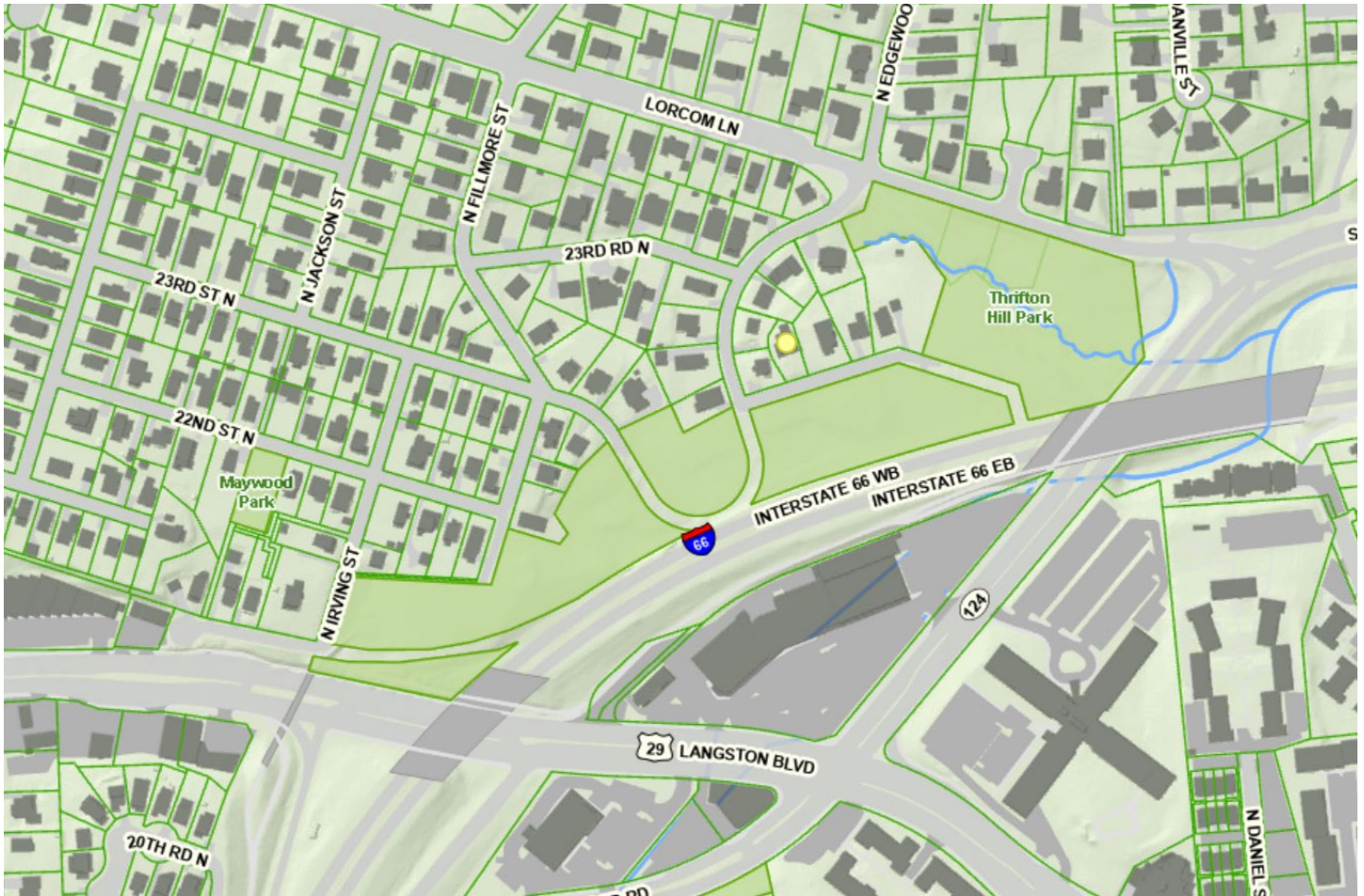


Historical Affairs and Landmark Review Board

Arlington County, Virginia



HALRB Meeting November 15, 2023, CoA 23-22

2737 23rd Road N.: A request to replace existing vinyl windows with wooden windows.

Andrews Residence - Restore Windows to Wood - Measurements

Item	Floor	Description	Count	Measurements	Photo #	Visible Glass
		Main Room Window Restore to Wood				
1	1st	West Window	1	30-1/2" x 60-1/2"	01	Top: 23-1/2" x 27-1/2"; Bottom: 24-1/2" x 27-1/2"
2	1st	West Large Bay Window	1	39-1/4" x 60-1/2"	02	Top and Bottom: 27" x 32-1/2"
3-4	1st	West Small Bay Windows	2	23" x 60-1/2"	02	Top and Bottom: 16-1/4" x 25-1/2" (Each Window)
		E Room Window Restore to Wood				
5-6	1st	East Large Bay Windows	2	31" x 58-1/4"	03, 04	Top and Bottom: 24" x 25-1/2" (Each Window)
7-8	1st	East Small Bay Windows	2	23" x 58-1/4"	03, 04	Top and Bottom: 16-1/4" x 25-1/2" (Each Window)
		SE Room Bedroom Window Restore to Wood				
9	2nd	South Window	1	30-1/2"x 60-3/4"	05	Top: 23-1/2" x 27-1/2"; Bottom: 24-1/2" x 27-1/2"
		SW Bedroom Window Restore to Wood				
10	2nd	South Window	1	30-1/2" x 60-3/4"	05	Top: 23-1/2" x 27-1/2"; Bottom: 24-1/2" x 27-1/2"
		NW Bedroom Window Restore to Wood				
11-12	2nd	West Windows	2	30-1/2" x 60-3/4"	02	Top: 23-1/2" x 27-1/2"; Bottom: 24-1/2" x 27-1/2" (Each Window)
		NE Bedroom Window Restore to Wood				
13	2nd	North Window	1	30-1/2" x 60-3/4"	06	Top: 23-1/2" x 27-1/2"; Bottom: 24-1/2" x 27-1/2"

