ARCHITECTURAL REVIEW BOARD MEETING AGENDA

Town Council Chambers
765 Lynn Street, Herndon, VA 20170
Wednesday, November 1, 2023 | 7:30 p.m.

---

1. **Call to Order**

2. **Public Hearing**

   a. **APPLICATION FOR AN ALTERATION, ARB #23-016,** to consider an application for a new housing development at 1155 Herndon Parkway, Herndon, Virginia, located on the southwest side of Herndon Parkway between Elden Street and Early Fall Court. The subject property is further identified as Fairfax County Tax Map 0161 27 A, is zoned PD-R, Planned Development-Residential and consists of 283,675 square feet of land. Owner: Stanley Martin Homes LLC. Applicant/Agent: Tim Shriner. **(Continued from the October 18, 2023, regular meeting.)**

3. **New Business**

   a. **Discussion** – Pre-application, 13100 & 13150 Worldgate Drive

   b. **Resolution** – ARB Meeting Schedule 2024

4. **Comments**

   a. Comments from the Staff Members

   b. Comments from the Board Members

5. **Adjournment**

TOWN OF Herndon VIRGINIA

MEMORANDUM

To: Chair Blaker-Glass and Members of the Architectural Review Board

From: Tamsin Himes, Lead Planner / Design and Development

Date: November 1, 2023

Subject: ARB #23-016 1155 Herndon Parkway, Herndon Virginia

This staff memo is an addendum to the staff report for ARB #23-016 provided to the Board prior to the October 4th work session and the staff memo provided to the Board prior to the October 18th public hearing.

The discussion for this case at the October 4th work session centered on feedback provided in the staff report and comments by the Board. The applicant stated their intention to submit updated documents and address the Board and staff's feedback. The applicant has submitted additional materials in response to that earlier discussion.

Staff comments below address the new material provided and assess whether they address the comments provided previously.

Completeness Review

Missing Application Materials. There remains confusion over what is being proposed. For example, the line drawings for the stacked units show six façade options, while the scheme schedule includes seven choices and the scheme renderings show three façade designs. The exact number of façade options for both products will need to be clarified and visually presented. Also, the exterior material specifications sheets do not indicate which materials are being proposed and there are no spec sheets for the retaining wall veneer, site furnishings, railing systems, and exterior lights. A materials list outlining each item, its color/finish, material, model, manufacturer, details, etc. would be useful.

Approving Façade Designs. There is some indication in the submitted materials that the applicant is seeking approval of only a limited number of units on specific lots. The ARB cannot review and approve only a portion of this project. The application must include information for the entirety of the project for consideration by the Board. There also appears to be confusion on whether the exact façade for each lot must be approved by the board. This is incorrect. Every façade option proposed must be approved but they do not to be presented in the exact order of eventual construction, which is not known at this time. Instead, a few drawings showing sample sticks of townhouses and stacked units along with sample combinations of color/material schemes is appropriate. The need to approve all façade options with a singular application likely means that additional line drawings beyond the four townhouse and six stacked unit options will require submission

and the perspective rendering should show at least each façade option once in the sample sticks rendered. The perspective renderings should be placed in the context of the development from strategic and identified viewsheds both internal to the site and as viewed external from the site. Gutters, downspouts, and conductors should also be included on the perspective renderings.

Design Review

1. Townhouse Partial Parapet. The townhouses rely on the use of a façade feature that extends above the eaves of the gabled roof resulting in a thin parapet-like form. This is a prominent form that staff believes is an inappropriate feature of the building design. In their comment letter and at the work session the applicant argued that this design feature is meant to provide differentiation along the façade of the townhouse rows, however that task alone can be achieved in numerous other ways. The use of these flat roof forms affixed to gable roof creates a forced, superficial, and awkward juxtaposition between two very different roof forms. If the intent is to more closely align the architecture between the townhouses and the stacked units, a flat roof for the townhouses should be considered. If, however, a gable roof remains the preference, other methods to break up the roof line and roof plane should be considered or alternatively, the facades can rely on a variety of materials and features below the roof line and difference in roof planes caused by the recession in various facades may suffice in providing differentiation.

2. Use of Recessed Facades. Both townhouses and two-over-two unit designs show the use of alternating façade recesses and façade treatment to virtually break up large facades and give the impression of individual or separated structures. Staff asked for clarification concerning the depth of the recesses and extensions, including trim on the panel bays. The applicant's response letter stated that Stanley Martin would provide dimensions for these elements, however the updated documents did not provide this information. The depth of reveal is important to help breakup up the mass and manage any overly flat appearance.

3. Front Entrance Prominence. Staff commented on the front entrances of the two-over-two structures and noted that something might be done to increase their prominence and provide a focal point for these designs. This has not been commented on or provided by the applicant.

4. Water Table Treatment. Side elevations of the two-over-two and townhouse buildings are flat and broad, although there are several windows and one side of each row will have an attached utility shed. On "high visibility" corners, there is a brick water table feature. The work session involved a discussion regarding this element and that to combat the broad, blank walls of the non-nigh visibility side elevations, a low brick water table could be considered that would extend up to the bottom of the first-floor windows. This would provide a visual base for the building. The applicant addressed this comment at the work session and in the comment letter and stated an intention

to include this in updated drawings, but the updated drawings have not been provided that illustrate this feature on side elevations. This should be provided for the Board's review.

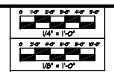
5. Townhouse Elevations. Two design features which staff addressed in the original staff report regarding the townhouse scheme examples relate to Elevation W and Elevation U. Elevation W features a faux bay which spans most, but not all, of the townhouse. This leaves a small vertical space on either side which is clad in siding and causes the windows on the third story to be misaligned with the windows on the first and second stories. Staff believes that a more congruent treatment of this area would be for the bay to span the width of the townhouse and allow for better alignment and congruency throughout the townhouse. Elevation U features a double hung window arrangement on the third floor above a single window on the second floor with the ground floor entrance aligned with the single window. Staff suggested limiting the third -floor window to a single window as seen in Elevation X. This comment remains unaddressed.

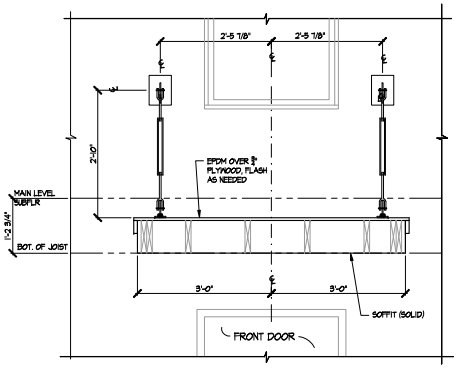
6. Color Options. The applicant has addressed staff's comments regarding color clarification for elements siding, gladding, window, door, and trim colors. These are provided in Attachment 2. Color specifications should be provided for the garage doors. As mentioned above, all townhouses and two-over-two buildings should be shown in color renderings – elevation and perspective – in the context of a development block or row.

7. Retaining Walls. New information has been provided regarding four retaining walls that will be a part of this development. The applicant has provided elevations for the retaining walls, and an annotated site plan showing their locations. Application materials should be provided that include both the retaining walls and the adjacent proposed buildings in elevation and perspective so that the Board and staff can understand how these elements interact with each other. A specifications sheet should also be provided for the stone or other materials proposed for the retaining walls.

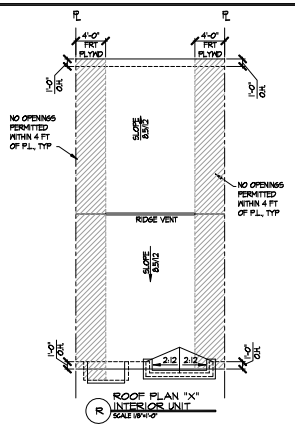
As stated in previous reports, staff is supportive of this project and its direction. We look forward to discussing the new materials provided with the Board and applicant and note that it is not unusual for a development of this size to be the subject of several Architectural Review Board meetings. Staff also reiterates that this development must be reviewed as a whole. Staff is withholding a recommendation at this time pending further information and discussion with the applicant.

Attachments:
1) Elevation Line Drawings
2) Lot Specific Line Elevation
3) Materials Specifications Sheets
4) Retaining Wall
5) Project Renderings from October Meetings

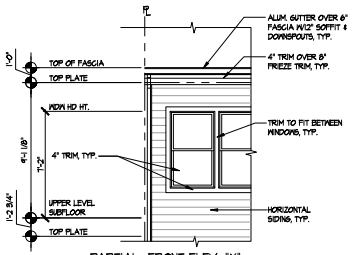




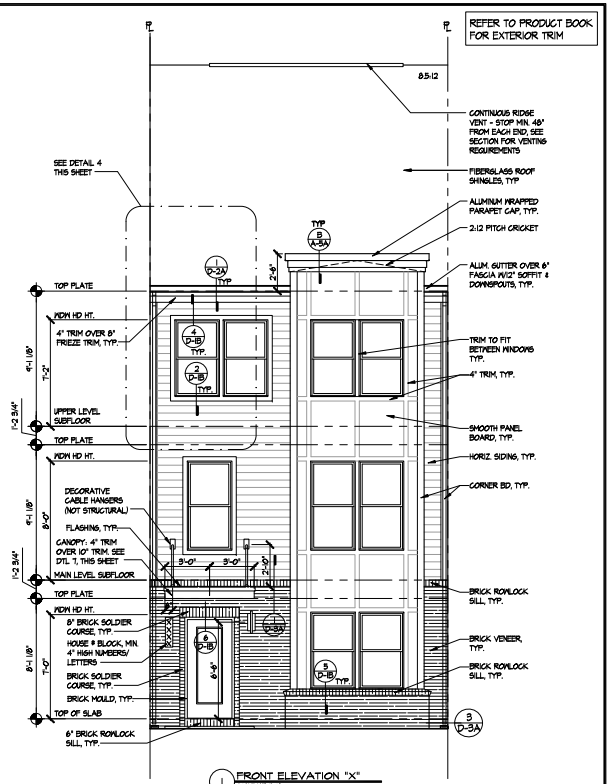
7 CANOPY BRACKET LOCATIONS
SCALE 1/4"=1'-0"



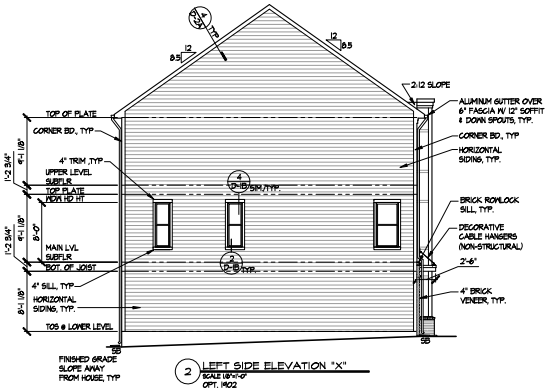
R ROOF PLAN "X" INTERIOR UNIT
SCALE 1/8"=1'-0"



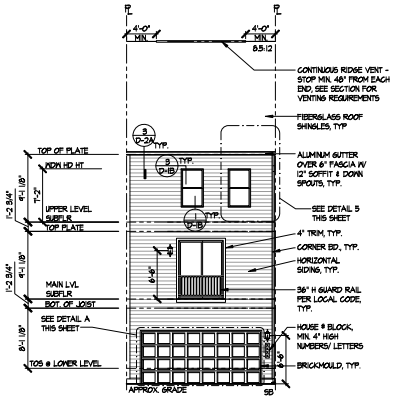
4 PARTIAL FRONT ELEV. "X" W/OPT. RAISED HEEL TRUSS
SCALE 1/4"=1'-0"
OPT. 0512



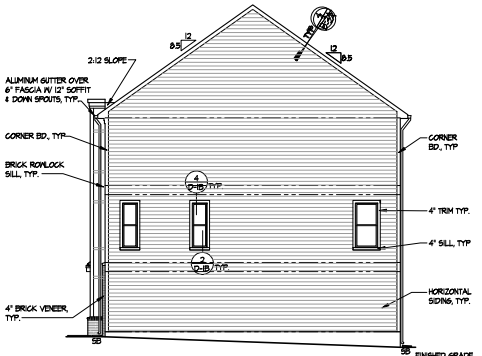
1 FRONT ELEVATION "X"
SCALE 1/8"=1'-0"



