

## HISTORIC AND DESIGN REVIEW COMMISSION

January 19, 2022

**HDRC CASE NO:** 2021-590  
**ADDRESS:** 331 FURR DR  
**LEGAL DESCRIPTION:** NCB 6698 BLK 7 LOT 8 E 5 FEET OF 9  
**ZONING:** R-6  
**CITY COUNCIL DIST.:** 7  
**DISTRICT:** Monticello Park Historic District  
**APPLICANT:** Ernestine Navarro  
**OWNER:** Ernestine Navarro  
**TYPE OF WORK:** Window replacement  
**APPLICATION RECEIVED:** November 09, 2021  
**60-DAY REVIEW:** Not applicable due to City Council Emergency Orders  
**CASE MANAGER:** Hannah Leighner

### REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to replace twenty (20) existing wood windows with new wood windows.

### APPLICABLE CITATIONS:

*Historic Design Guidelines, Chapter 2, Exterior Maintenance and Alterations*

#### 6. Architectural Features: Doors, Windows, and Screens

##### A. MAINTENANCE (PRESERVATION)

- i. *Openings*—Preserve existing window and door openings. Avoid enlarging or diminishing to fit stock sizes or air conditioning units. Avoid filling in historic door or window openings. Avoid creating new primary entrances or window openings on the primary façade or where visible from the public right-of-way.
- ii. *Doors*—Preserve historic doors including hardware, fanlights, sidelights, pilasters, and entablatures.
- iii. *Windows*—Preserve historic windows. When glass is broken, the color and clarity of replacement glass should match the original historic glass.
- iv. *Screens and shutters*—Preserve historic window screens and shutters.
- v. *Storm windows*—Install full-view storm windows on the interior of windows for improved energy efficiency. Storm window may be installed on the exterior so long as the visual impact is minimal and original architectural details are not obscured.

##### B. ALTERATIONS (REHABILITATION, RESTORATION, AND RECONSTRUCTION)

- i. *Doors*—Replace doors, hardware, fanlight, sidelights, pilasters, and entablatures in-kind when possible and when deteriorated beyond repair. When in-kind replacement is not feasible, ensure features match the size, material, and profile of the historic element.
- ii. *New entrances*—Ensure that new entrances, when necessary to comply with other regulations, are compatible in size, scale, shape, proportion, material, and massing with historic entrances.
- iii. *Glazed area*—Avoid installing interior floors or suspended ceilings that block the glazed area of historic windows.
- iv. *Window design*—Install new windows to match the historic or existing windows in terms of size, type, configuration, material, form, appearance, and detail when original windows are deteriorated beyond repair.

v. *Muntins*—Use the exterior muntin pattern, profile, and size appropriate for the historic building when replacement windows are necessary. Do not use internal muntins sandwiched between layers of glass.

vi. *Replacement glass*—Use clear glass when replacement glass is necessary. Do not use tinted glass, reflective glass, opaque glass, and other non-traditional glass types unless it was used historically. When established by the architectural style of the building, patterned, leaded, or colored glass can be used.

vii. *Non-historic windows*—Replace non-historic incompatible windows with windows that are typical of the architectural style of the building.

viii. *Security bars*—Install security bars only on the interior of windows and doors.

ix. *Screens*—Utilize wood screen window frames matching in profile, size, and design of those historically found when the existing screens are deteriorated beyond repair. Ensure that the tint of replacement screens closely matches the original screens or those used historically.

x. *Shutters*—Incorporate shutters only where they existed historically and where appropriate to the architectural style of the house. Shutters should match the height and width of the opening and be mounted to be operational or appear to be operational. Do not mount shutters directly onto any historic wall material.

#### *OHP Window Policy Document*

Individual sashes should be replaced where possible. Should a full window unit require replacement, inserts should:

- Match the original materials;
- Maintain the original dimension and profile;
- Feature clear glass. Low-e or reflective coatings are not recommended for replacements;
- Maintain the original appearance of window trim or sill detail.

#### **FINDINGS:**

- a. The property located at 331 Furr is a two-story, single family, craftsman-style structure. The house first appears on the 1931 Sanborn Map and contributes to the Monticello Historic District.
- b. WINDOW REPLACEMENT: WOOD WINDOWS – The applicant has proposed to replace twenty (20) existing wood windows with replacement wood windows. The windows requested for replacement are located on the north, south, east, and west elevations. According to the Historic Design Guidelines, wood windows should be repaired in place and restored whenever possible, unless there is substantial evidence that the windows are deteriorated beyond repair. Guideline 6.B.iv for Exterior Maintenance and Alterations states that new windows should be installed to match the historic or existing windows in terms of size, type, configuration, material, form, appearance, and detail when original windows are deteriorated beyond repair.
- c. WINDOW REPLACEMENT: EXISTING CONDITION – Staff performed a site visit on November 22, 2021, to assess the condition of the windows requested for replacement. From the photos submitted to date and the site visit, the wood windows proposed for replacement appear to be of historic-age, fully wood one-over-one windows. The windows do not show signs of significant wood rot, wood damage, or severe deterioration. Staff finds that the wood windows are in repairable condition based on the documentation provided, with most requiring minimal repair and intervention such as the reworking of the sashes and re-glazing, along with refitting into the trim and frames.
- d. WINDOW REPLACEMENT: WASTE AND LIFESPAN – Over 112 million windows end up in landfills each year, and about half are under 20 years old. Historic wood windows were constructed to last 100+ years with old growth wood, which is substantially more durable than modern wood and clad products, and original windows that are restored and maintained over

time can last for decades. Replacement window products have a much shorter lifespan, around 10-20 years, and cannot be repaired once they fail. On average, over the lifetime of an original wood window, replacement windows will need to be again replaced at least 4 times. The total lifecycle cost of replacement windows is also much more energy intensive than the restoration of existing windows, including material sourcing and the depletion of natural resources and forests, petroleum-heavy manufacturing methods, transportation, and installation. Finally, window repair and restoration utilize the local labor and expertise of craftspeople versus off-the-shelf, non-custom composite products. Staff generally encourages the repair and restoration of original windows whenever possible.