Serena Bolliger

From: Joseph Andrews <jandrewsjr15@googlemail.com>
Sent: Tuesday, October 24, 2023 1:56 PM
To: Serena Bolliger
Cc: Lorin Farris; Mical Tawney
Subject: Re: Window replacement CoA at 2737 23rd Rd N.
Attachments: 01 - West 1st Floor Window.jpg; 02 - West 1st Floor Bay Windows and NW 2nd Floor Bedroom Windows.jpg; 03 - East 1st Floor Bay Windows - photo 1.jpg; 04 - East 1st Floor Bay Windows - photo 2.jpg; 05 - SE and SW 2nd Floor Bedroom Windows.jpg; 06 - NE 2nd Floor Bedroom Window.jpg; Andrews Residence - Restore Windows to Wood - Measurements.pdf; ADM Ultimate Wood Double Hung Collection - rails and stiles.pdf

You don't often get email from jandrewsjr15@googlemail.com. [Learn why this is important](#)

EXTERNAL EMAIL

CAUTION: This email contains file attachments. Do NOT open files that you are not expecting to receive, even from known senders.

Serena - please see the attachments:

1. Measurements of the vinyl windows to be restored to wood - pdf of spreadsheet
2. Photo of west first floor window (1)
3. Photo of west first floor bay windows (3) and 2nd floor northwest bedroom windows (2)
4. Two Photos of east first floor bay windows (4)
5. Photo of southeast and southwest 2nd floor bedroom windows (2)
6. Photo of northeast bedroom window (1)
7. Marvin Ultimate Double Hung Wood Windows Architectural Details Manual (rails and stiles highlighted page 2)

Regarding the window elements sizes:

1. I've included the measurements of the opening from edge to edge of the casing trim.
2. I've included the measurements of the visible glass on the existing vinyl windows.
3. We have three original double hung windows. The visible glass on those is 26-1/2" x 27-1/2" for each panel.
4. With the exception of the 1st Floor East Bay windows, the vertical and top casing are between 5" and 5-1/4", and the sills are 2".
5. The 1st Floor East Bay windows have only 1" to 1-1/4" trim in lieu of the original casing.
6. The vinyl window rails are 1-1/2" but from the exterior look like they vary from 3-1/4" to 4-1/2" because of the trim and closure pieces that were installed into the rough opening. Similarly, the vinyl window stiles look like they are approximately 4" because of the trim and closure pieces.

Proposed wood windows:

1. We are currently planning on using Marvin Signature Ultimate Double Hung Wood Windows for the restoration.
2. The standard rails and stiles are as follows: Top rail - 2-7/32"; Stiles - 2-7/16"; Bottom rail - 3-11/16" (see dimensions highlighted on attached ADM Manual).
3. The 3 remaining original double hung windows are as follows: Top rail - 2-1/8"; Stiles - 2-1/8"; Bottom rail - 3-1/8".
4. The Marvin windows would make the visible glass area much closer to that of the original windows.
5. My understanding Jeld Wen is having some supply issues, but we have used their product successfully for our previous project.
6. There are other custom window companies we could try, but Marvin and Jeld Wen were my first choices.

7. For the 1st Floor East Bay windows that currently do not have the historic exterior casing/trim, we propose fabricating the casing to match the original casing on all of the other windows. The middle two windows would have a "shared" casing similar to the 2nd floor NW bedroom windows, while the two side windows would have individual casing. Existing casing would be touched up and painted for all other windows.

Please don't hesitate to contact me with any suggestions or questions.

Thanks

Joe

On Mon, Oct 23, 2023 at 12:41 PM Serena Bolliger <sbolliger@arlingtonva.us> wrote:

Good afternoon,

Take your time, to go on the November agenda we'll need everything by Wednesday COB, but if need more time we can push to the December agenda, absolutely up to you.

I hope you had a pleasant weekend with your family,

Best,

Serena Bolliger

Historic Preservation Planner

Department of Community Planning, Housing & Development

2100 Clarendon Boulevard, Suite 700

Arlington County, Virginia

sbolliger@arlingtonva.us

703 228 3818

Any email sent to or from Arlington County email addresses may be subject to disclosure under the Freedom of Information Act (FOIA).

CPHD Mission Statement - Promoting the improvement, conservation and revitalization of Arlington's physical and social environment.

From: Joseph Andrews <jandrewsjr15@googlemail.com>

Sent: Thursday, October 19, 2023 10:52 PM

To: Serena Bolliger <sbolliger@arlingtonva.us>

Cc: Lorin Farris <lfarris@arlingtonva.us>; Mical Tawney <mtawney@arlingtonva.us>

Subject: Re: Window replacement CoA at 2737 23rd Rd N.

You don't often get email from jandrewsjr15@googlemail.com. [Learn why this is important](#)

EXTERNAL EMAIL

Serena - sure thing. I happen to be out of town for my mother's 80th birthday until Sunday. But I should put that together and send the photos and measurements to you, when I get back, so you'll have it for Monday. Yes, the outdoor casing will be wood, and we plan to re-use the existing. The contractor we are using performed the work on our previous renovation which included preserving the outdoor casing on I believe three windows. He has been able to find/produce a number of matching interior plinths and interior trim elements, as well, and if we did have to restore any damaged elements, he will be able to do that.