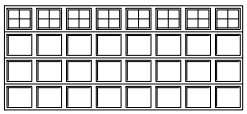
2 LEFT SIDE ELEVATION "X"
SCALE 1/8"=1'-0"
OPT. 1902



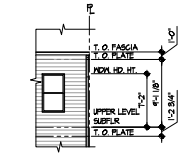
3 TYPICAL REAR ELEVATION
SCALE 1/8"=1'-0"



6 RIGHT SIDE ELEVATION "X"
SCALE 1/8"=1'-0"
OPT. 1901



A UP 1 GARAGE DOOR
SCALE 1/4"=1'-0"
OPT. 4555



5 PARTIAL REAR ELEVATION W/OPT. RAISED HEEL TRUSS
SCALE 1/8"=1'-0"
OPT. 0512

STANLEY MARTIN HOMES
11710 PLAZA AMERICA DRIVE, SUITE 1100, RESTON, VA 20190
PHONE: (703) 964-8000 FAX: (703) 715-8076

SEAL:

MODEL: JENKINS
SLAB
HB#: 005

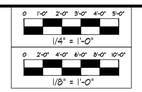
ORIGINAL ISSUE DATE: 07/05/2018

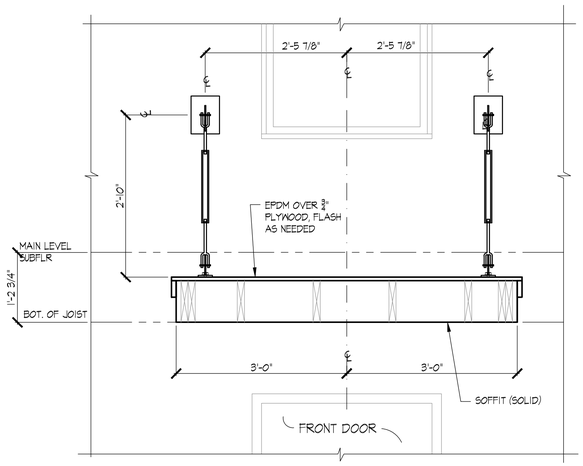
REVISION(S):
03/13/2020
04/16/2020
10/15/2021
10/09/2020
10/15/2021
02/15/2022
05/24/2022
10/07/2022
10/10/2022
04/04/2023
09/14/2023

DRAWING DESCRIPTION: ELEVATION "X" & ROOF PLANS

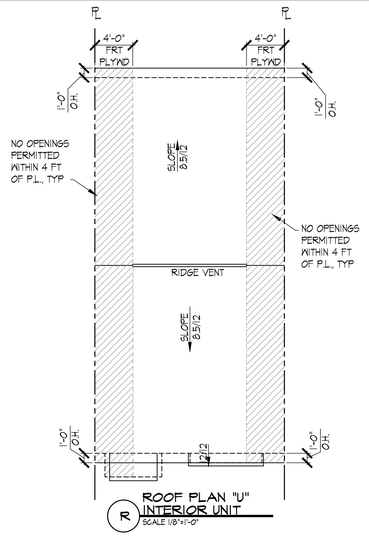
SHEET # A-4X

© 2020, 2024 THE DRAWINGS CONTAINED HEREIN ARE THE PROPERTY OF STANLEY MARTIN HOMES, LLC AND MAY NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF STANLEY MARTIN HOMES, LLC. ALL DRAWING SETS MUST BE RETURNED UPON REQUEST.

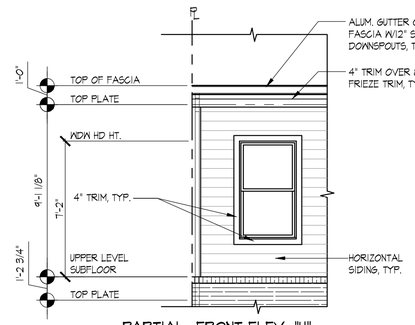




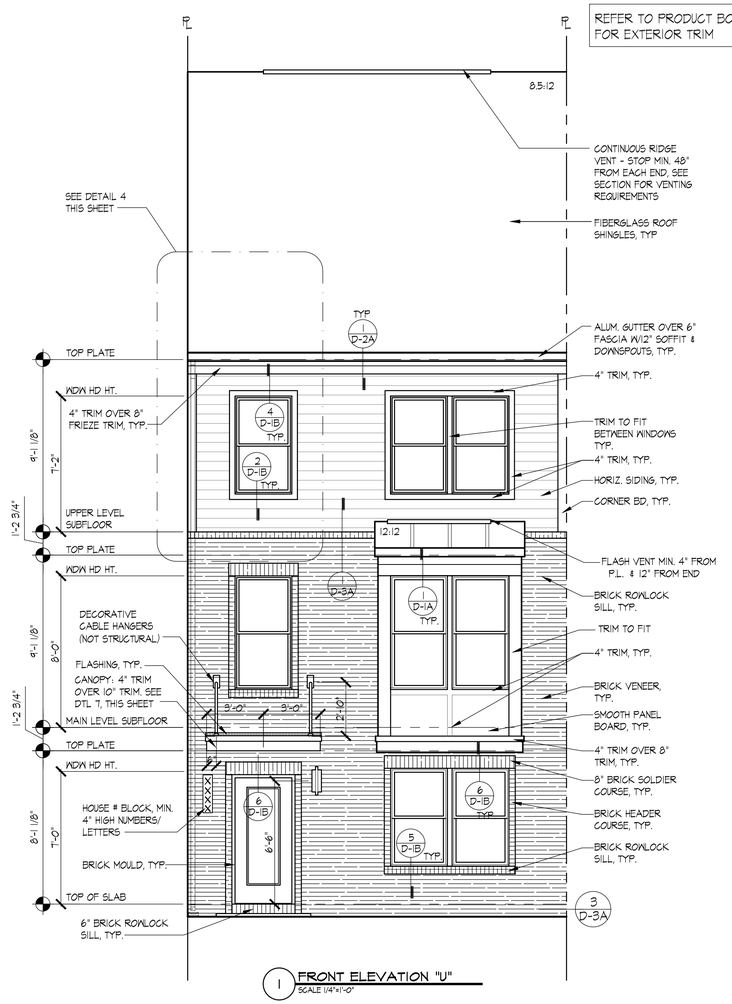
7 CANOPY BRACKET LOCATIONS
SCALE 3/4"=1'-0"



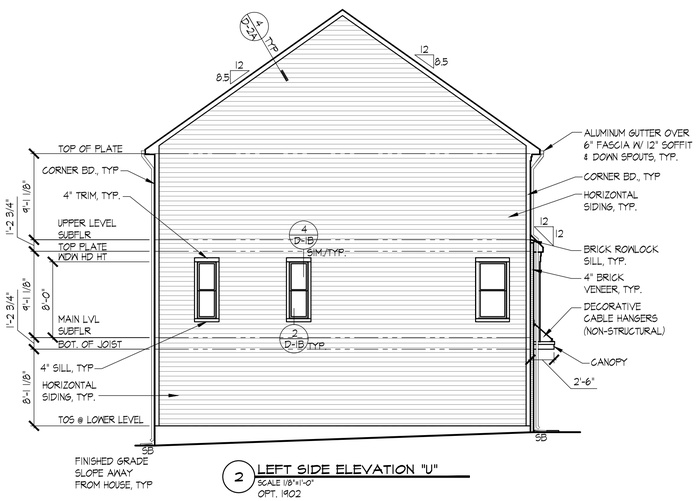
R ROOF PLAN "U" INTERIOR UNIT
SCALE 1/8"=1'-0"



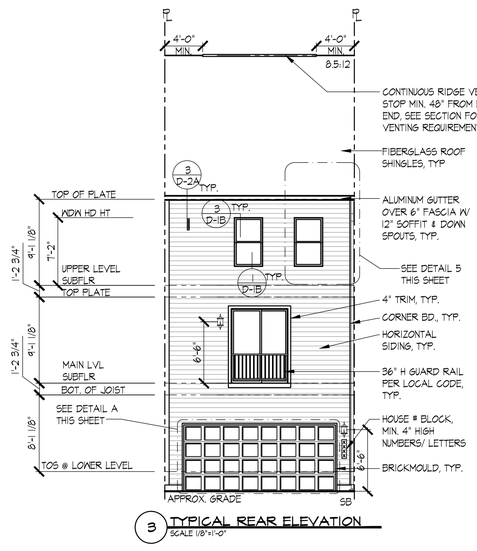
4 PARTIAL FRONT ELEV. "U" W/OPT. RAISED HEEL TRUSS
SCALE 1/4"=1'-0"
OPT. 0512



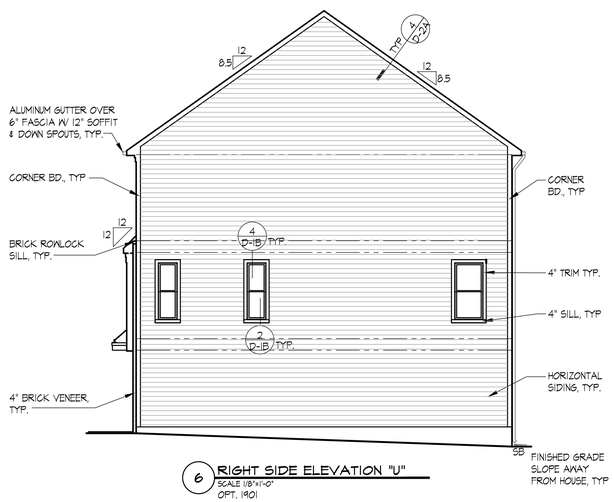
1 FRONT ELEVATION "U"
SCALE 1/4"=1'-0"



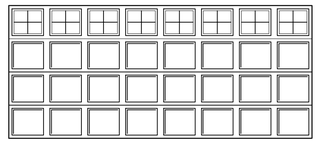
2 LEFT SIDE ELEVATION "U"
SCALE 1/8"=1'-0"
OPT. 1902



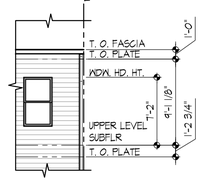
3 TYPICAL REAR ELEVATION
SCALE 1/8"=1'-0"



6 RIGHT SIDE ELEVATION "U"
SCALE 1/8"=1'-0"
OPT. 1901



A UP 1 GARAGE DOOR
SCALE 1/4"=1'-0"
OPT. 4555



5 PARTIAL REAR ELEVATION W/OPT. RAISED HEEL TRUSS
SCALE 1/8"=1'-0"
OPT. 0512

STANLEY MARTIN HOMES
1110 PLAZA AMERICA DRIVE, SUITE 1100, RESTON, VA 20190
PHONE: (703) 464-3000 FAX: (703) 715-8076

SEAL:

MODEL: JENKINS
SLAB
HBI#: D05

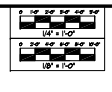
ORIGINAL ISSUE DATE: 07/05/2018

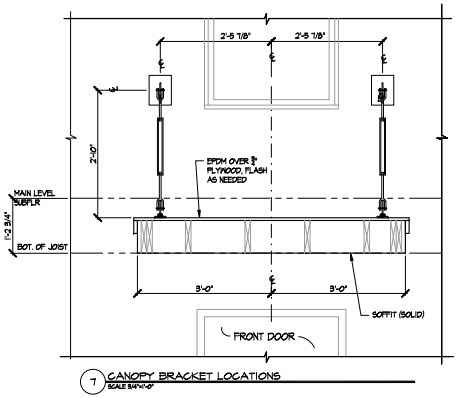
REVISION(S):
03/13/2020
04/16/2020
10/15/2021
10/09/2020
10/15/2021
02/15/2022
05/24/2022
10/07/2022
10/10/2022
04/04/2023
09/14/2023

DRAWING DESCRIPTION:
ELEVATION "U" & ROOF PLANS

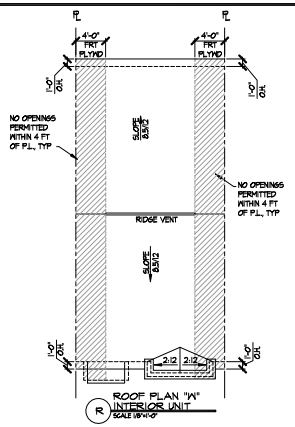
SHEET #
A-4U

© 2023, 2024 THE DRAWINGS CONTAINED HEREIN ARE THE PROPERTY OF STANLEY MARTIN HOMES, LLC AND MAY NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF STANLEY MARTIN HOMES, LLC. ALL DRAWING SETS MUST BE RETURNED UPON REQUEST.

