PVC.
  - Additional Weatherstrip For French Doors:**
  11. Astragal: full perimeter vistaflex skin/santoprene foam/polypropylene rigid santoprene flex kerf-mounted weatherstrip, available in [Beige] [Brown].
  12. Astragal sill block: made of polypropylene in Dark Bronze with a matte finish.
  13. Active astragal pad: made of Gray EVA closed cell foam.
- F. Screens: Shipped loose.
1. [Standard sliding screen.] [Ultra sliding screen: for heavy duty use, with wider channels.]
  2. Screen cloth: BetterVue® Black fiberglass is standard iVis (improved visibility insect screen) 10% better insect protection, airflow, and clearer view. [UltraVue® Black fiberglass eVis (excellent visibility insect screen) 20% better insect protection, 15% better airflow, and clearer view] [Bright aluminum (not available with Brass screen frame)] [Charcoal aluminum].
  3. Screen channels: .024 inch (0.6mm) thick roll formed aluminum.
  4. Screen track: .050 inch (1.3mm) extruded aluminum.
  5. Screen strike and keeper: zinc plated steel.
  6. Finish color options: To match unit exterior. Screens are available for segment head and 1/2 circle top units.
  7. Swinging screen: with an adjustable self-closing mechanism, spring-loaded, locks on the head and sill of the secondary panel, pile weatherstrip, and rubber door sweep. Finish color options: to match unit exterior.

*The following are optional materials and accessories. Edit for project requirements.*

- G. Jamb Extensions: Provide factory installed Douglas Fir or Knotty Alder jamb extensions up to 7 inches (178mm) for wall thickness indicated or required.
1. Finish: match exterior frame finish.
  2. Other wood species available: [Pine] [Alder] [Maple] [Oak] [Cherry] [Mahogany] [Walnut] [Bamboo] [other]
- H. Performance Divided Lites (PDL): PDL system utilizes a permanently adhered wood grille bar both to the interior and to the exterior glass.
1. Material: Muntin is constructed of Douglas Fir or Knotty Alder on interior and exterior. [1-1/8 inch (29mm) wide]
  2. Pattern: [rectangular] [custom lite cuts-subject to approval of Kolbe & Kolbe Millwork Co., Inc.].
  3. Spacer bar between the glass. Finish: Standard [Champagne]. Optional [Aluminum mill-finish] [Black finish].
  4. Exterior surface finish: To match frame and sash exterior. (Some limitations apply for PDL bars on radius and special grid patterns.)
- I. Accessories & Trim
1. Casings:
    - a. [1-15/16 inch (51mm) profiled brickmould] [1-15/16 inch (51mm) flat casing] [3-1/2 inch (89mm) profiled brickmould] [3-1/2 inch (89mm) flat casing] [3-1/2 inch (89mm) profiled brickmould with backband; overall face dimension 4-1/4 inch (108mm)] [3-1/2 inch (89mm) flat casing with backband; overall face dimension 4-1/4 inch (108mm)] [4 inch (102mm) flat casing] [5-1/2 inch (140mm) flat casing] [no casing]

## 2.03 GLAZING

- A. Glass:
  - 1. Standard one lite IG is 5/8 inch (16mm) with tempered LoE<sup>2</sup>-270, argon filled.
  - 2. Standard IG or single glazed has standard design pressure of 20 psf (DP 20). See Website [www.kolbe-kolbe.com](http://www.kolbe-kolbe.com) for high & impact performance ratings.
  - 3. High altitude IG has open breather tube.
  - 4. All glass is select quality complying with FS-DD-G-451D.
  - 5. IG complies with IGCC and ASTM E2190-08'.
- B. Glazing Methods:
  - 1. Single glazed units are all silicone-glazed.
  - 2. Operating units and fixed units have K-Glaze with 3/16 inch (5mm) wide glazing tape and primary silicone on #1 surface along sight line paired with latex sealant on #4 surface at bottom wood glazing bead.
- C. Glass Options:
  - 1. [LoE<sup>3</sup> 340 – Glare Control - tempered] [LoE<sup>3</sup> 366 - tempered]. [ThermaPlus LoE glass has a [LoE<sup>2</sup>-270] [LoE<sup>3</sup>-366] option on surface 2 and a LoE hard coat on surface 4 plus permanent coating (interior pane) tempered].
  - 2. Tempered Patterned, bronze, or gray-lite.
  - 3. Laminated glass.
  - 4. Protective film.
  - 5. Other options: Standard to the industry. [With] [Without] argon gas. (Argon gas may not be included in units to be installed in or shipping through high altitude areas. Smaller TDL glass may not have argon gas.)
- D. Glazing Bead Options:
  - 1. Ovolo profile is standard. Options: [beveled] [square]

## 2.04 ACCESSORIES AND TRIM

<i>Edit for project requirements.</i>
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- A. Installation Accessories:
  - For Individual, Mullled Units, and Transoms:**
  - 1. Galvanized steel installation clips (number required to meet DP20 may be factory applied to unit). Kolbe & Kolbe recommends that all units with exterior casing be installed using installation clips.
  - 2. Mull anchors.
  - 3. Strip mull anchors.

## PART 3 EXECUTION

### 3.01 EXAMINATION

- A. Verification of conditions: Before installation, verify that openings are plumb and square and of proper dimension. Report frame defects or unsuitable conditions to the General Contractor before proceeding.
- B. Acceptance: Beginning of installation means acceptance of existing conditions.

### 3.02 INSTALLATION

- A. Install windows according to manufacturer's installation instructions, reviewed shop drawings and in accordance with Section 01730 – Execution or *Section 01 73 19 – Installation*.  
 Note: Certain codes require the use of pressure-treated lumber to line rough openings. Corrosion-resistant materials, such as stainless steel or hot-dip galvanized steel, must be used for fasteners and anchors having direct contact with pressure-treated lumber.

- B. Install sealant and related flashing materials at perimeter of assembly in accordance with Section 07900 Joint Sealers *or* 07 92 00 – *Joint Sealants*.
- C. Install accessory items as required.

### **3.03 ADJUSTING AND CLEANING**

- A. Adjust operable sash to work freely with hardware functioning properly. Re-adjust at completion of the project if directed.
- B. Remove visible labels.
- C. Leave windows in a job clean condition. Final cleaning of glass will be done in accordance with Section 01740 – Cleaning *or* Section 01 74 00 - *Cleaning and Waste Management*.

### **3.04 PROTECTION**

- A. Cover windows, in accordance with Section 01760 *or* 01 76 00 – Protecting Installed Construction, during spray painting or other construction operations (such as muretic acid washing after completion of masonry) that might cause damage.

**END OF SECTION**