- e. **WINDOW REPLACEMENT: ENERGY EFFICIENCY AND MAINTENANCE** – In terms of efficiency, in most cases, windows only account for a fraction of heat gain/loss in a building. Improving the energy efficiency of historic windows should be considered only after other options have been explored such as improving attic and wall insulation. The original windows feature single-pane glass which is subject to radiant heat transfer. Products are available to reduce heat transfer such as window films, interior storm windows, and thermal shades. Additionally, air infiltration can be mitigated through weather-stripping or readjusting the window assembly within the frame, as assemblies can settle or shift over time. The wood windows were designed specifically for this structure and can accommodate the natural settling and movement of the structure as a whole throughout seasons. Modern replacement products are extremely rigid, often resulting in the creation of gaps, cracks, and major points of air infiltration at the window frames and other areas of the exterior wall plane over time due to material incompatibility when considering the structure as whole integrated system.
- f. **DESIGN REVIEW COMMITTEE** – At the December 15, 2021 HDRC hearing, the commission referred the request to a Design Review Committee (DRC) site visit. The Design Review Committee reviewed this request on January 4, 2021 and commented on the windows requested to be replaced. Committee members agreed that the windows are in repairable condition and supported staff recommendations as stipulated.

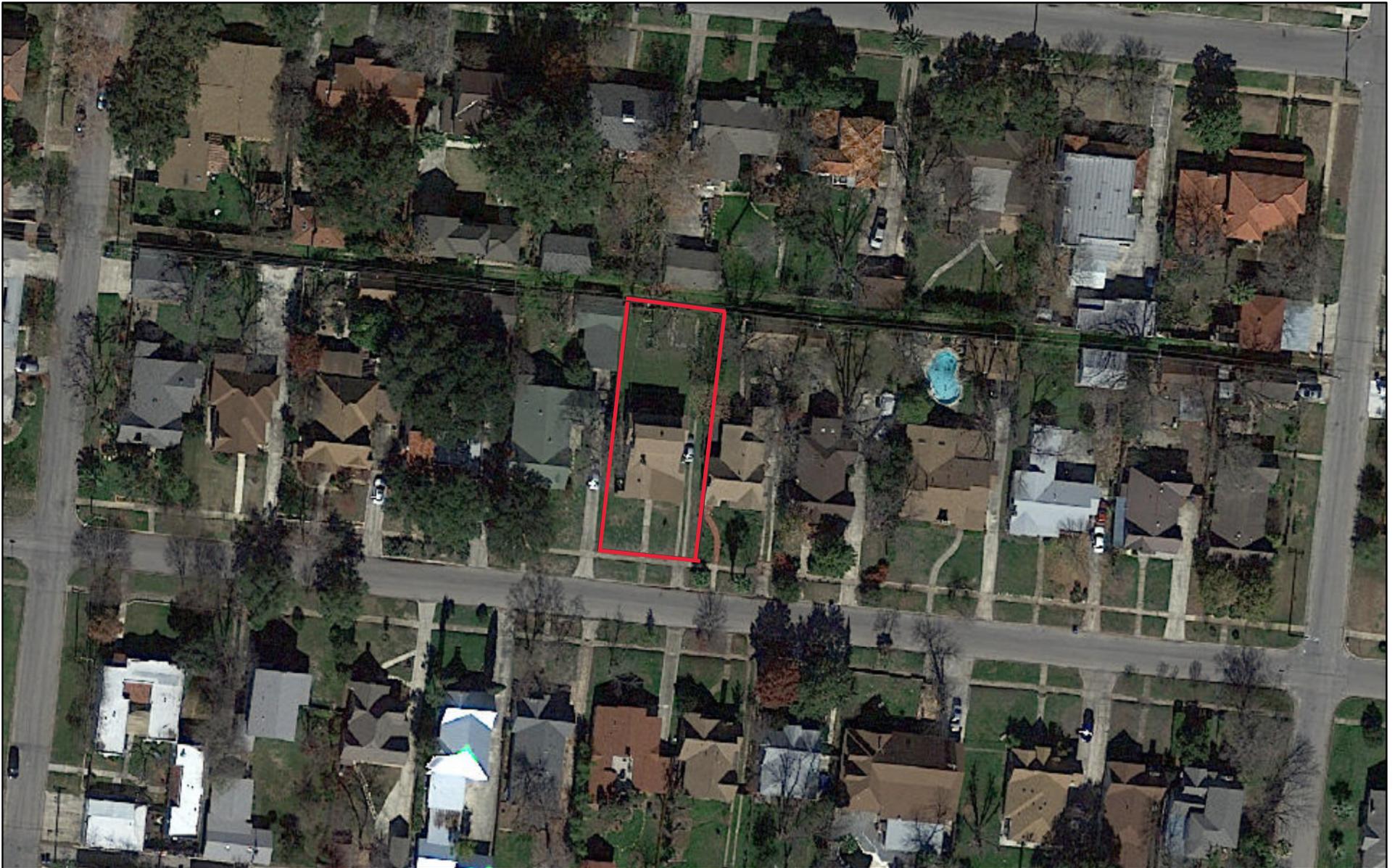
### **RECOMMENDATION:**

Staff does not recommend approval based on findings b-e. Staff recommends that the applicant restore the deteriorated wood windows and preserve all original window openings. If the HDRC is compelled to approve window replacement, staff recommends the following stipulations:

- i. **MATERIALS:** If full window replacement is approved, the new windows must feature primed and painted wood exterior finish. Clad, composition, or non-wood options are not allowed unless explicitly approved by the commission.
- ii. **SASHES:** Meeting rails must be no taller than 1.25". Stiles must be no wider than 2.25". Top and bottom sashes must be equal in size unless otherwise approved.
- iii. **DEPTH:** There should be a minimum of 2" in depth between the front face of the window trim and the front face of the top window sash. This must be accomplished by recessing the window sufficiently within the opening or with the installation of additional window trim to add thickness.
- iv. **TRIM:** Original trim details and sills should be retained or repaired in kind. If approved, new window trim must feature traditional dimensions and architecturally appropriate casing and sloped sill detail. Window track components such as jamb liners must be painted to match the window trim or concealed by a wood window screen set within the opening. **GLAZING:** Replacement windows should feature clear glass. Low-e or reflective coatings are not recommended for replacements. The glazing should not feature faux divided lights with an interior grille. If approved to match a historic window configuration, the window should feature real exterior muntins.

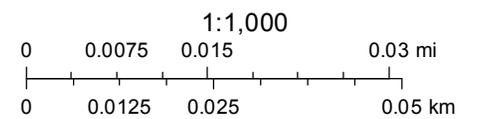
- v. COLOR: Replacement windows should feature a painted finished. If a clad product is approved, white or metallic manufacturer's color is not allowed, and color selection must be presented to staff.
- vi. INSTALLATION: Replacement windows should be supplied in a block frame and exclude nailing fins. Window opening sizes should not be altered to accommodate stock sizes prior to

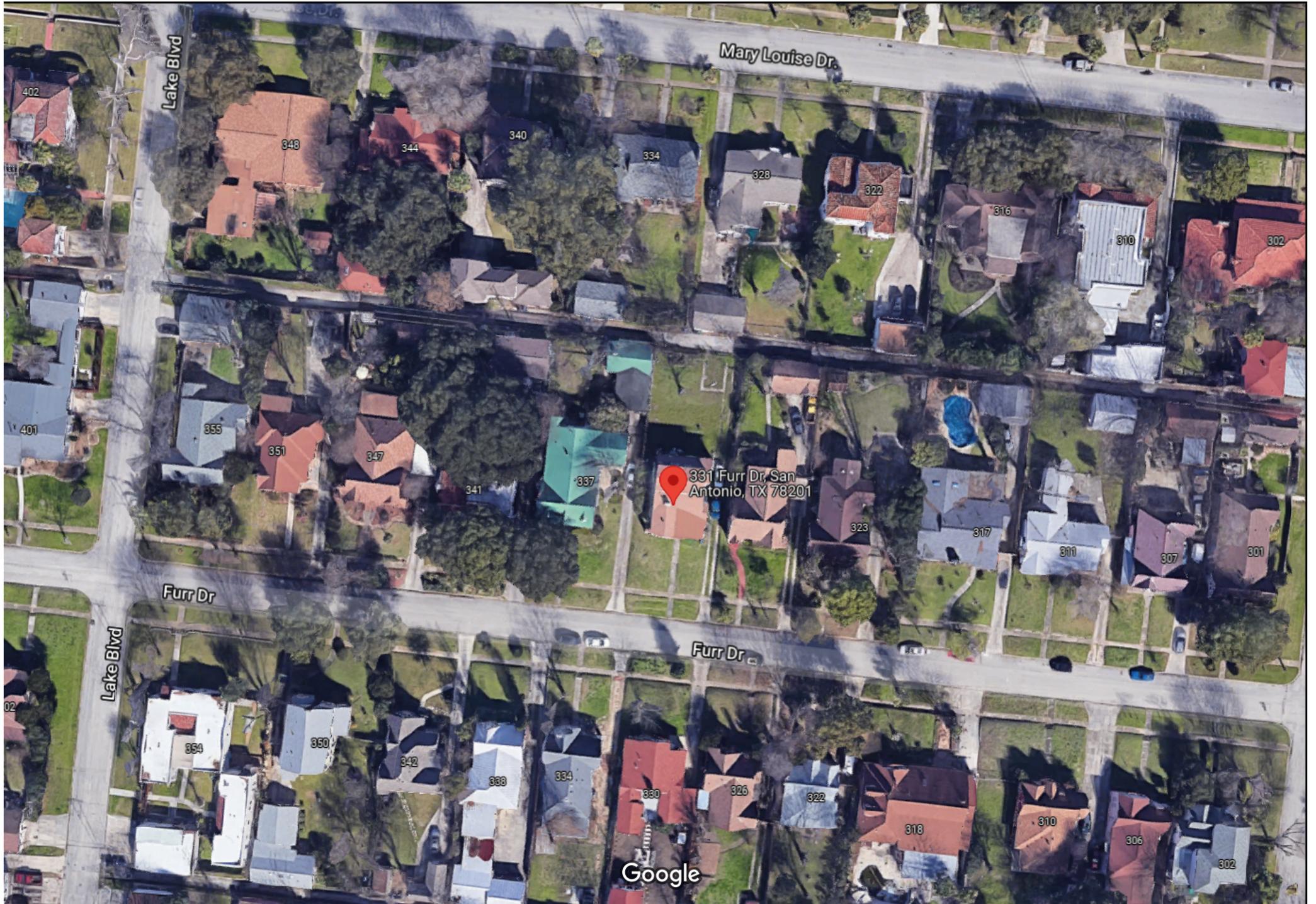
# City of San Antonio One Stop



November 22, 2021

— User drawn lines













State:

City:

Date:

Volume:

Texas

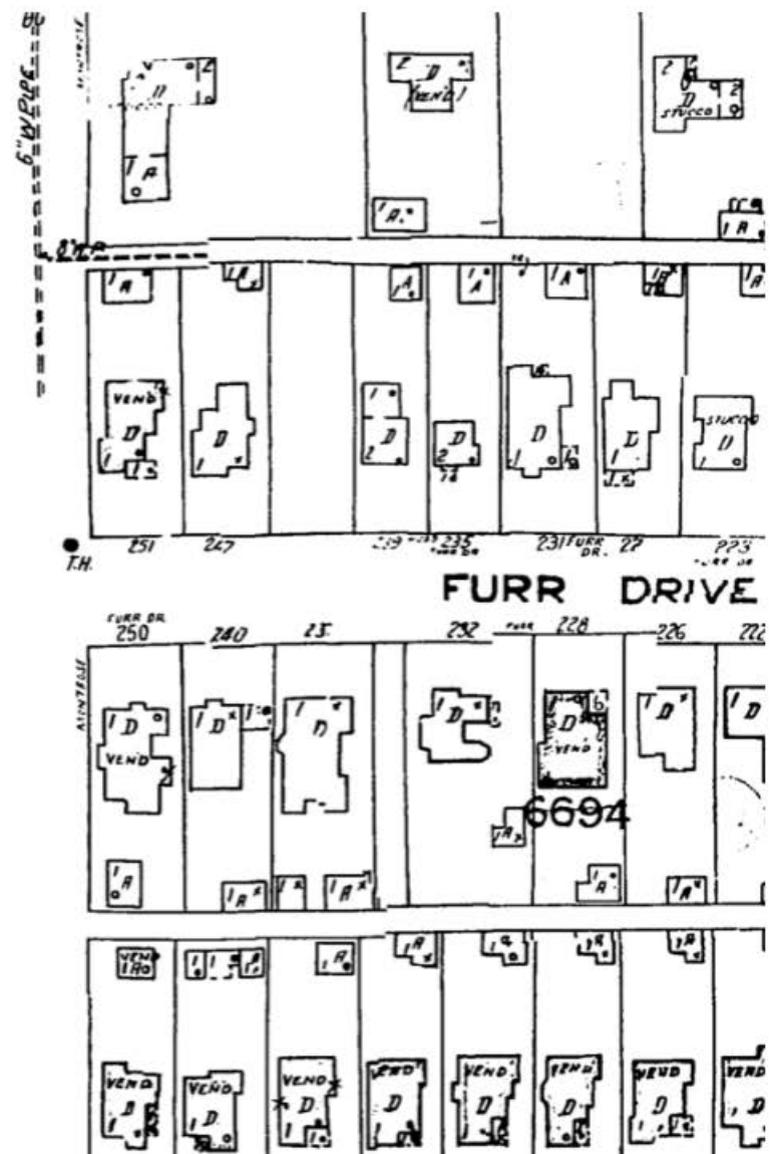
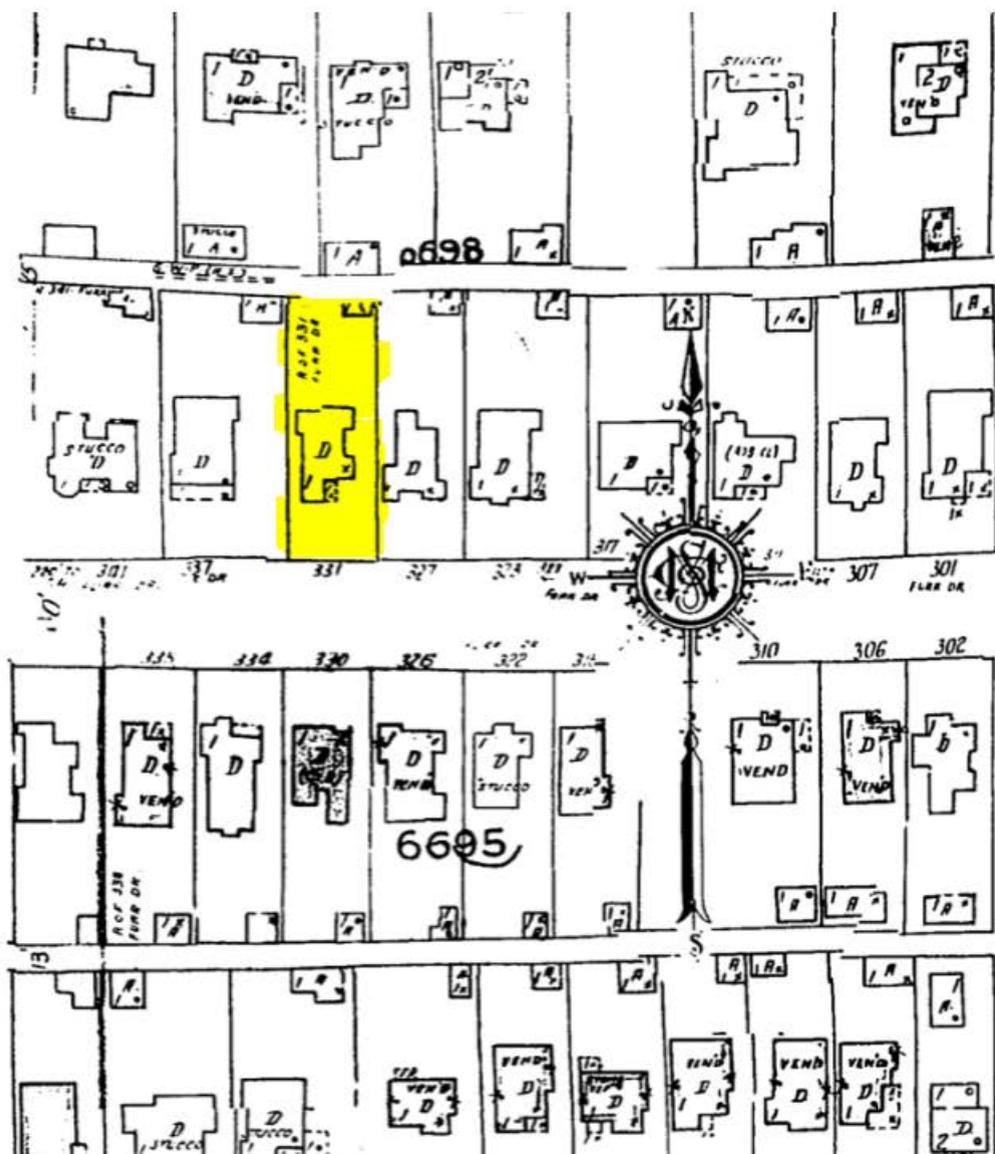
San Antonio