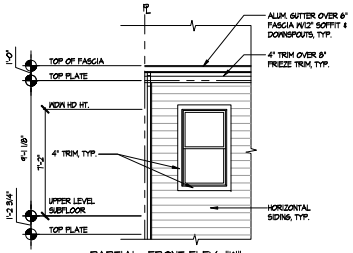




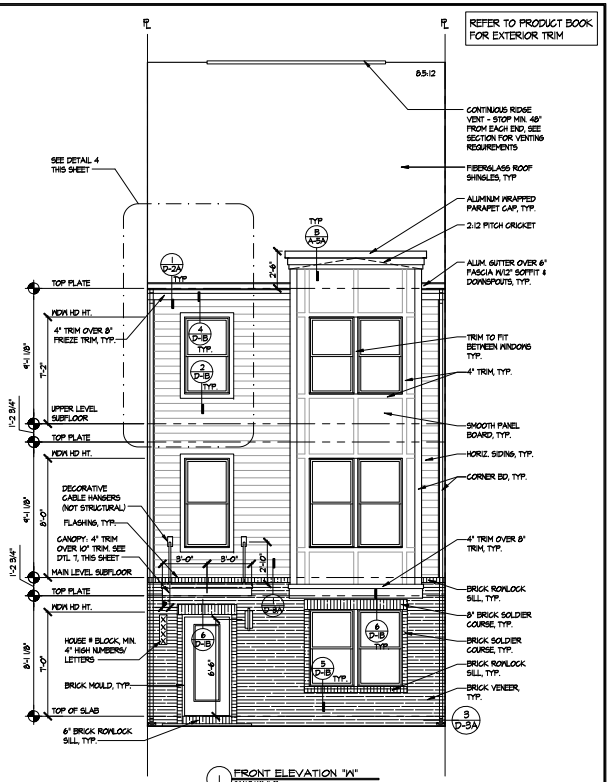
7 CANOPY BRACKET LOCATIONS
SCALE 3/4"=1'-0"



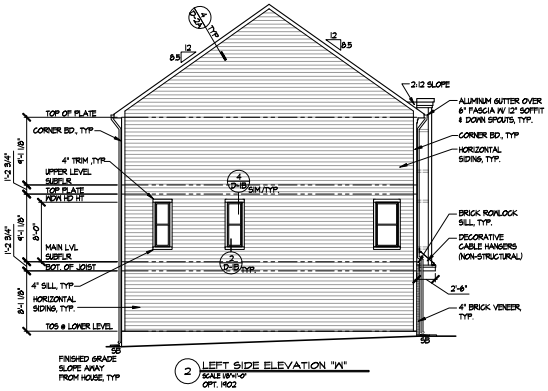
R ROOF PLAN "W" INTERIOR UNIT
SCALE 1/8"=1'-0"



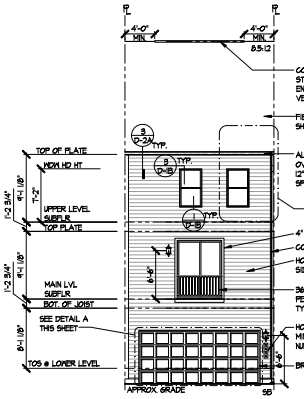
4 PARTIAL FRONT ELEV. "W" W/OPT. RAISED HEEL TRUSS
SCALE 1/4"=1'-0"
OPT. 0512



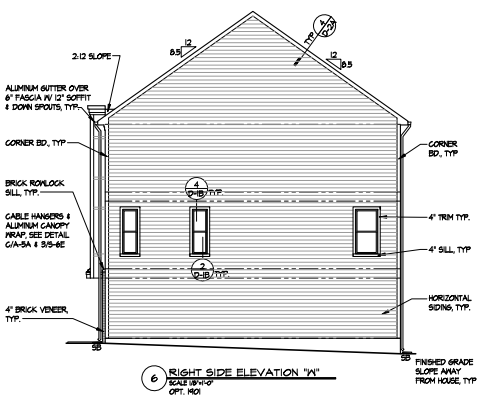
1 FRONT ELEVATION "W"
SCALE 1/4"=1'-0"



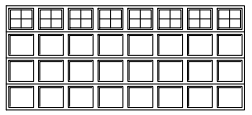
2 LEFT SIDE ELEVATION "W"
SCALE 1/8"=1'-0"
OPT. 1602



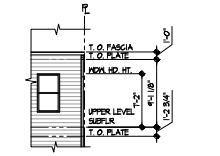
3 TYPICAL REAR ELEVATION
SCALE 1/8"=1'-0"



6 RIGHT SIDE ELEVATION "W"
SCALE 1/8"=1'-0"
OPT. 1601



A UP 1 GARAGE DOOR
SCALE 1/4"=1'-0"
OPT. 4555



5 PARTIAL REAR ELEVATION W/OPT. RAISED HEEL TRUSS
SCALE 1/8"=1'-0"
OPT. 0512

STANLEY MARTIN HOMES
11710 PLAZA AMERICA DRIVE, SUITE 1100, RESTON, VA 20190
PHONE: (703) 964-8000 FAX: (703) 715-8076

SEAL:

MODEL: JENKINS
SLAB
HB#: 005

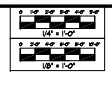
ORIGINAL ISSUE DATE: 07/05/2018

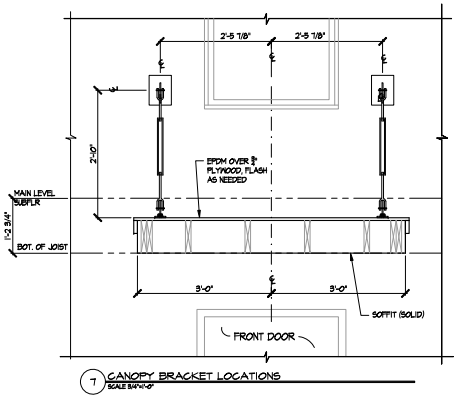
REVISION(S):
03/13/2020
04/16/2020
10/15/2021
10/09/2020
10/15/2021
02/15/2022
05/24/2022
10/07/2022
10/10/2022
04/04/2023
09/14/2023

DRAWING DESCRIPTION: ELEVATION "W" & ROOF PLANS

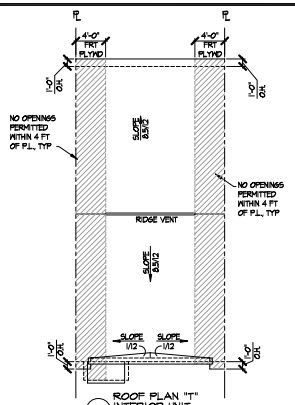
SHEET # A-4W

© 2020, 2024 THE DRAWINGS CONTAINED HEREIN ARE THE PROPERTY OF STANLEY MARTIN HOMES, LLC AND MAY NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF STANLEY MARTIN HOMES, LLC. ALL DRAWING SETS MUST BE RETURNED UPON REQUEST.

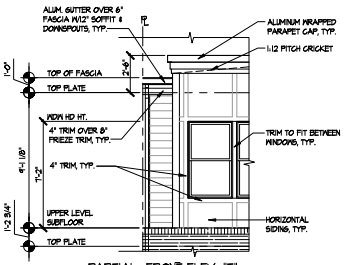




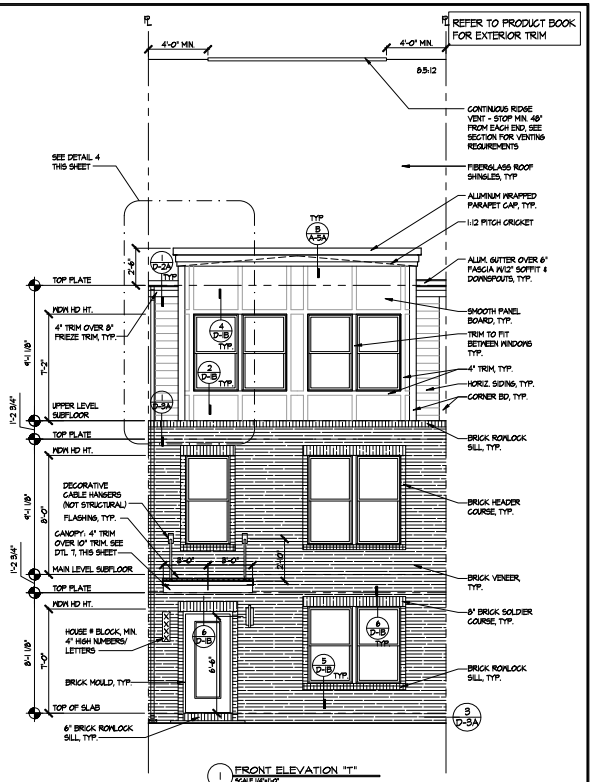
7 CANOPY BRACKET LOCATIONS
SCALE 3/4"=1'-0"



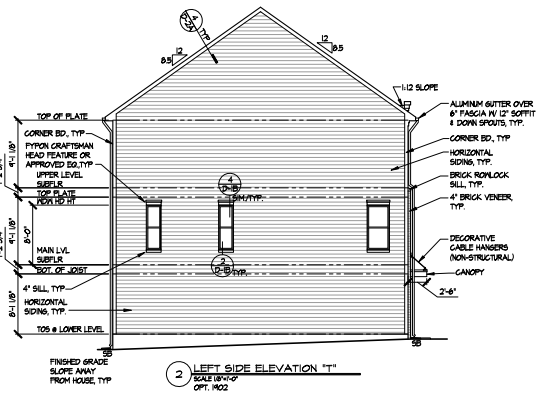
R ROOF PLAN "T" INTERIOR UNIT
SCALE 1/8"=1'-0"



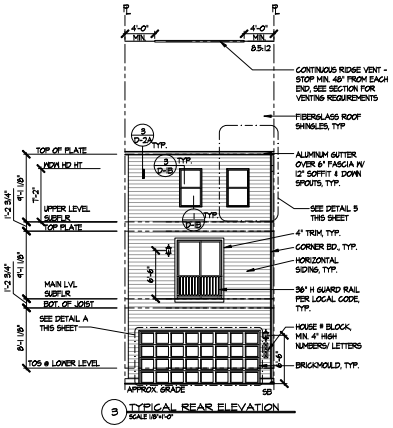
4 PARTIAL FRONT ELEV. "T" W/OPT. RAISED HEEL TRUSS
SCALE 1/4"=1'-0"
OPT. 0512



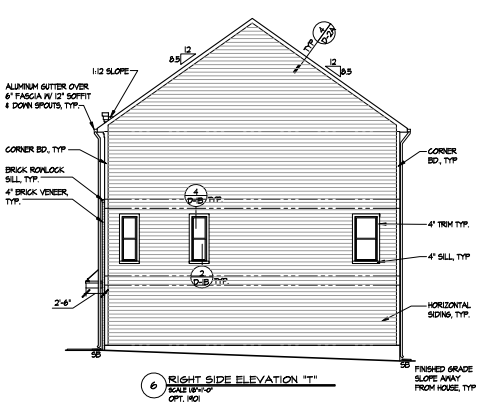
1 FRONT ELEVATION "T"
SCALE 1/4"=1'-0"



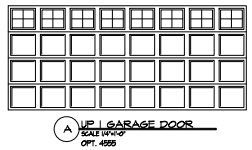
2 LEFT SIDE ELEVATION "T"
SCALE 1/8"=1'-0"
OPT. 1902



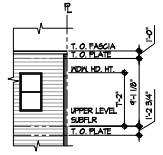
3 TYPICAL REAR ELEVATION
SCALE 1/8"=1'-0"