I think I mentioned in our previous CoA meetings back in 2019 and 2020 that I hoped to change out the vinyl windows at some point, because I think it will really help connect the exterior (and interior) look of the house back to its original style. Please don't hesitate to ask for any more information or photos.

Thanks

Joe

On Thu, Oct 19, 2023 at 10:46 AM Serena Bolliger <sbolliger@arlingtonva.us> wrote:

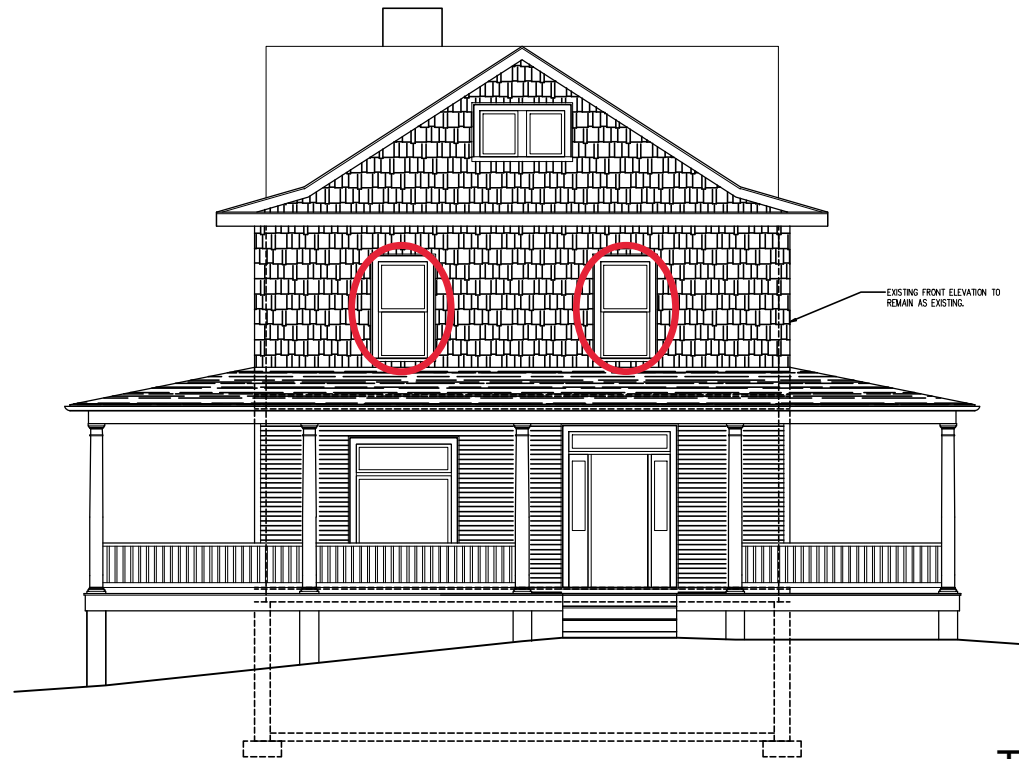
Good morning,

Thank you for submitting your application for the window replacement project at 2737 23rd Rd. N. Could you send photographs of the elevations where the windows will be replaced and photos of the windows? Also, do you have measurements of the existing windows and information about the proposed replacements so we can ensure they match? This would include the overall size, the visible glass, and the rails and stiles.

Will the outdoor casing trim be wood and match the existing?

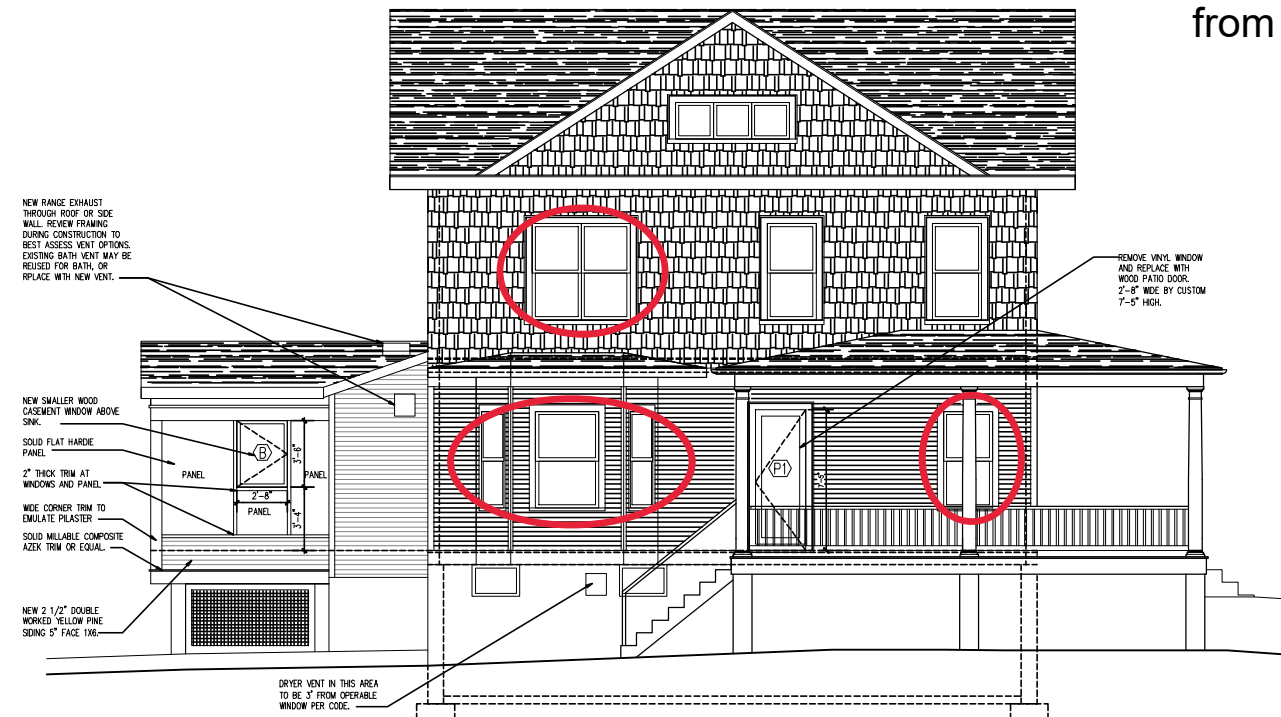
You can send them to me directly and I'll add them to your application as it closes once its submitted and no additional documents can be uploaded.