1911-Mar. 1951 \*

vol. 5, 1924-June 1950



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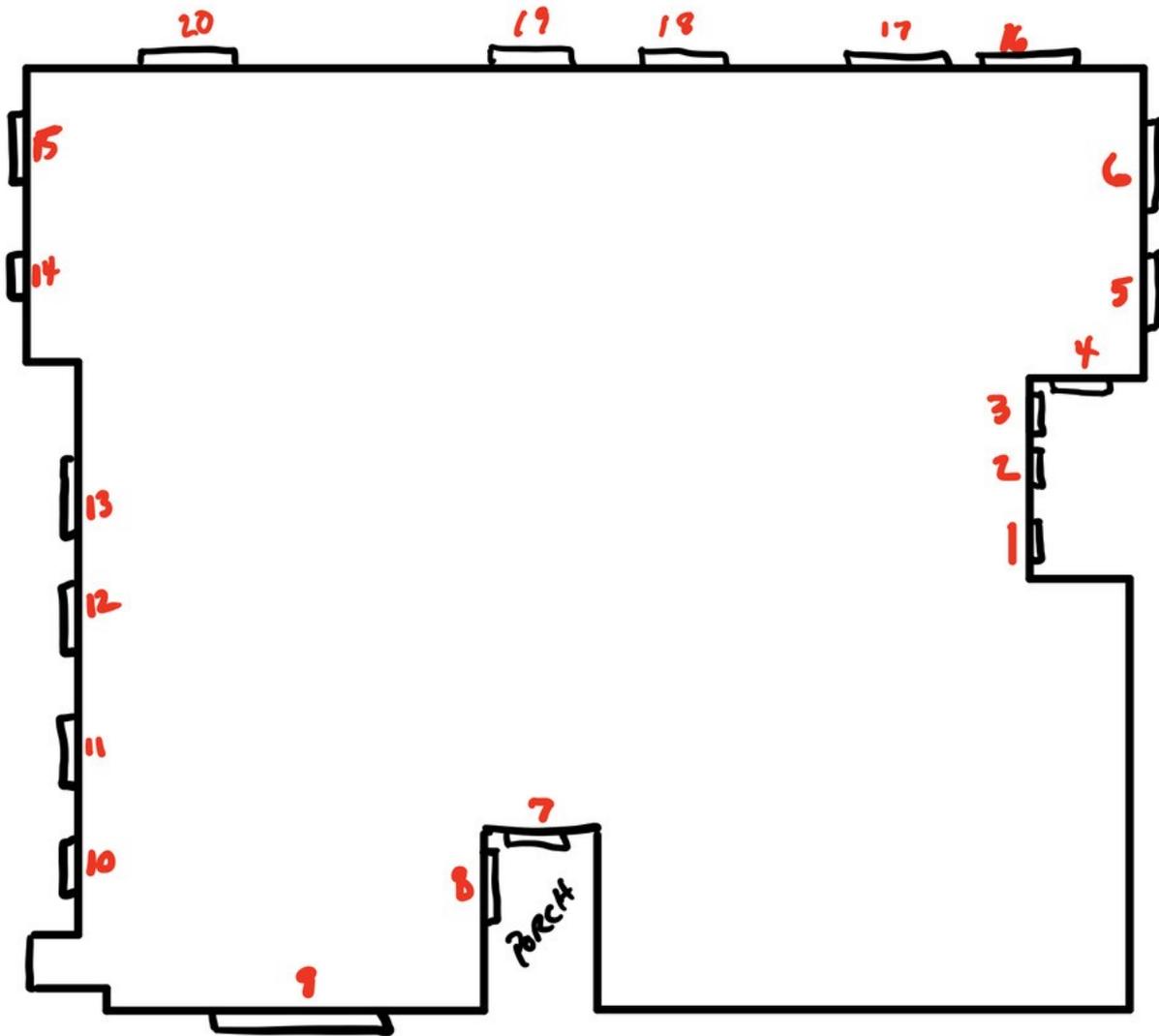