6 RIGHT SIDE ELEVATION "T"
SCALE 1/8"=1'-0"
OPT. 1901



A UP | GARAGE DOOR
SCALE 1/4"=1'-0"
OPT. 4555



5 PARTIAL REAR ELEVATION W/OPT. RAISED HEEL TRUSS
SCALE 1/8"=1'-0"
OPT. 0512

STANLEY MARTIN HOMES
11710 PLAZA AMERICA DRIVE, SUITE 1100, RESTON, VA 20190
PHONE: (703) 964-8000 FAX: (703) 715-8076

SEAL:

MODEL: JENKINS
SLAB
HB#: D05

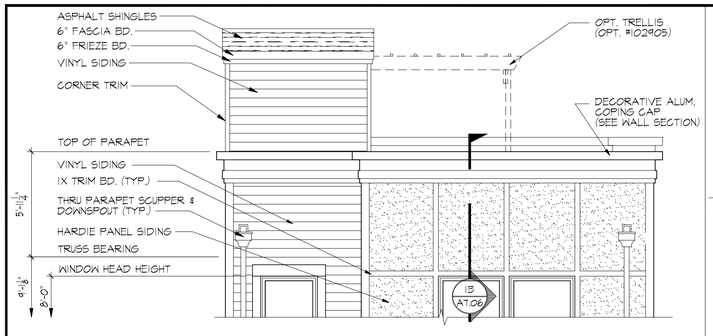
ORIGINAL ISSUE DATE: 07/05/2018

REVISION(S):
03/13/2020
04/16/2020
10/15/2021
10/09/2020
10/15/2021
02/15/2022
05/24/2022
10/07/2022
10/10/2022
04/04/2023
09/14/2023

DRAWING DESCRIPTION: ELEVATION "T" & ROOF PLANS

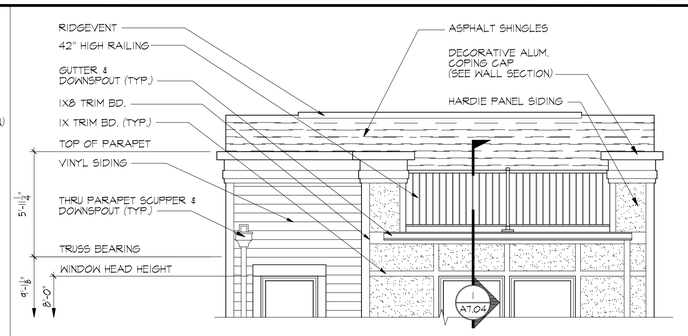
SHEET # A-4T

© 2023, 2024 THE DRAWINGS CONTAINED HEREIN ARE THE PROPERTY OF STANLEY MARTIN HOMES, LLC AND MAY NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF STANLEY MARTIN HOMES, LLC. ALL DRAWING SETS MUST BE RETURNED UPON REQUEST.



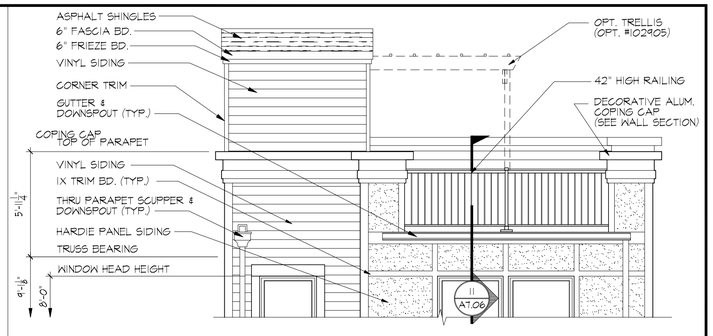
PARTIAL ELEVATION "B1" @ OPT. TERRACE

SCALE : 1/4" = 1'-0" (OPT. #8160)



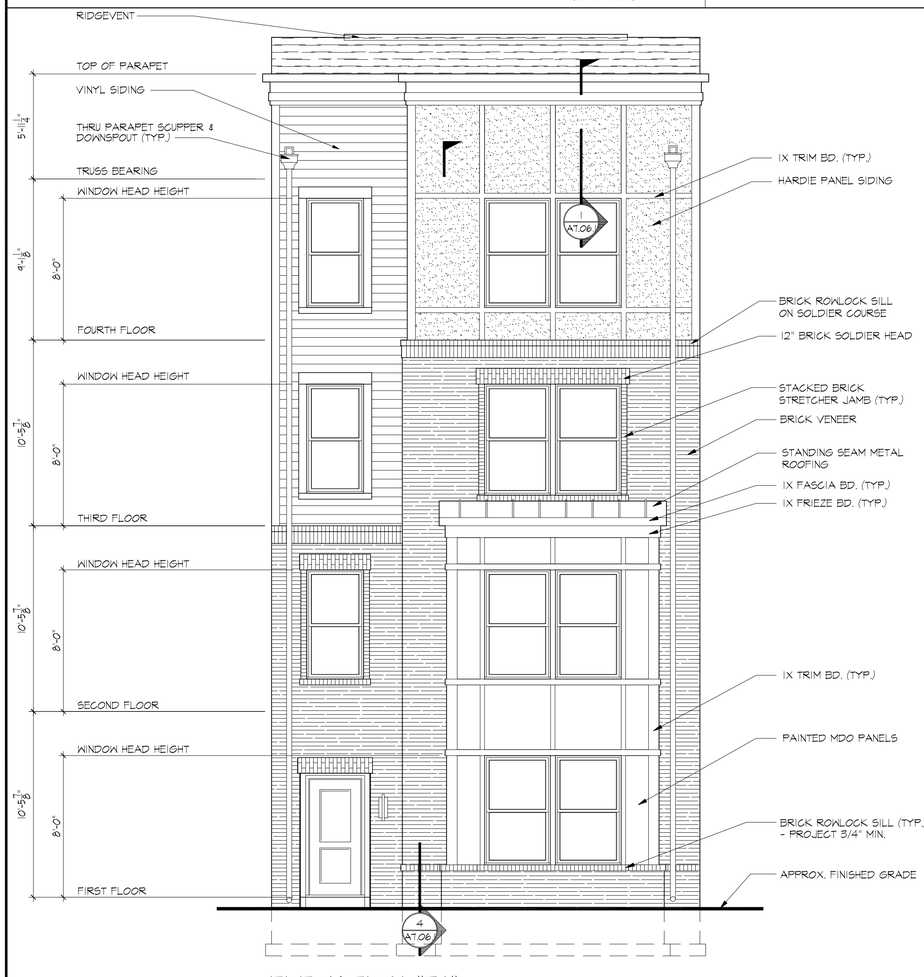
PARTIAL ELEVATION "B1" W/ RAILING

SCALE : 1/4" = 1'-0" (OPT. #103145)



PARTIAL ELEVATION "B1" @ OPT. TERRACE W/ RAILING

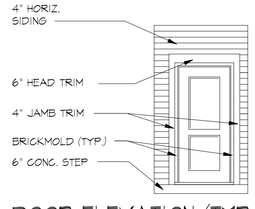
SCALE : 1/4" = 1'-0" (OPT. #8160 & #103145)



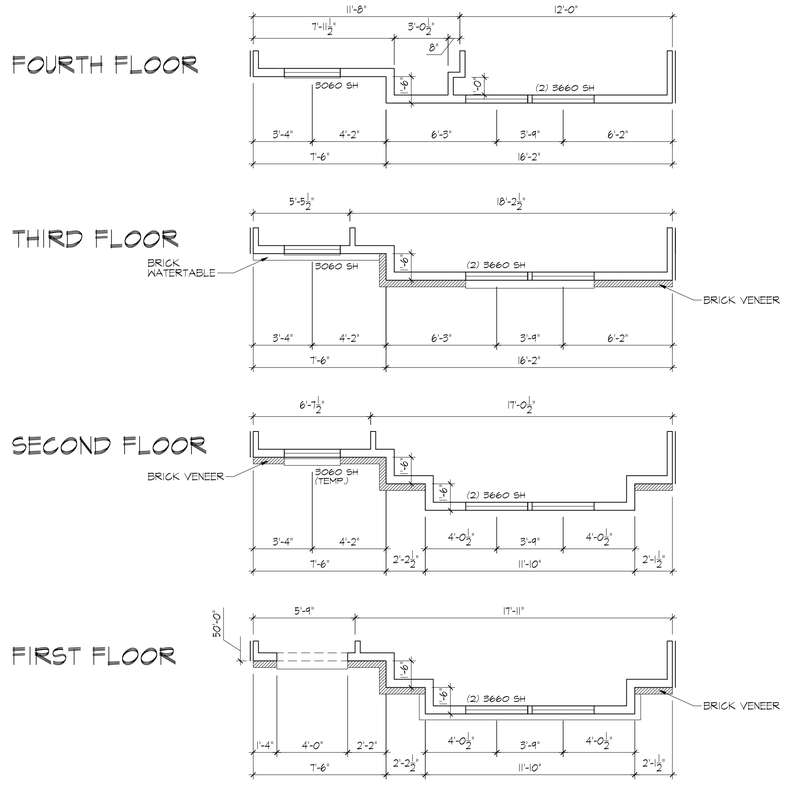
ELEVATION "B1"

43% BRICK VENEER

SCALE : 1/4" = 1'-0"



DOOR ELEVATION (TYP.)



PINNACLE DESIGN & CONSULTING INC.
ARCHITECTURE * PLANNING * CONSULTING * BROCHURES * MARKET ANALYSIS
11150 FAIRFAX BLVD. SUITE 402
FAIRFAX, VA 22030
(703) 218-3400
www.pdc-home.com

SEAL:

MODEL: 1543 TESSA & 1544 JULIANNE

ORIGINAL ISSUE DATE: 09/14/2023

REVISION(S):

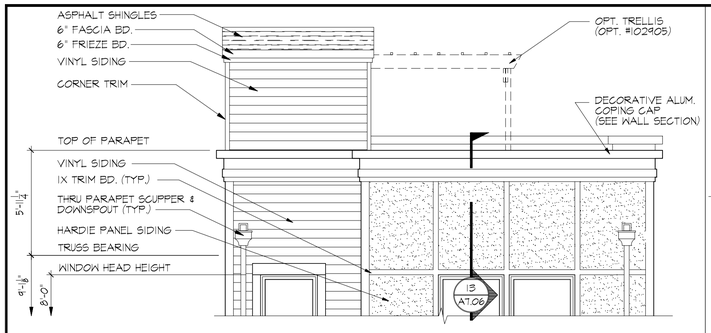
SCALE: AS NOTED

DRAWN BY: DEW
CHECKED BY: DEW

DRAWING DESCRIPTION: FRONT ELEVATION B1

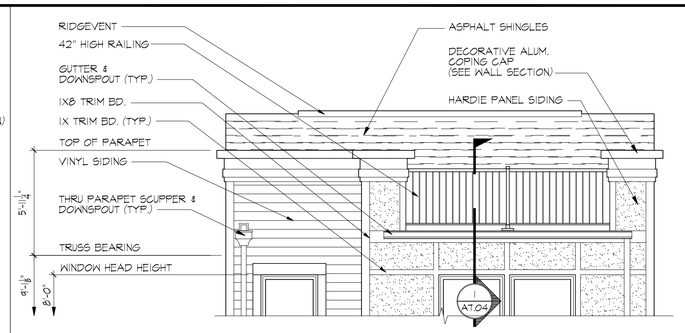
SHEET # A4.30
PARK PLACE

© THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF PINNACLE DESIGN AND CONSULTING INC., IT SHALL NOT BE MODIFIED OR REPRODUCED IN ANY MANNER WITHOUT THE KRITTEN PERMISSION OF PINNACLE DESIGN AND CONSULTING INC.