Let me know if you have questions,



EXISTING/NEW SOUTH FRONT ELEVATION
Scale: 1/4" = 1'-0"

The windows circled in red are currently vinyl windows that we propose to restore to exterior wood windows. We used the elevations from our 2020 project.



NEW WEST SIDE ELEVATION
Scale: 1/4" = 1'-0"

**FITZHARRIS
DESIGNS**
ARCHITECTS + DESIGNERS
Heidi FitzHarris, AIA
3623 North 21st Avenue
Arlington, VA 22207
703.598.9318
heidi@fitzharrisdesigns.com
www.fitzharrisdesigns.com

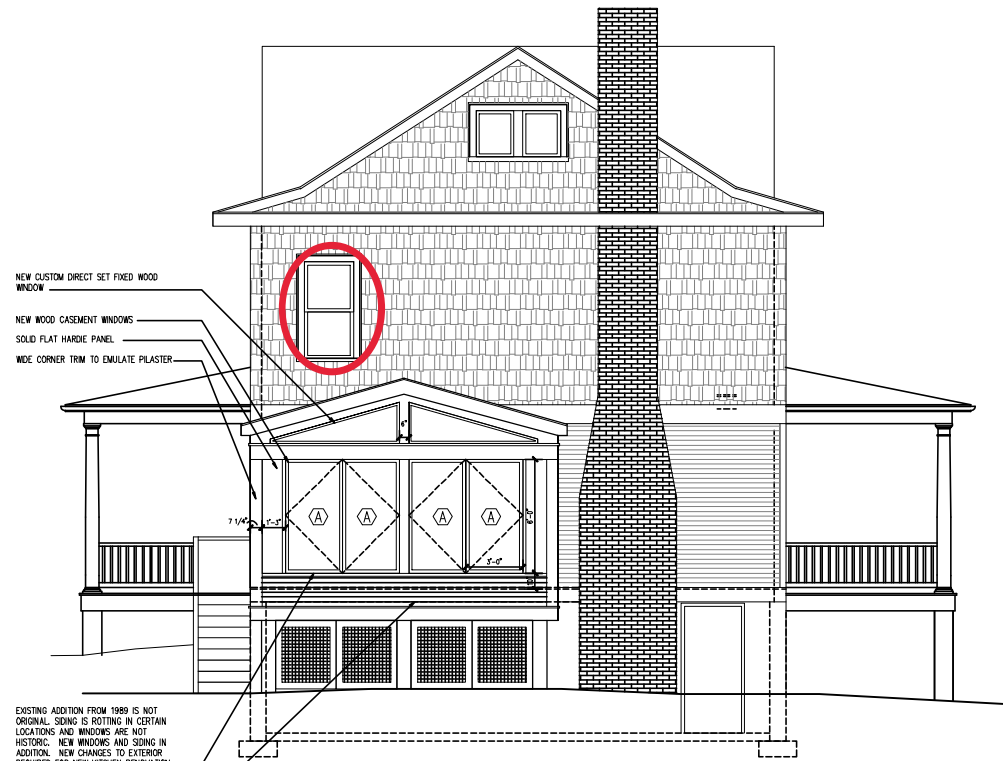
KNF Engineering
Structural Engineer
KNF Engineering, PLLC
Kyle Franzen, PE
42506 Regal Wood Drive
Ashburn, VA 20148
703.946.3188
kyle@knfeng.com