BACK



FRONT













# Vinyl Windows and Doors Manufactured by Pella Corporation

## Single-Hung – East and West Regions

### Detailed Product Description

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#### Frame

- Overall frame depth: 2-11/16" [new construction frame with integral nailing fin [and J-channel (East region only)]] [replacement frame [with integral flush flange (Florida region only)]]].
- Frame members are extruded, [high impact-resistant (2-11/16" frame, East Only)], rigid uPVC.
- Frame members are mitered and heat-fused to provide a fully welded corner assembly.

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#### Sash

- Sash members are extruded, rigid uPVC.
- Sash members are mitered and heat-fused to provide a fully welded corner assembly.
- Integral extruded sash lift at checkrail.

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#### Weatherstripping

- Fin-type pile around the perimeter of the vent sash.

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#### Glazing System

- Quality float glass complying with ASTM C1036, Quality.
- Exterior face glazed 3/4" sealed insulating glass.
- [Clear] [Advanced Low-E coated [with argon]] [SunDefense™ Low-E coated, [with argon]] [NaturalSun Low-E [with argon]] [bronze, Advanced Low-E coated, [with argon]]; [Clear] [NaturalSun Low-E] [Standard obscure [Fern (West region only)]] [Rain (West region only)] [High Altitude [with argon] (West region only)]. [tempered].

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#### Interior / Exterior

- All window frame members have an integral color extruded throughout the profiles.
- All exposed PVC surfaces are smooth, glossy and uniform in appearance.
- Colors: [White] [Almond] [Fossil].

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#### Hardware

- Constant force balances connected to sash with stainless steel spring and concealed within the frame.
- Lower sash is fully operable for ventilation.
- All fasteners are corrosion-resistant material compatible with uPVC.
- Lock is factory installed zinc die cast self-aligning cam-action lock located on the checkrail.
- 2-11/16" Units ≥ 29-1/2" wide have two locks.
- Integral extruded sash lift.
- Tilt latches are factory installed, and located on the checkrail (East region Only).
- Hardware is factory pre-finished to match unit.

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#### Optional Products

- Factory applied primed wood jamb extension for [4-9/16"] [6-9/16"] wall depth, for 2-11/16" fin frame East region units only.

#### Grilles

- Grilles-Between-the-Glass
  - Insulating glass contains [3/4" contoured (East or West)] [5/8" flat (West)] aluminum grilles permanently installed between two panes of glass.
  - Grilles match color of interior and exterior frame.

#### Hardware

- Drywall Pass Through option is available on fin frame, single units of frame size greater or equal to 29.5" x 59.5".
- Dry-wall Pass Through option is available on fin frame two wide composites with individual units of frame size greater or equal to 29.5" x 59.5" and less than or equal to 35.5" x 71.5".
- Optional limited opening hardware available for field installation on vent units in [White] [Almond] extruded vinyl to match the interior of the unit; nominal 3-3/4" opening.
- Optional window opening control device available for field installation. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-10.

#### Screens

- Half-size with black vinyl coated 18/14 mesh fiberglass screen cloth complying with FS L-S125B, ASTM D 3656 and SMA 1201.
- Set in aluminum frame and fitted to outside of window.
- Supplied complete with all necessary hardware.

# Vinyl Windows and Doors Manufactured by Pella Corporation

## Single-Hung – East and West Regions

### Detailed Product Description

---

#### Frame

- Overall frame depth: 2-11/16" [new construction frame with integral nailing fin [and J-channel (East region only)]] [replacement frame [with integral flush flange (Florida region only)]]].
- Frame members are extruded, [high impact-resistant (2-11/16" frame, East Only)], rigid uPVC.
- Frame members are mitered and heat-fused to provide a fully welded corner assembly.

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#### Sash

- Sash members are extruded, rigid uPVC.
- Sash members are mitered and heat-fused to provide a fully welded corner assembly.
- Integral extruded sash lift at checkrail.

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#### Weatherstripping

- Fin-type pile around the perimeter of the vent sash.

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#### Glazing System

- Quality float glass complying with ASTM C1036, Quality.
- Exterior face glazed 3/4" sealed insulating glass.
- [Clear] [Advanced Low-E coated [with argon]] [SunDefense™ Low-E coated, [with argon]] [NaturalSun Low-E [with argon]] [bronze, Advanced Low-E coated, [with argon]]; [Clear] [NaturalSun Low-E] [Standard obscure [Fern (West region only)]] [Rain (West region only)] [High Altitude [with argon] (West region only)]. [tempered].

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#### Interior / Exterior

- All window frame members have an integral color extruded throughout the profiles.
- All exposed PVC surfaces are smooth, glossy and uniform in appearance.
- Colors: [White] [Almond] [Fossil].

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#### Hardware

- Constant force balances connected to sash with stainless steel spring and concealed within the frame.
- Lower sash is fully operable for ventilation.
- All fasteners are corrosion-resistant material compatible with uPVC.
- Lock is factory installed zinc die cast self-aligning cam-action lock located on the checkrail.
- 2-11/16" Units ≥ 29-1/2" wide have two locks.
- Integral extruded sash lift.
- Tilt latches are factory installed, and located on the checkrail (East region Only).
- Hardware is factory pre-finished to match unit.