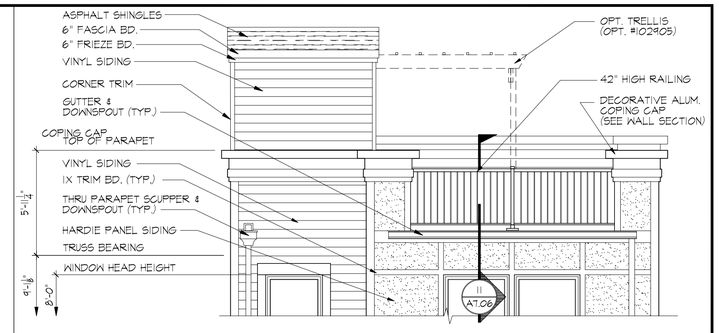
PARTIAL ELEVATION "A1" @ OPT. TERRACE

SCALE : 1/4" = 1'-0" (OPT. #8160)



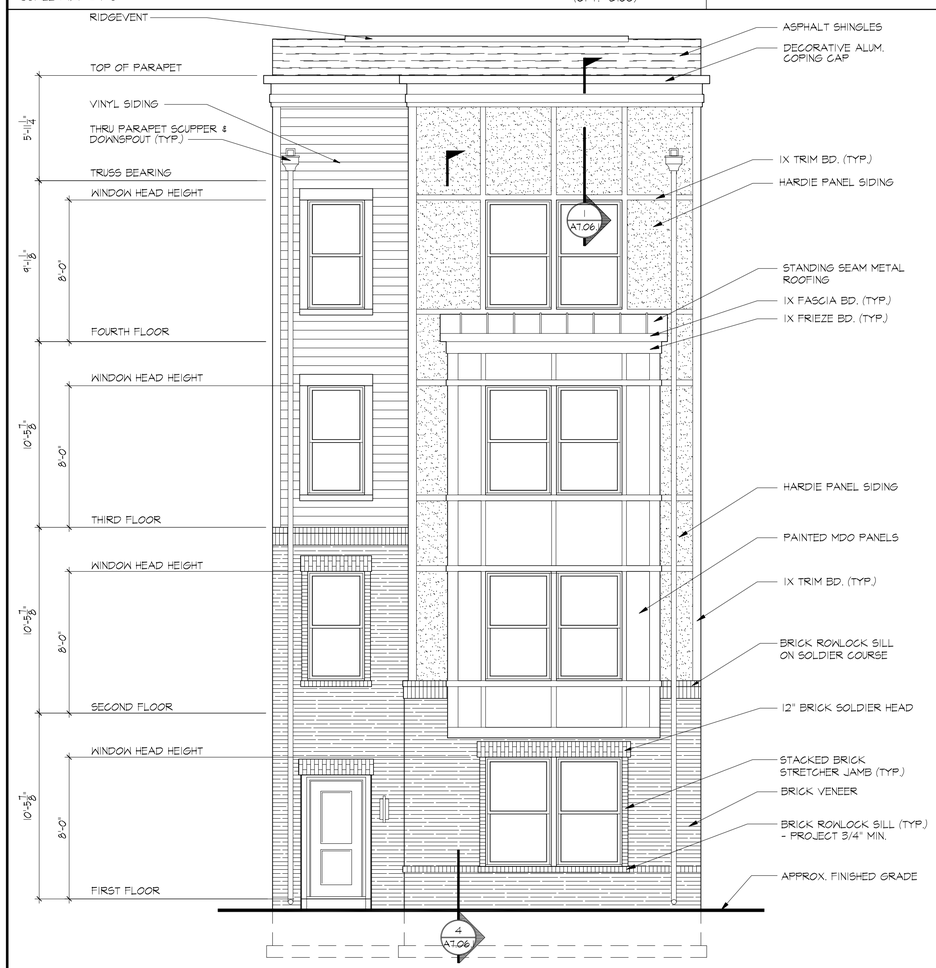
PARTIAL ELEVATION "A1" W/ RAILING

SCALE : 1/4" = 1'-0" (OPT. #103145)



PARTIAL ELEVATION "A1" @ OPT. TERRACE W/ RAILING

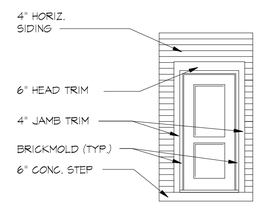
SCALE : 1/4" = 1'-0" (OPT. #8160 & #103145)



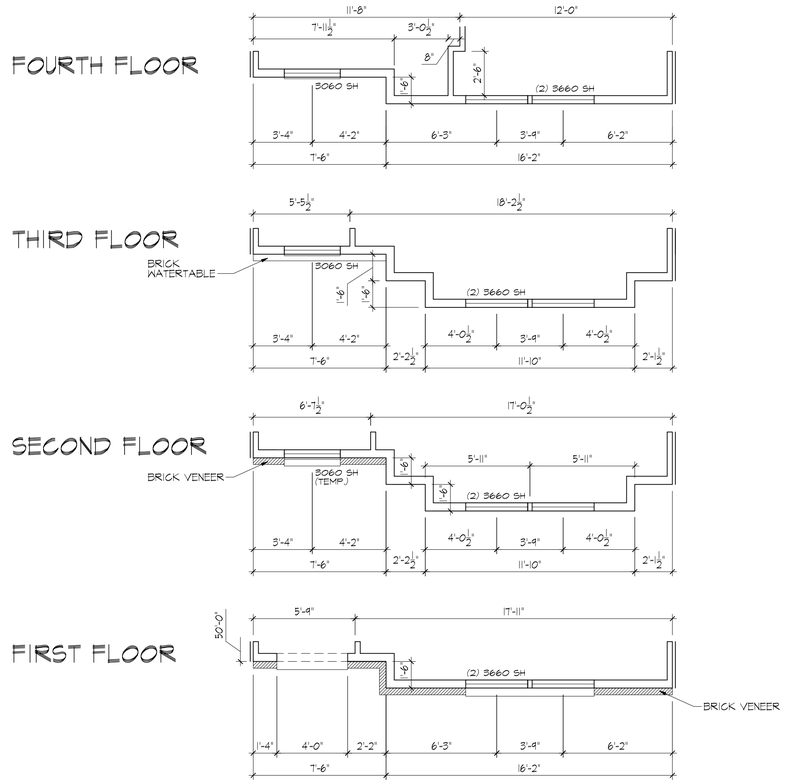
ELEVATION "A1"

SCALE : 1/4" = 1'-0"

39% BRICK VENEER



DOOR ELEVATION (TYP.)



PINNACLE DESIGN & CONSULTING INC.
ARCHITECTURE * PLANNING * CONSULTING * BROCHURES * MARKET ANALYSIS
11150 FAIRFAX BLVD.
SUITE 402
FAIRFAX, VA 22030
(703) 218-3400
www.pdc-home.com

SEAL:

MODEL: 1543 TESSA & 1544 JULIANNE

ORIGINAL ISSUE DATE: 09/14/2023

REVISION(S):

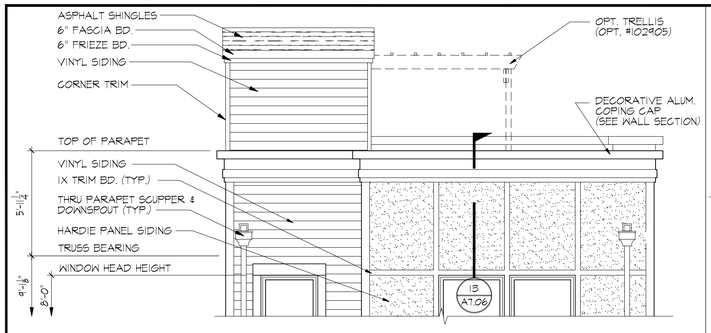
SCALE: AS NOTED

DRAWN BY: DEW
CHECKED BY: DEW

DRAWING DESCRIPTION: FRONT ELEVATION A1

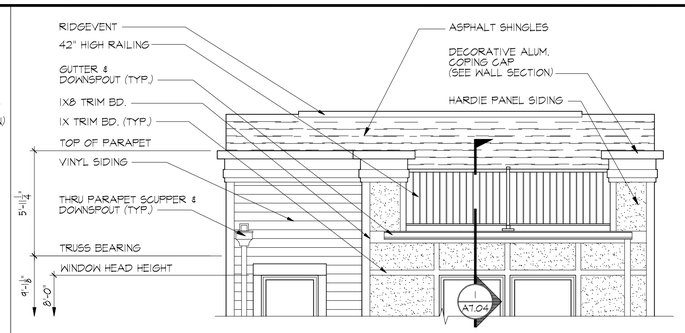
SHEET # A4.29
PARK PLACE

© THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF PINNACLE DESIGN AND CONSULTING INC. IT SHALL NOT BE MODIFIED OR REPRODUCED IN ANY MANNER WITHOUT THE KRITTEN PERMISSION OF PINNACLE DESIGN AND CONSULTING INC.



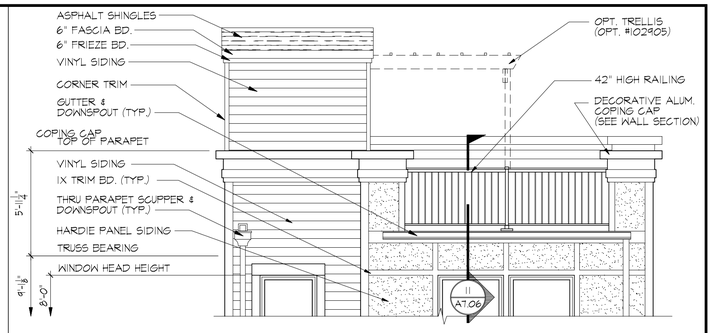
PARTIAL ELEVATION "C1" @ OPT. TERRACE

SCALE : 1/4" = 1'-0" (OPT. #8160)



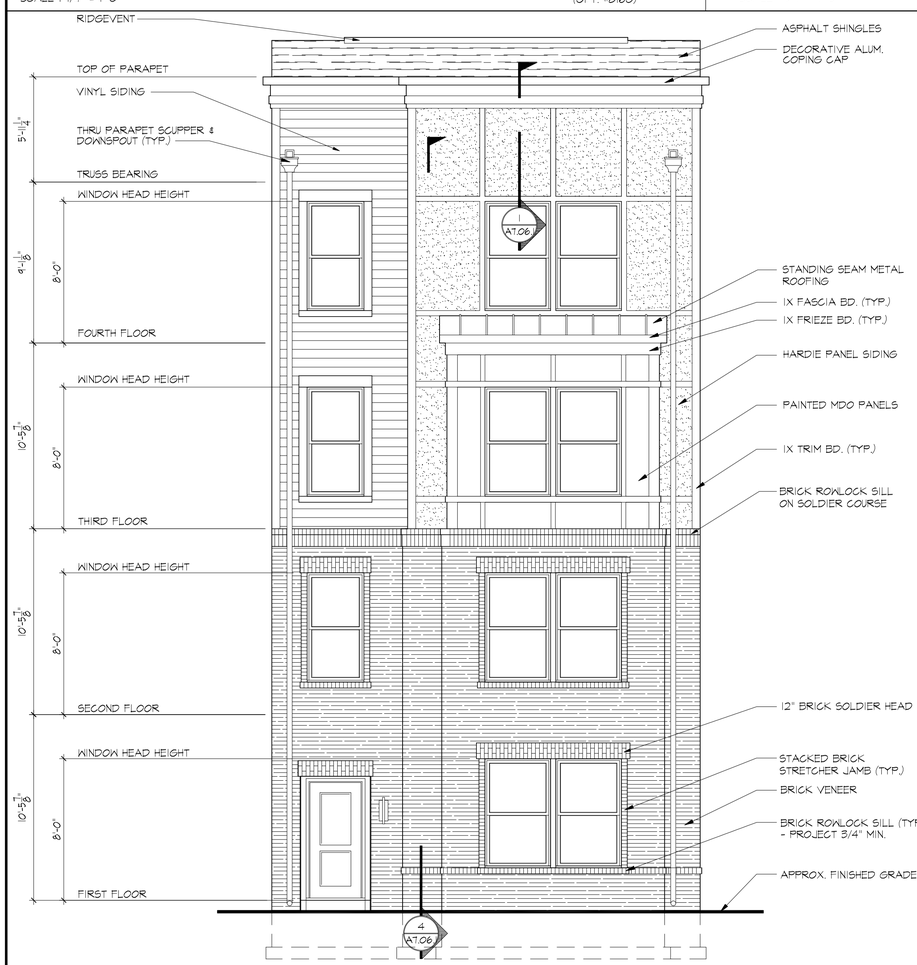
PARTIAL ELEVATION "C1" W/ RAILING

SCALE : 1/4" = 1'-0" (OPT. #103145)



PARTIAL ELEVATION "C1" @ OPT. TERRACE W/ RAILING

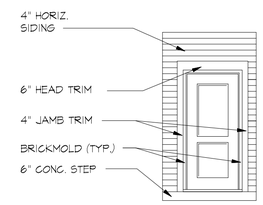
SCALE : 1/4" = 1'-0" (OPT. #8160 & #103145)



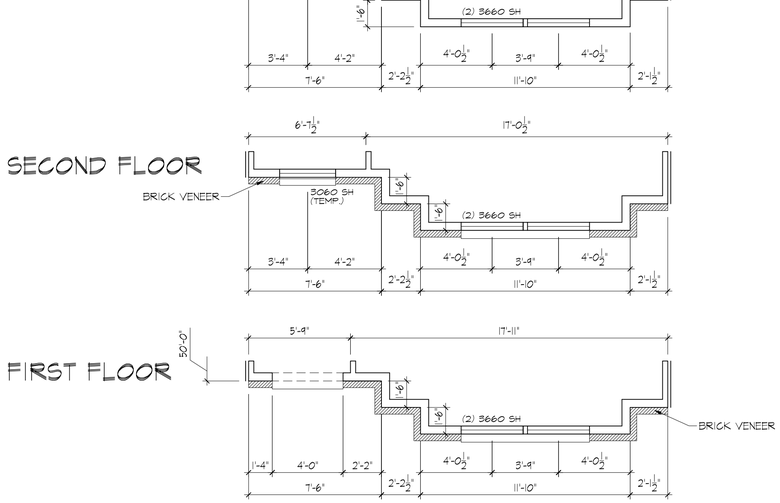
ELEVATION "C1"

SCALE : 1/4" = 1'-0"

46% BRICK VENEER



DOOR ELEVATION (TYP.)