ANDREWS RESIDENCE
2737 23RD Road North
Arlington, VA 22201
Renovation

Issue: Date:
Pricing 2020.03.05

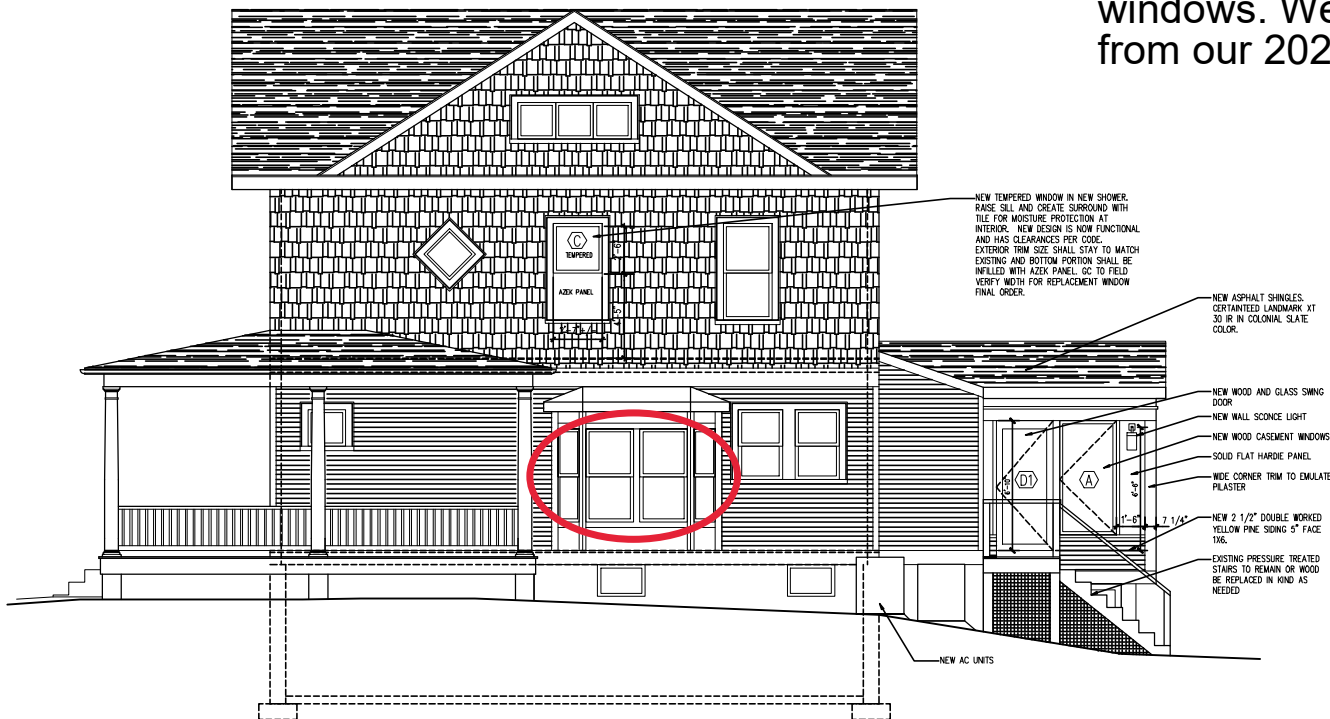
NEW ELEVATIONS

A203



NEW NORTH REAR ELEVATION
Scale: 1/4" = 1'-0"

The windows circled in red are currently vinyl windows that we propose to restore to exterior wood windows. We used the elevations from our 2020 project.



NEW EAST SIDE ELEVATION
Scale: 1/4" = 1'-0"

**FITZHARRIS
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ARCHITECTS + DESIGNERS
Heidi FitzHarris, AIA
3623 North 21st Avenue
Arlington, VA 22207
703.598.9318
heidi@fitzharrisdesigns.com
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KNF Engineering
Structural Engineer
KNF Engineering, PLLC
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42506 Regal Wood Drive
Ashburn, VA 20148
703.946.3188
kyle@knfeng.com

ANDREWS RESIDENCE
2737 23RD Road North
Arlington, VA 22201
Renovation

Issue: Date:
Pricing 2020.03.05

NEW ELEVATIONS

A204

WOOD EXTERIOR DOUBLE HUNG WINDOWS



Wood Exterior Double Hung windows with White hardware



Wood Exterior Double Hung windows with custom stain

WOOD EXTERIOR DOUBLE HUNG WINDOWS

The Ultimate Wood Double/Single Hung, Ultimate Wood Double Hung Magnum, and Ultimate Wood Double Hung Insert are quintessentially American windows designed to fit seamlessly into the historic fabric of your home, neighborhood, or community. With residential and commercial applications, these windows are perfect for any historic building.



WOOD DOUBLE/SINGLE HUNG EXTERIOR



WOOD DOUBLE HUNG MAGNUM INTERIOR



DOUBLE HUNG INSERT EXTERIOR






























































































WOOD DOUBLE HUNG

MO (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-4 1/2 (1029)	3-8 1/2 (1130)	4-0 1/2 (1232)
RO (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
FS (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
DLO (mm)	1-2 15/16 (379)	1-6 15/16 (481)	1-10 15/16 (583)	2-0 15/16 (633)	2-2 15/16 (684)	2-4 15/16 (735)	2-6 15/16 (786)	2-10 15/16 (887)	3-2 15/16 (989)
2-10 9/16 (878) 2-9 1/2 (851) 2-9 (838) 0-1 15/16 (278)	 UWDH1612	 UWDH2012	 UWDH2412	 UWDH2612	 UWDH2812	 UWDH3012	 UWDH3212	 UWDH3612	 UWDH4012
3-2 9/16 (980) 3-1 1/2 (953)w 3-1 (940) 1-0 15/16 (329)	 UWDH1614	 UWDH2014	 UWDH2414	 UWDH2614	 UWDH2814	 UWDH3014	 UWDH3214	 UWDH3614	 UWDH4014
3-6 9/16 (1081) 3-5 1/2 (1054) 3-5 (1041) 1-2 15/16 (379)	 UWDH1616	 UWDH2016	 UWDH2416	 UWDH2616	 UWDH2816	 UWDH3016	 UWDH3216	 UWDH3616	 UWDH4016
3-10 9/16 (1183) 3-9 1/2 (1156) 3-9 (1143) 1-4 15/16 (430)	 UWDH1618	 UWDH2018	 UWDH2418	 UWDH2618	 UWDH2818	 UWDH3018	 UWDH3218	 UWDH3618	 UWDH4018
4-2 9/16 (1284) 4-1 1/2 (1257) 4-1 (1245) 1-6 15/16 (481)	 UWDH1620	 UWDH2020	 UWDH2420	 UWDH2620	 UWDH2820	 UWDH3020	 UWDH3220	 UWDH3620	 UWDH4020
4-6 9/16 (1386) 4-5 1/2 (1359) 4-5 (1346) 1-8 15/16 (532)	 UWDH1622	 UWDH2022	 UWDH2422	 UWDH2622	 UWDH2822	 UWDH3022	 UWDH3222	 UWDH3622	 UWDH4022
4-10 9/16 (1488) 4-9 1/2 (1461) 4-9 (1448) 1-10 15/16 (583)	 UWDH1624	 UWDH2024	 UWDH2424	 UWDH2624	 UWDH2824	 UWDH3024	 UWDH3224	 UWDH3624	 UWDH4024
5-2 9/16 (1589) 5-1 1/2 (1562) 5-1 (1549) 2-0 15/16 (633)	 UWDH1626	 UWDH2026	 UWDH2426	 UWDH2626	 UWDH2826	 UWDH3026	 UWDH3226	 UWDH3626 E	 UWDH4026 E
5-6 9/16 (1691) 5-5 1/2 (1664) 5-5 (1651) 2-2 15/16 (684)	 UWDH1628	 UWDH2028	 UWDH2428	 UWDH2628	 UWDH2828	 UWDH3028 E	 UWDH3228 E	 UWDH3628 E	 UWDH4028 E