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#### Optional Products

- Factory applied primed wood jamb extension for [4-9/16"] [6-9/16"] wall depth, for 2-11/16" fin frame East region units only.

#### Grilles

- Grilles-Between-the-Glass
  - Insulating glass contains [3/4" contoured (East or West)] [5/8" flat (West)] aluminum grilles permanently installed between two panes of glass.
  - Grilles match color of interior and exterior frame.

#### Hardware

- Drywall Pass Through option is available on fin frame, single units of frame size greater or equal to 29.5" x 59.5".
- Dry-wall Pass Through option is available on fin frame two wide composites with individual units of frame size greater or equal to 29.5" x 59.5" and less than or equal to 35.5" x 71.5".
- Optional limited opening hardware available for field installation on vent units in [White] [Almond] extruded vinyl to match the interior of the unit; nominal 3-3/4" opening.
- Optional window opening control device available for field installation. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-10.

#### Screens

- Half-size with black vinyl coated 18/14 mesh fiberglass screen cloth complying with FS L-S125B, ASTM D 3656 and SMA 1201.
- Set in aluminum frame and fitted to outside of window.
- Supplied complete with all necessary hardware.

# Pella Architect Series® Traditional – Hung Windows

## Wood Exterior — LX Double-, Single- and Simulated-Hung

### Detailed Product Descriptions

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#### Frame

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [clear pine] [mahogany].
- Exterior surfaces are [pine] [mahogany].
- Overall frame depth is 4-3/8" (111 mm) for a wall depth of 4-3/16" (106 mm).
- Vinyl Jamb liner includes wood / clad inserts.
- Optional factory applied jamb extensions available for 4-9/16" (116 mm) and 7-3/16" (183 mm) wall depths, with Pella's standard wood exterior trim.

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#### Sash

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [clear pine] [mahogany].
- Exterior surfaces are [pine] [mahogany].
- Corners are mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 1-7/8" (47 mm).
- Sash exterior profile is putty glaze, interior profile is ogee.
- [Double-Hung: Upper sash has surface-mounted wash locks] [Single-Hung: Fixed upper sash has surface-mounted wash locks] [Arch Head units have no wash locks].
- Lower sash has concealed wash locks in lower check rail.
- Sashes tilt for easy cleaning.
- Simulated-Hung units have non-operable upper and lower sashes.

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#### Weatherstripping

- Water-stop santoprene-wrapped foam at head and sill.
- Thermoplastic elastomer bulb with slip coating set into Low-E sash for tight contact at check rail.
- Vinyl-wrapped foam inserted into jamb liner to seal against sides of sash.

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#### Glazing System

- Quality float glass complying with ASTM C 1036.
- Custom and high altitude glazing available.
- Silicone-glazed 1 1/16" dual-seal insulating glass [[annealed] [tempered]] [[clear] [[Advanced Low-E] [SunDefense™ Low-E] [AdvancedComfort Low-E] [NaturalSun Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E with argon].

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#### Exterior

- [Pine: factory primed with one coat acrylic latex] [Mahogany: [factory primed with one coat acrylic latex] [Unfinished, ready for site finishing]].

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#### Interior

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [paint] [stain] ,].

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#### Hardware

- Galvanized block-and-tackle balances are connected to self-locking balance shoes which are connected to the sashes using zinc die cast terminals and concealed within the frame.
- Sash lock is [standard (cam-action)] [historic spoon-style] [air-conditioner lock] [simulated lock (Single-piece lock ties upper and lower sash together. When removed, lower sash becomes operable)]. Two sash locks on units with frame width 37" and greater.
- Optional sash lift furnished for field installation. Two lifts on units with frame width 37" and greater.
- Hardware finish is [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Satin Nickel] [Oil-rubbed Bronze] [Distressed Bronze] [Distressed Nickel].

## Optional Products

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### Grilles

- Integral Light Technology® grilles
  - Interior grilles are [5/8"] [7/8"] [1-1/4"] ogee profile that are solid [pine] [mahogany]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory prefinished [paint] [stain] <sub>1</sub>].
  - Exterior grilles are solid [5/8"] [7/8"] [1-1/4"] putty glaze profile that are [pine] [mahogany]. Exterior surfaces are water repellent, preservative-treated in accordance with WDMA I.S.-4, and are [unfinished, ready for site finishing] [factory primed].
  - Patterns are [Traditional] [Prairie] [Top Row] [New England] [Victorian].
  - Insulating glass contains non-glare spacer between the panes of glass.
  - Grilles are adhered to both sides of the insulating glass with VHB acrylic adhesive tape and aligned with the non-glare spacer.  
– or –
- Grilles-Between-the-Glass<sub>2</sub>
  - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
  - Patterns are [Traditional] [Prairie] [Cross] [Top Row]
  - Interior color is [White] [Tan<sub>3</sub>] [Brown<sub>3</sub>] [Putty<sub>3</sub>] [Black] [Morning Sky Gray] [Ivory] [Sand Dune] [Harvest] [Cordovan] [Brickstone].
  - Exterior color<sub>5</sub> is [standard<sub>1</sub>].

### Screens (for Double- and Single-Hung)

- InView™ Screens
  - [Half-Size] [Full-Size<sub>4</sub>] black vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
  - Full screen spreader bar placed on units > 37" width or > 65" height.
  - Insect screen frame finish is baked enamel.