PINNACLE DESIGN & CONSULTING INC.
ARCHITECTURE * PLANNING * CONSULTING * BROCHURES * MARKET ANALYSIS
11150 FAIRFAX BLVD.
SUITE 402
FAIRFAX, VA 22030
(703) 218-3400
www.pdc-home.com

SEAL:

MODEL: 1543 TESSA & 1544 JULIANNE

ORIGINAL ISSUE DATE: 09/14/2023

REVISION(S):

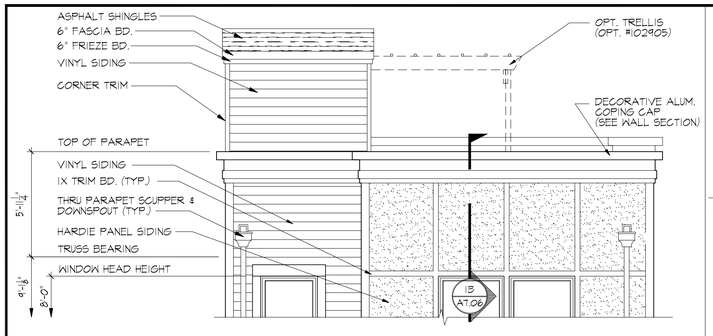
SCALE: AS NOTED

DRAWN BY: DEW
CHECKED BY: DEW

DRAWING DESCRIPTION: FRONT ELEVATION C1

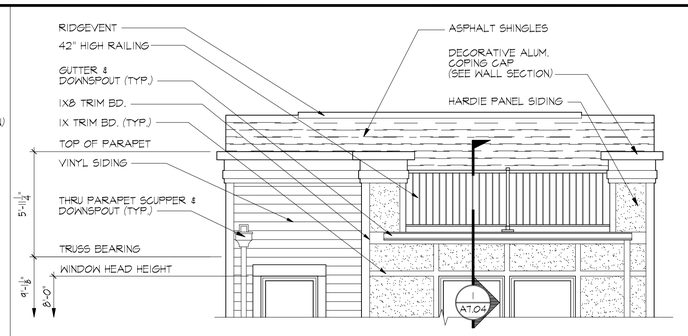
SHEET #
A4.31
PARK PLACE

© THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF PINNACLE DESIGN AND CONSULTING INC. IT SHALL NOT BE MODIFIED OR REPRODUCED IN ANY MANNER WITHOUT THE KRITTEN PERMISSION OF PINNACLE DESIGN AND CONSULTING INC.



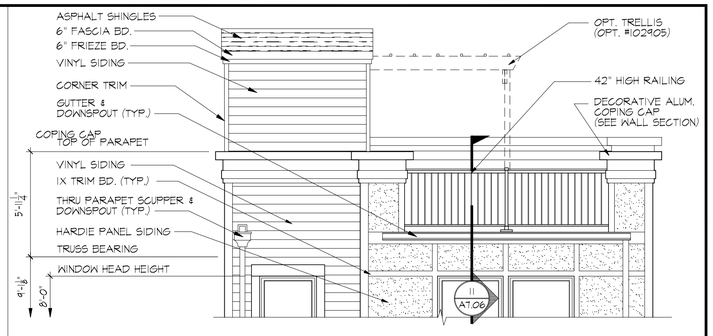
PARTIAL ELEVATION "B1" @ OPT. TERRACE

SCALE : 1/4" = 1'-0" (OPT. #8160)



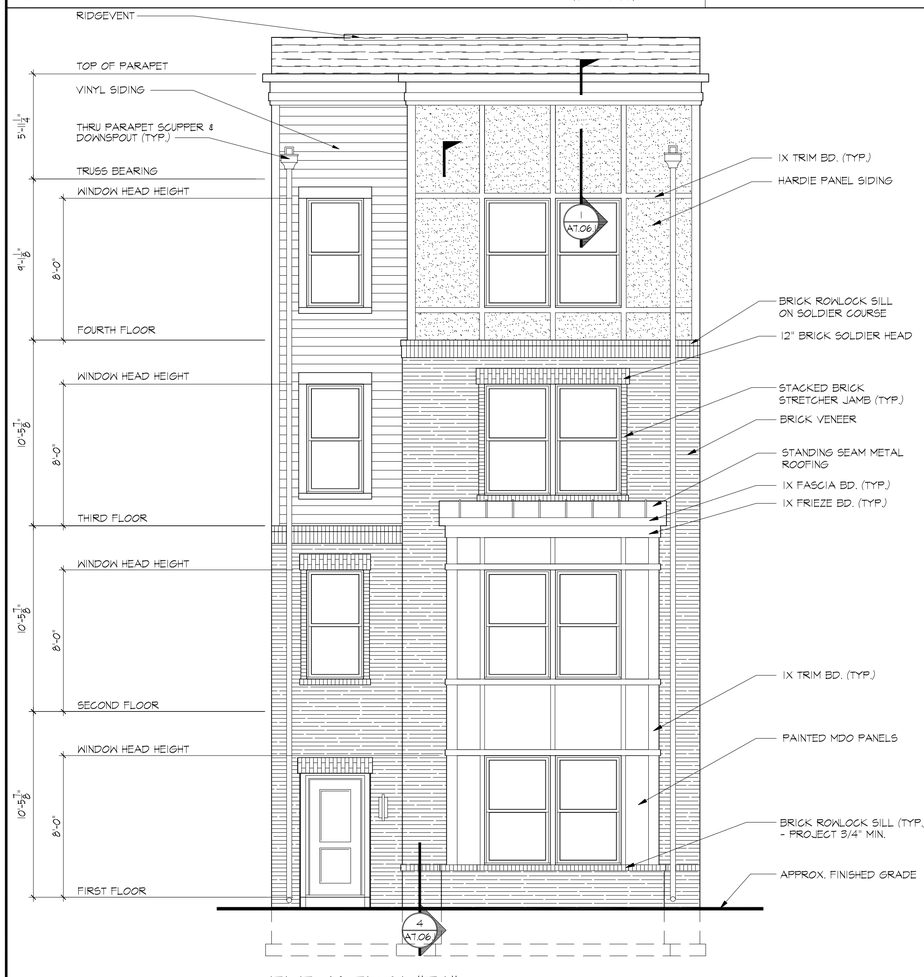
PARTIAL ELEVATION "B1" W/ RAILING

SCALE : 1/4" = 1'-0" (OPT. #103145)



PARTIAL ELEVATION "B1" @ OPT. TERRACE W/ RAILING

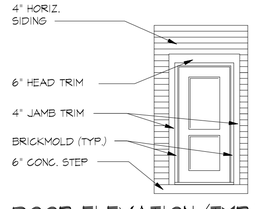
SCALE : 1/4" = 1'-0" (OPT. #8160 & #103145)



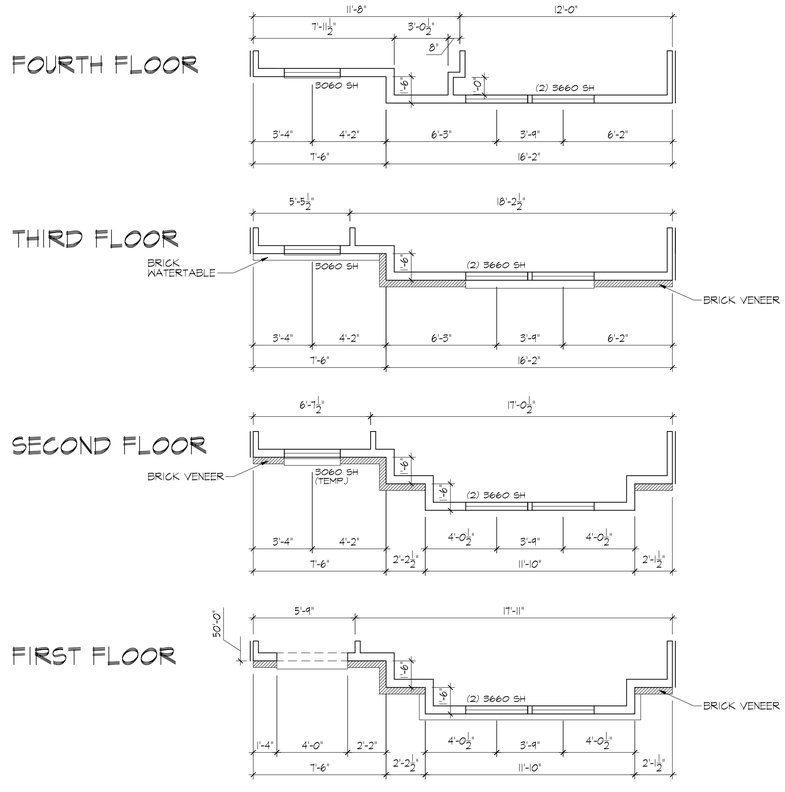
ELEVATION "B1"

43% BRICK VENEER

SCALE : 1/4" = 1'-0"



DOOR ELEVATION (TYP.)



PINNACLE DESIGN & CONSULTING INC.
ARCHITECTURE * PLANNING * CONSULTING * BROCHURES * MARKET ANALYSIS
11150 FAIRFAX BLVD. SUITE 402
FAIRFAX, VA 22030
(703) 218-3400
www.pdc-home.com

SEAL:

MODEL: 1543 TESSA & 1544 JULIANNE

ORIGINAL ISSUE DATE: 09/14/2023

REVISION(S):

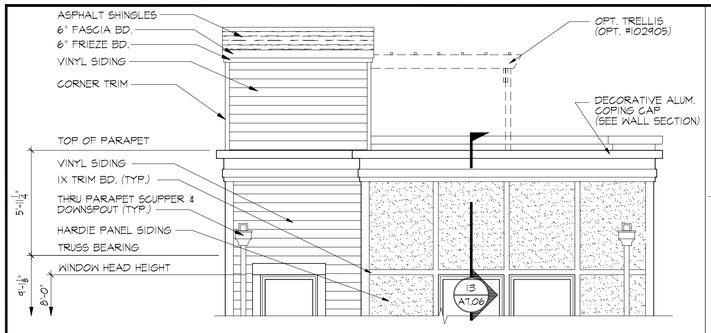
SCALE: AS NOTED

DRAWN BY: DEW
CHECKED BY: DEW

DRAWING DESCRIPTION: FRONT ELEVATION B1

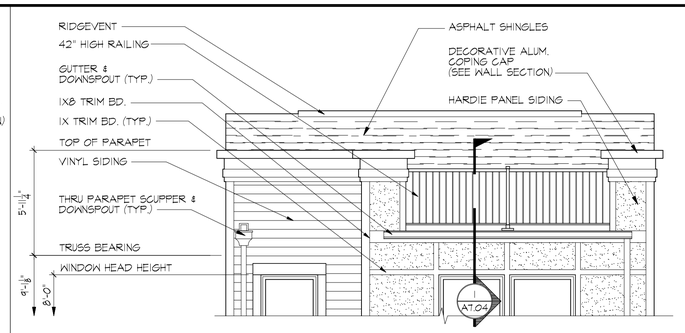
SHEET # A4.30
PARK PLACE

© THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF PINNACLE DESIGN AND CONSULTING INC., IT SHALL NOT BE MODIFIED OR REPRODUCED IN ANY MANNER WITHOUT THE KRITTEN PERMISSION OF PINNACLE DESIGN AND CONSULTING INC.