MULTIPLE ASSEMBLY CONVERSIONS

ROUGH OPENING		MASONRY OPENING WITH BMC	
Width	Height	Width	Height
Add all frame sizes plus 1" (25)	Add frame sizes plus 1/2" (13)	Add all frame sizes plus 3 1/8" (79)	Add frame sizes plus 1 9/16" (39)

Details and Elevations not to scale.

E These windows meet national Egress codes for fire evacuation. Local codes may differ.

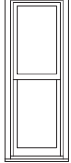
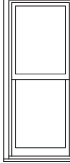





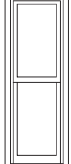
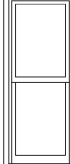





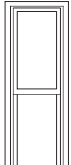







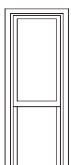








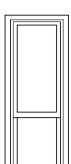








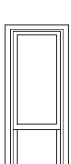







* For more Cottage Style sizes than the sample shown, please contact your Marvin representative. Ultimate Double Hung cottage call number formula is figured in fifths. Top sash is ²/₅ and bottom is ³/₅.

1. Standard call number; 2024
2. Add the two glass heights; 24" + 24" = 48"
3. Divide 48" by ²/₅; 19-13/64"
4. Round to the nearest standard glass height; 20"
5. Subtract from total glass height; 48" - 20" = 28" The call number for the above example is: 2020/28. The top sash will be a 2020 and the bottom sash will be a 2028

Ultimate Wood Double Hung: UWDH

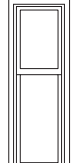






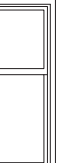
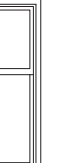
WOOD DOUBLE HUNG

MO (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-4 1/2 (1029)	3-8 1/2 (1130)	4-0 1/2 (1232)
RO (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
FS (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
DLO (mm)	1-2 15/16 (379)	1-6 15/16 (481)	1-10 15/16 (583)	2-0 15/16 (633)	2-2 15/16 (684)	2-4 15/16 (735)	2-6 15/16 (786)	2-10 15/16 (887)	3-2 15/16 (989)

5-10 9/16 (1792) 5-9 1/2 (1765) 5-9 (1753) 2-4 15/16 (735)									
6-2 9/16 (1894) 6-1 1/2 (1867) 6-1 (1854) 2-6 15/16 (786)									
6-6 9/16 (1996) 6-5 1/2 (1969) 6-5 (1956) 2-8 15/16 (837)									
6-10 9/16 (2097) 6-9 1/2 (2070) 6-9 (2057) 2-10 15/16 (887)									
7-6 9/16 (2300) 7-5 1/2 (2273) 7-5 (2261) 3-2 15/16 (989)									
7-10 9/16 (2402) 7-9 1/2 (2375) 7-9 (2362) 3-4 15/16 (1040)									

COTTAGE STYLE*

MO (mm)	2-0 1/2 (622)	2-4 1/2 (724)	2-8 1/2 (826)	2-10 1/2 (876)	3-0 1/2 (927)	3-2 1/2 (978)	3-4 1/2 (1029)	3-8 1/2 (1130)	4-0 1/2 (1232)
RO (mm)	1-10 3/8 (568)	2-2 3/8 (670)	2-6 3/8 (772)	2-8 3/8 (822)	2-10 3/8 (873)	3-0 3/8 (924)	3-2 3/8 (975)	3-6 3/8 (1076)	3-10 3/8 (1178)
FS (mm)	1-9 3/8 (543)	2-1 3/8 (645)	2-5 3/8 (746)	2-7 3/8 (797)	2-9 3/8 (848)	2-11 3/8 (899)	3-1 3/8 (949)	3-5 3/8 (1051)	3-9 3/8 (1153)
DLO (mm)	1-2 15/16 (379)	1-6 15/16 (481)	1-10 15/16 (583)	2-0 15/16 (633)	2-2 15/16 (684)	2-4 15/16 (735)	2-6 15/16 (786)	2-10 15/16 (887)	3-2 15/16 (989)

5-10 9/16 (1792) 5-9 1/2 (1765) 5-9 (1753) 1-10 15/16 (583) / 2-10 15/16 (887)									
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Please consult your local Marvin representative for more information.
For further details and drawings visit the 'Tools and Documents' section at Marvin.com.