### Hardware

- Optional factory applied limited opening device available for vent units in stainless steel; nominal 3-3/4" opening. Limiting device concealed from view.
- Optional factory applied window opening control device available. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-10.

- (1) Contact your local Pella sales representative for current color options.
- (2) Available in clear or Low-E insulating glass with argon, and obscure insulated glass.
- (3) Tan, Brown or Putty Interior GBG colors are available in single-tone (Brown/Brown, Tan/Tan or Putty/Putty). Other interior colors are also available with Tan or Brown exterior.
- (4) Full screens are available on units ≤ 96" height.
- (5) Appearance of exterior grille color will vary depending on Low-E coating on glass.

# Pella Architect Series® Traditional – Hung Windows

## Wood Exterior — LX Double-, Single- and Simulated-Hung

### Detailed Product Descriptions

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#### Frame

- Select softwood, immersion treated with Pella's EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [clear pine] [mahogany].
- Exterior surfaces are [pine] [mahogany].
- Overall frame depth is 4-3/8" (111 mm) for a wall depth of 4-3/16" (106 mm).
- Vinyl Jamb liner includes wood / clad inserts.
- Optional factory applied jamb extensions available for 4-9/16" (116 mm) and 7-3/16" (183 mm) wall depths, with Pella's standard wood exterior trim.

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#### Sash

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- Lower sash has concealed wash locks in lower check rail.
- Sashes tilt for easy cleaning.
- Simulated-Hung units have non-operable upper and lower sashes.

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#### Weatherstripping

- Water-stop santoprene-wrapped foam at head and sill.
- Thermoplastic elastomer bulb with slip coating set into Low-E sash for tight contact at check rail.
- Vinyl-wrapped foam inserted into jamb liner to seal against sides of sash.

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#### Glazing System

- Quality float glass complying with ASTM C 1036.
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- Silicone-glazed 1 1/16" dual-seal insulating glass [[annealed] [tempered]] [[clear] [[Advanced Low-E] [SunDefense™ Low-E] [AdvancedComfort Low-E] [NaturalSun Low-E] with argon]] [[bronze] [gray] [green] Advanced Low-E with argon].

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#### Exterior

- [Pine: factory primed with one coat acrylic latex] [Mahogany: [factory primed with one coat acrylic latex] [Unfinished, ready for site finishing]].

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#### Interior

- [Unfinished, ready for site finishing] [factory primed with one coat acrylic latex] [factory prefinished [paint] [stain] ,].

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#### Hardware

- Galvanized block-and-tackle balances are connected to self-locking balance shoes which are connected to the sashes using zinc die cast terminals and concealed within the frame.
- Sash lock is [standard (cam-action)] [historic spoon-style] [air-conditioner lock] [simulated lock (Single-piece lock ties upper and lower sash together. When removed, lower sash becomes operable)]. Two sash locks on units with frame width 37" and greater.
- Optional sash lift furnished for field installation. Two lifts on units with frame width 37" and greater.
- Hardware finish is [baked enamel [Champagne] [White] [Brown] [Matte Black]] [Satin Nickel] [Oil-rubbed Bronze] [Distressed Bronze] [Distressed Nickel].

## Optional Products

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### Grilles

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  - Exterior grilles are solid [5/8"] [7/8"] [1-1/4"] putty glaze profile that are [pine] [mahogany]. Exterior surfaces are water repellent, preservative-treated in accordance with WDMA I.S.-4, and are [unfinished, ready for site finishing] [factory primed].
  - Patterns are [Traditional] [Prairie] [Top Row] [New England] [Victorian].
  - Insulating glass contains non-glare spacer between the panes of glass.
  - Grilles are adhered to both sides of the insulating glass with VHB acrylic adhesive tape and aligned with the non-glare spacer.  
– or –
- Grilles-Between-the-Glass<sub>2</sub>
  - Insulating glass contains 3/4" contoured aluminum grilles permanently installed between two panes of glass.
  - Patterns are [Traditional] [Prairie] [Cross] [Top Row]
  - Interior color is [White] [Tan<sub>3</sub>] [Brown<sub>3</sub>] [Putty<sub>3</sub>] [Black] [Morning Sky Gray] [Ivory] [Sand Dune] [Harvest] [Cordovan] [Brickstone].
  - Exterior color<sub>5</sub> is [standard<sub>1</sub>].

### Screens (for Double- and Single-Hung)

- InView™ Screens
  - [Half-Size] [Full-Size<sub>4</sub>] black vinyl-coated 18/18 mesh fiberglass screen cloth complying with the performance requirements of SMA 1201, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
  - Full screen spreader bar placed on units > 37" width or > 65" height.
  - Insect screen frame finish is baked enamel.

### Hardware

- Optional factory applied limited opening device available for vent units in stainless steel; nominal 3-3/4" opening. Limiting device concealed from view.
- Optional factory applied window opening control device available. Device allows window to open less than 4" with normal operation, with a release mechanism that allows the sash to open completely. Complies with ASTM F2090-10.

- (1) Contact your local Pella sales representative for current color options.
- (2) Available in clear or Low-E insulating glass with argon, and obscure insulated glass.
- (3) Tan, Brown or Putty Interior GBG colors are available in single-tone (Brown/Brown, Tan/Tan or Putty/Putty). Other interior colors are also available with Tan or Brown exterior.
- (4) Full screens are available on units ≤ 96" height.
- (5) Appearance of exterior grille color will vary depending on Low-E coating on glass.