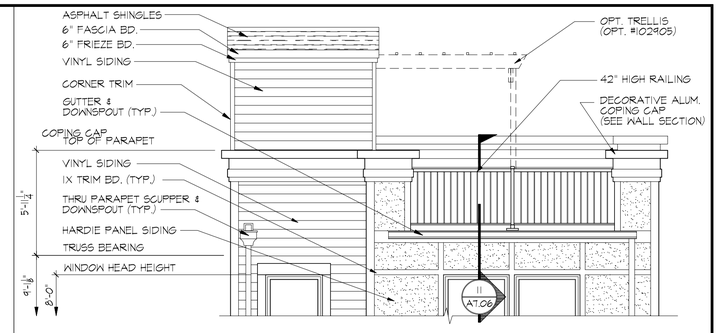
PARTIAL ELEVATION "A1" @ OPT. TERRACE

SCALE : 1/4" = 1'-0" (OPT. #8160)



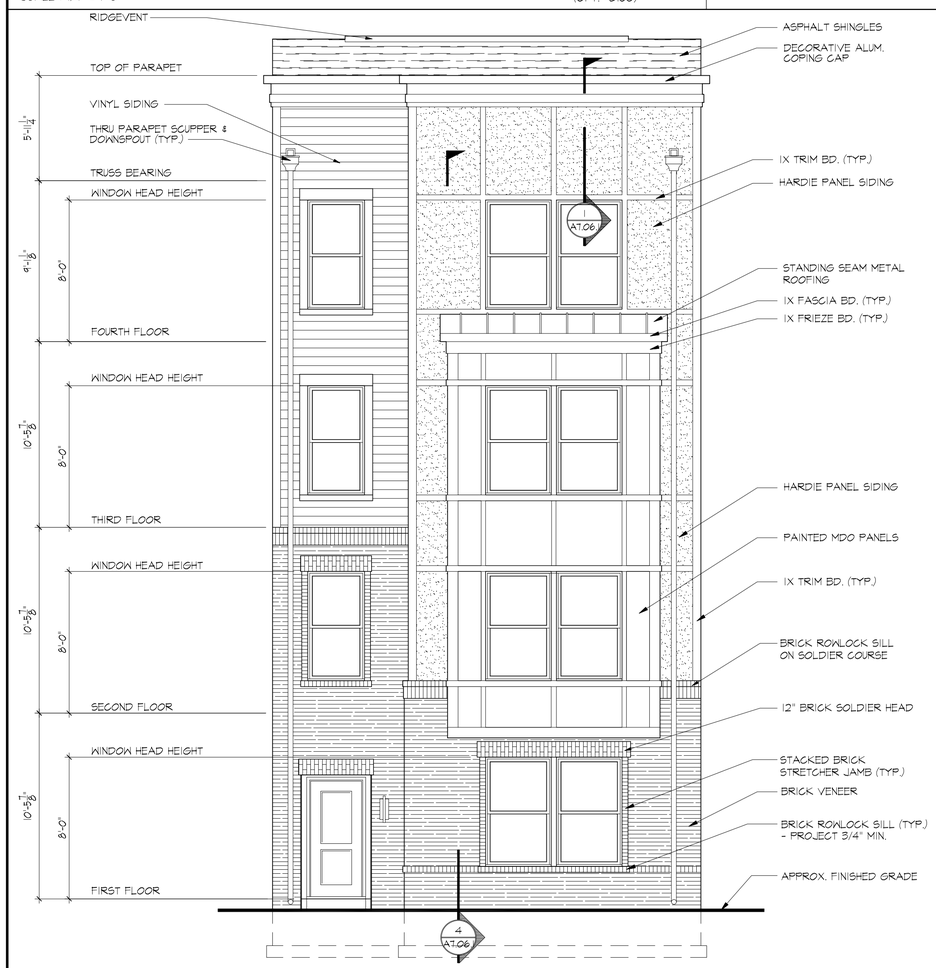
PARTIAL ELEVATION "A1" W/ RAILING

SCALE : 1/4" = 1'-0" (OPT. #103145)



PARTIAL ELEVATION "A1" @ OPT. TERRACE W/ RAILING

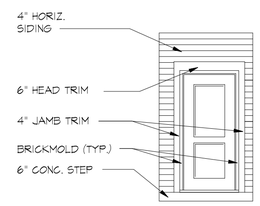
SCALE : 1/4" = 1'-0" (OPT. #8160 & #103145)



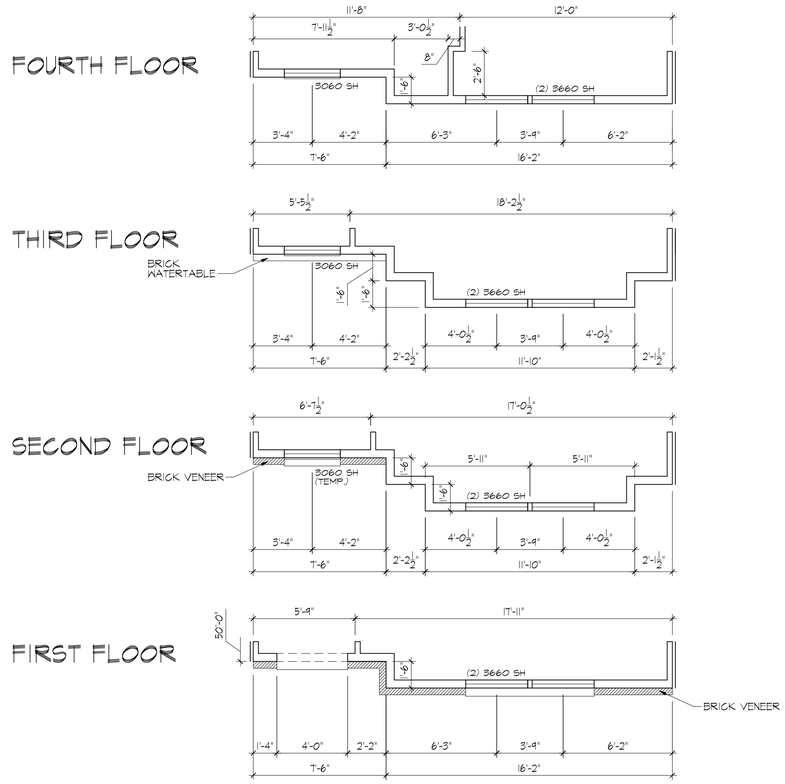
ELEVATION "A1"

SCALE : 1/4" = 1'-0"

39% BRICK VENEER



DOOR ELEVATION (TYP.)



PINNACLE DESIGN & CONSULTING INC.
ARCHITECTURE * PLANNING * CONSULTING * BROCHURES * MARKET ANALYSIS
11150 FAIRFAX BLVD.
SUITE 402
FAIRFAX, VA 22030
(703) 218-3400
www.pdc-home.com

SEAL:

MODEL: 1543 TESSA & 1544 JULIANNE

ORIGINAL ISSUE DATE: 09/14/2023

REVISION(S):

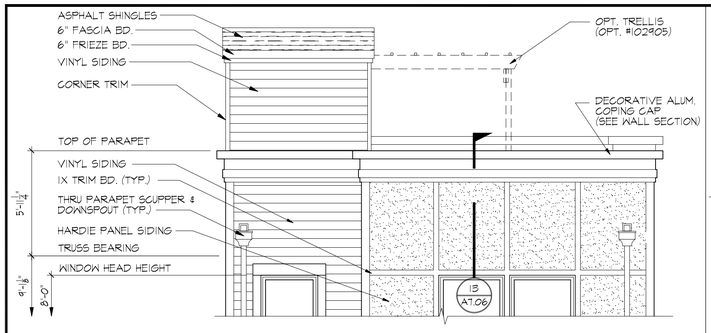
SCALE: AS NOTED

DRAWN BY: DEW
CHECKED BY: DEW

DRAWING DESCRIPTION: FRONT ELEVATION A1

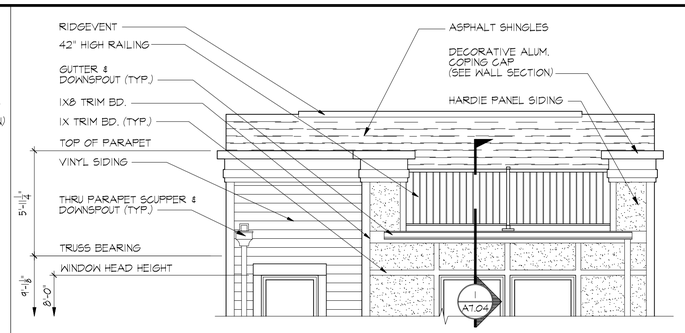
SHEET # A4.29
PARK PLACE

© THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF PINNACLE DESIGN AND CONSULTING INC. IT SHALL NOT BE MODIFIED OR REPRODUCED IN ANY MANNER WITHOUT THE KRITTEN PERMISSION OF PINNACLE DESIGN AND CONSULTING INC.



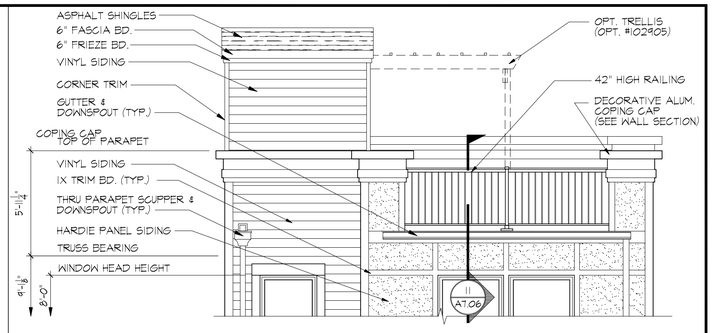
PARTIAL ELEVATION "C1" @ OPT. TERRACE

SCALE : 1/4" = 1'-0" (OPT. #8160)