Unit Features

Ultimate Wood Double Hung Collection:

- Ultimate Wood Double Hung: UWDH
- Ultimate Wood Double Hung Picture: UWDH P
- Ultimate Wood Double Hung Transom: UWDH TR
- Ultimate Wood Double Hung Bows and Bays: UWDH BB

Ultimate Wood Round Top Double Hung Collection:

- Ultimate Wood Double Hung Round Top: UWDH RT
- Ultimate Wood Single Hung Round Top: UWSH RT
- Ultimate Wood Double Hung Round Top Picture: UWDH RT P
- Ultimate Wood Double Hung Round Top Transom: UWDH RT TR

Ultimate Wood Double Hung Magnum Collection:

- Ultimate Wood Double Hung Magnum: UWDHM
- Ultimate Wood Single Hung Magnum: UWSHM
- Ultimate Wood Double Hung Magnum Picture: UWDHM P
- Ultimate Wood Double Hung Magnum Transom: UWDHM TR

Ultimate Wood Round Top Double Hung Magnum Collection:

- Ultimate Wood Double Hung Magnum Round Top: UWDHMRT
- Ultimate Wood Single Hung Magnum Round Top: UWSHMRT
- Ultimate Wood Double Hung Magnum Round Top Picture: UWDHM RTP
- Ultimate Wood Double Hung Magnum Round Top Transom: UWDHMRTT

Standard Frame:

- Frame thickness: 1 1/16"(17)
- Subsill thickness: 1 3/32"(28)
- Frame base (with pre-drilled installation holes in jambs): 4 9/16"(116) from backside of BMC to interior wood face of frame
- 8 degree bevel on sill and subsill
- Curved frames are laminated and/or edge glued pine
- Radius bead is laminated in non finger-jointed pine
- Optional DP50 sill liner maximum size 2830 or 3026

Standard Sash:

- Operating sash thickness: 1 5/8"(41)
- Transom and picture unit sash thickness 1 5/8"(41) or optional 2" (51)
- All measurements are nominal - sash are removable for easy cleaning, service or finishing
 - WUDH, WUDHP, WUDHRT: Bottom of subsill to top of interior wood sill liner - 3 11/16" (94)
 - Top rail - 2 7/32" (56); stiles - 2 7/16" (62); bottom rail - 3 9/16" (90)
 - WUDHT: Bottom of sill to top of interior wood sill liner - 1 31/32" (50)
 - Top rail - 2 7/32" (56); stiles - 2 7/16" (62); bottom rail - 2 19/32" (66)

Insect Screen

- Aluminum screen: Full screen standard, half screen optional
- Screen Frame
 - Window Frame Height less than or equal to 54 1/2". Standard: Aluminum Screen. Option: Extruded Aluminum Screen Frame
 - Window Frame Height greater than 54 1/2". Standard: Extruded Screen Frame. Option: None.
 - Colors available: Pebble Gray, Bahama Brown, Evergreen, Bronze, Stone White, Ebony, Wineberry, Coconut Cream, Hampton Sage, Cashmere, Sierra White, Cadet Gray, Cascade Blue, Bright Silver (pearlescent), Copper (pearlescent), Clay, Gunmetal, Liberty Bronze (pearlescent), or Suede.
- Optional wood screen
 - Matches wood species/finish selected
- Screens have a cross bar on glass height of 20" (508) and taller
- Full screen: Standard, Optional half screen.
- Screen mesh:
 - Standard: Marvin Bright View™
 - Optional: Charcoal Aluminum Wire, Black Aluminum Wire, Bright Aluminum Wire, Bright Bronze Aluminum Wire

Unit Features**Magnum Frame:**

- Double Hung Magnums has a frame thickness head and jamb: 1 1/16" (17)
- Double Hung Magnums has a sill thickness: 2 13/16"(71)
- Frame base (with pre-drilled installation holes in jambs): 4 9/16"(116) from backside of BMC to interior wood face of frame
- 8 degree bevel on sill and subsill
- Curved frames are laminated and/or edge glued pine
- Radius bead is laminated in non finger-jointed pine

Magnum Sash:

- Transom and picture unit sash thickness 1 5/8"(41) or optional 2" (51)
- All measurements are nominal - sash are removable for easy cleaning, service or finishing
 - WUDHM, WUDHMP, WURTDHM: Bottom of subsill to top of wood interior sill liner - 3 29/32" (99)
 - Top rail - 2 7/32" (56); stiles - 1 15/32" (37); bottom rail - 3 9/16" (90)
 - WUDHMT: Bottom of sill to top of wood interior sill liner- 1 31/32" (50)
 - Top rail - 2 7/32" (56); stiles -1 15/32" (37); bottom rail - 2 19/32" (66)

Hardware: - See Individual Product Chapters**Weather Strip:**

- Operating units: Continuous leaf weather strip at head jamb; dual bulb at check rail, weather strip and bottom rail
 - Color: Beige
- Picture units: Continuous weather strip at perimeter; leaf and bulb weather strip at jamb, bulb weather strip at head and sill
 - Color: Beige

Unit Features

Glass and Glazing:

- Glazing seal: Silicone glazed
- Standard glass is Insulating Low E2 Argon or air
- Dual-pane insulating glass thickness: 1 1/16"
- Triple-pane insulating glass thickness: 7/8"
- Insulating Glass Coatings:
 - Low E1
 - Low E2
 - Low E3
 - Low ERS
 - Low ELR
- Gas Fill: Air or Argon
- Available glass types:
 - Laminated
 - Tempered
 - Obscure
 - Clear
- Tints
 - Bronze
 - Gray
 - Green
 - Reflective Bronze
- Decorative glass options:
 - Frost
 - Reed
 - Narrow Reed
 - Rain
 - Sandblasted
 - Glue Chip
- Glazing will be altitude adjusted for higher elevations with capillary tubes. Argon gas not included
- IZ3 has annealed exterior pane is default with the option to temper
- Egress may be affected when selecting specialty glass, please contact your Marvin representative
- For additional specialty glazing options, please contact your Marvin representatives.

Unit Features**Wood Combination Storm Sash and Screen:**

- Frame: Treated bare wood or white primed (pine only)
- Storm panel: Select quality glass in an extruded aluminum frame
- Frame color: Stone White or Bronze
- Insect screen: Marvin BrightView™
 - Optional screen material: Charcoal Aluminum Wire, Black Aluminum Wire, Bright Aluminum Wire, Bright Bronze Aluminum Wire
- Weather strip: Pile weather strip between operating panels and at stiles of main frame
- Hardware: Spring loaded latches to secure storm panel.

Combination Storm and Sash Screen:

- Frame: Treated bare Pine wood or white primed (pine only)
- Storm panel: Select quality glass in an extruded aluminum frame
- Colors: Stone White or Bronze
- Standard screen: Marvin BrightView™
 - Optional screen mesh: Charcoal Aluminum Wire, Black Aluminum Wire, Bright Aluminum Wire, Bright Bronze Aluminum Wire
- Weather strip: Pile weather strip between operating panels at the stiles of the main frame
- Hardware: Spring loaded latches to secure the storm panel.

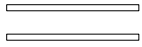
Wood Storm Sash:

- Frame: Treated bare pine wood or white primed (pine only)
- Glazing: Select quality glass

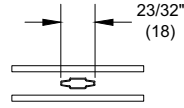
Cedar Dress Option:

- Available on pine frames
- Bare cedar
- Components:
 - Sill
 - Subsill
 - Blind stops and jamb covers
 - Mull covers
 - Brick Mold and Flat Casing
- See individual chapter for section detail

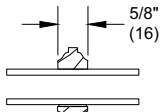
Standard Insulating Glass Divided Lite Options



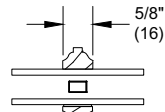
Insulating Glass



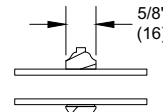
Aluminum 23/32"
Contour GBG



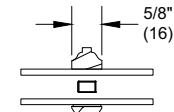
5/8" SDL



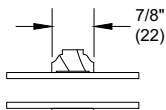
5/8" SDL
W/Spacer



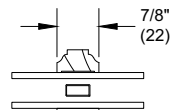
5/8" Putty
SDL



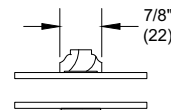
5/8" Putty SDL
W/Spacer



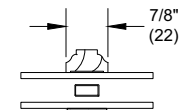
7/8" SDL



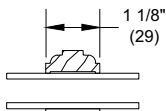
7/8" SDL
W/Spacer Bar



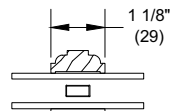
7/8" Putty SDL



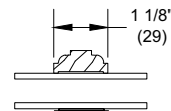
7/8" Putty SDL
W/Spacer Bar



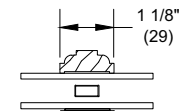
1 1/8" SDL



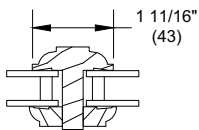
1 1/8" SDL
W/Spacer Bar



1 1/8" Putty SDL



1 1/8" Putty SDL
W/Spacer Bar



1 11/16" IG ADL

NOTE: Due to the inherent qualities of tempered glass, daylight gaps may be seen when using simulated divided lite bars. Daylight gaps could be visible between the internal spacer bar and surface applied bars when viewing from an acute angle to the glass on the following applications:

- Tempered glass over 72" high while using 5/8" SDL bars
- Tempered glass over 91" high while using 7/8" SDL bars.

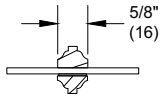
Standard Single Glaze Divided Lite Options



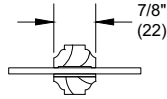
Single Glaze



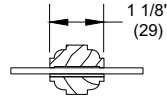
Single Glaze
W/ Energy Panel



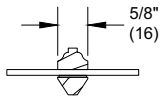
5/8" SDL



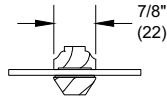
7/8" SDL



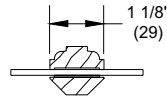
1 1/8" SDL



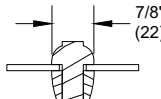
5/8" Putty SDL



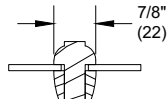
7/8" Putty SDL



1 1/8" Putty SDL

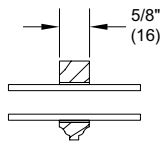


7/8" SG-ADL

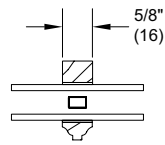


7/8" SG-ADL
W/ Energy Panel

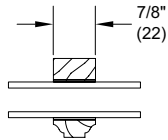
Optional Interior Square Simulated Divided Lite



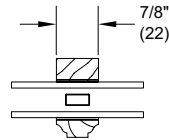
5/8" SDL



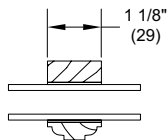
5/8" SDL
W/Spacer



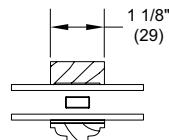
7/8" SDL



7/8" SDL
W/Spacer Bar



1 1/8" SDL



1 1/8" SDL
W/Spacer Bar

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