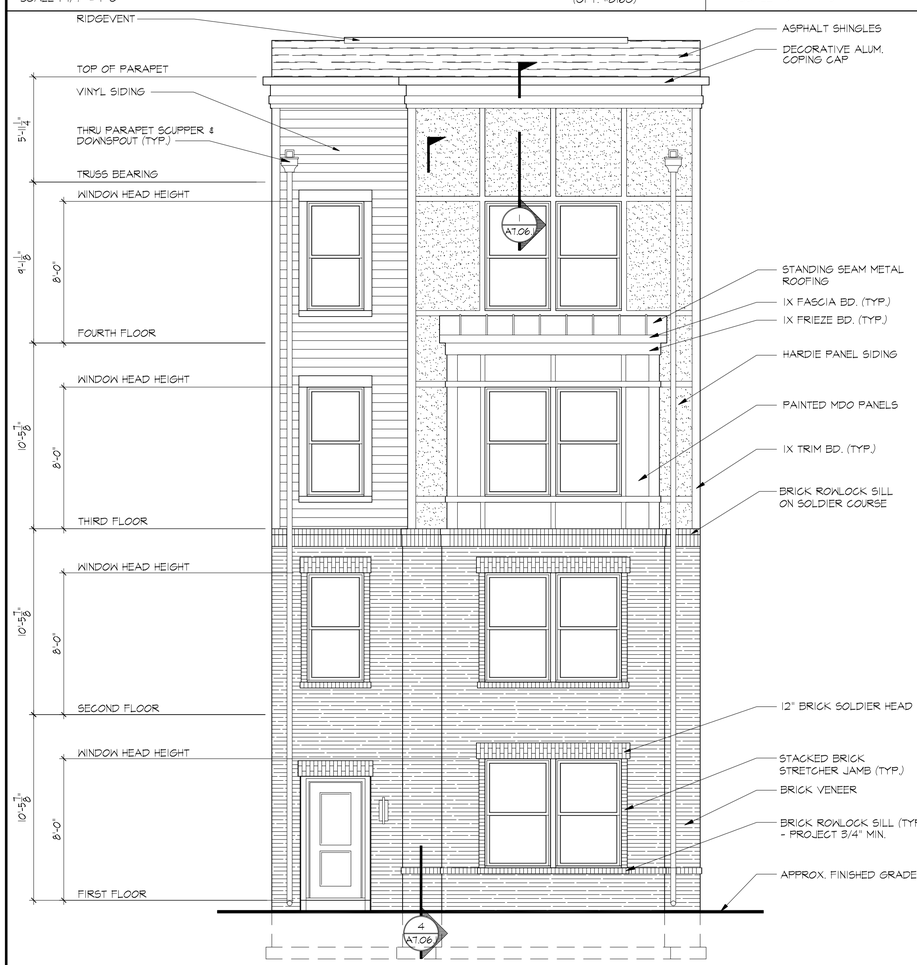
PARTIAL ELEVATION "C1" W/ RAILING

SCALE : 1/4" = 1'-0" (OPT. #103145)



PARTIAL ELEVATION "C1" @ OPT. TERRACE W/ RAILING

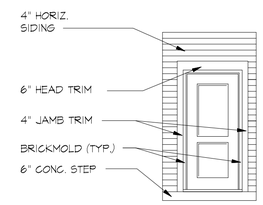
SCALE : 1/4" = 1'-0" (OPT. #8160 & #103145)



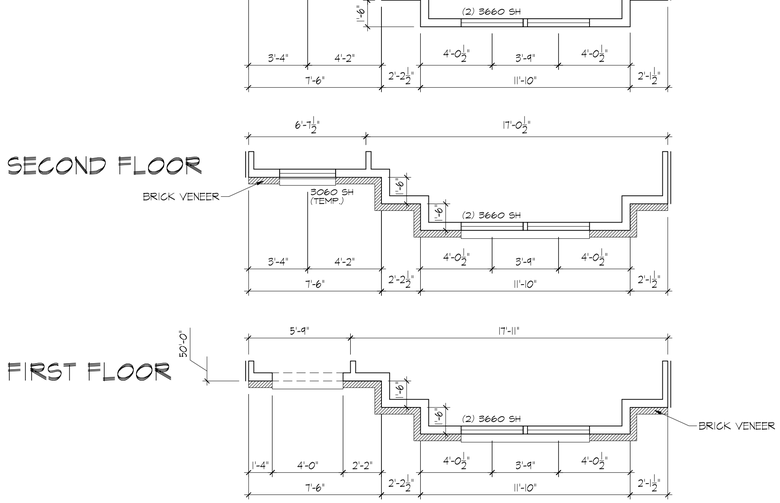
ELEVATION "C1"

SCALE : 1/4" = 1'-0"

46% BRICK VENEER



DOOR ELEVATION (TYP.)



PINNACLE DESIGN & CONSULTING INC.
ARCHITECTURE * PLANNING * CONSULTING * BROCHURES * MARKET ANALYSIS
11150 FAIRFAX BLVD.
SUITE 402
FAIRFAX, VA 22030
(703) 218-3400
www.pdc-home.com

SEAL:

MODEL: 1543 TESSA & 1544 JULIANNE

ORIGINAL ISSUE DATE: 09/14/2023

REVISION(S):

SCALE: AS NOTED

DRAWN BY: DEW
CHECKED BY: DEW

DRAWING DESCRIPTION: FRONT ELEVATION C1

SHEET #
A4.31
PARK PLACE

© THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF PINNACLE DESIGN AND CONSULTING INC. IT SHALL NOT BE MODIFIED OR REPRODUCED IN ANY MANNER WITHOUT THE KRITTEN PERMISSION OF PINNACLE DESIGN AND CONSULTING INC.

Lot 33 - Jenkins

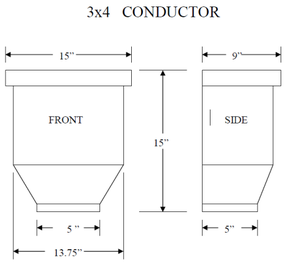


1 FRONT ELEVATION "X"
SCALE 1/4"=1'-0"



Hardie® Plank

Thickness 5/16 in
Length 12 ft planks
Select Cedarmill® & Smooth
Width 8.25 in
Exposure 7 in



SCHEME 2

BRICK COLOR



OLD MILL

HORIZONTAL SIDING



TIMBER BARK

PANEL COLOR



COBBLESTONE

BAY COLOR



EVENING BLUE

FRONT DOOR COLOR

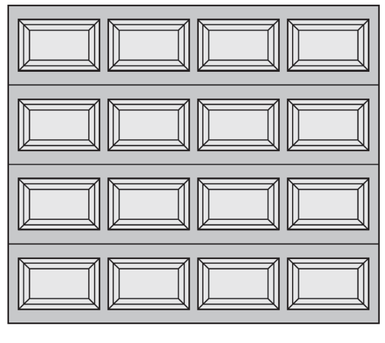
Mckinney Stone 475

Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



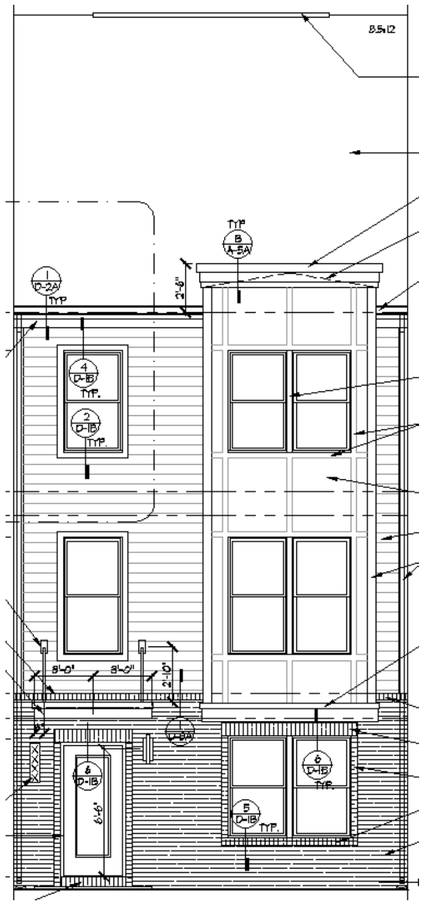
DARK BRONZE

BRICK MORTAR COLOR

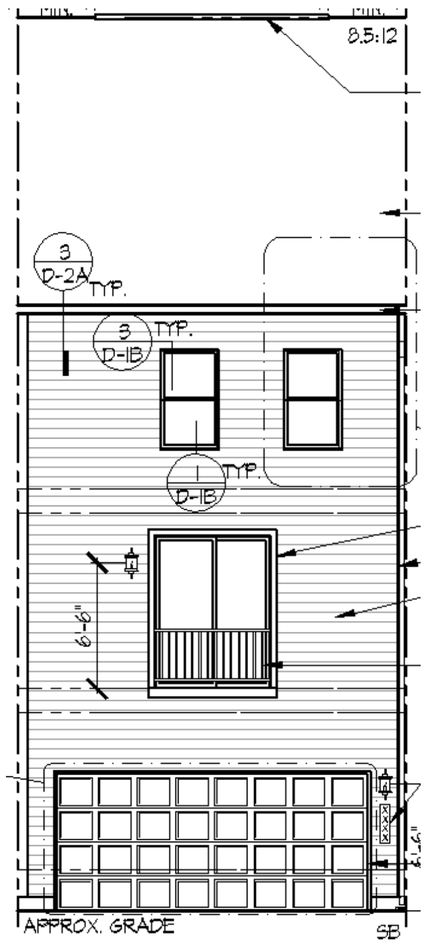


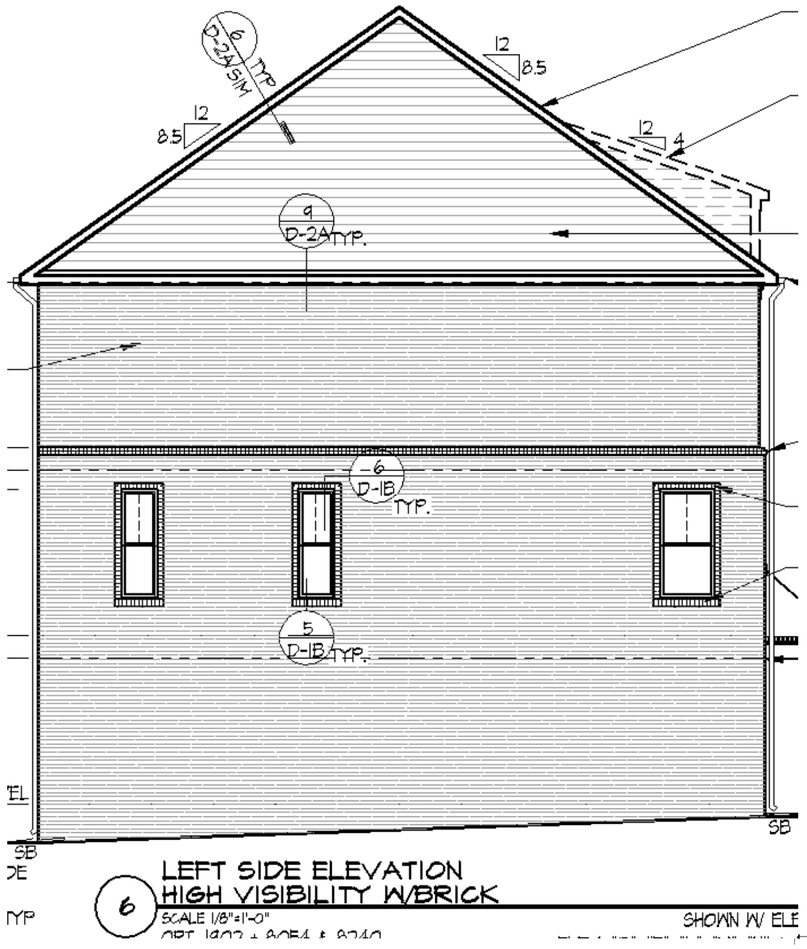
ROANOKE GRAY

Lot 34 - Jenkins



1 FRONT ELEVATION "W"
SCALE 1/4"=1'-0"





6 LEFT SIDE ELEVATION
HIGH VISIBILITY W/BRICK
SCALE 1/8"=1'-0"
SHOWN W/ ELE

LANDMARK®

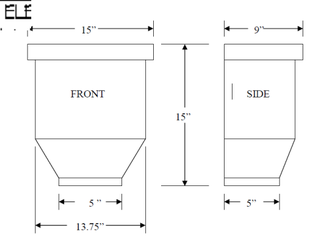
Hardie® Plank

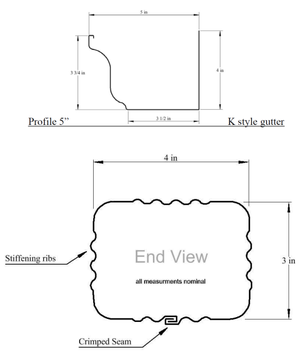
Thickness	5/16 in
Length	12 ft planks

Select Cedarmill® & Smooth

Width	8.25 in
Exposure	7 in

3x4 CONDUCTOR



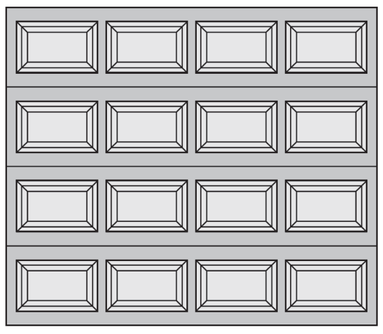


Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

SCHEME 4

BRICK COLOR



BLUE RIDGE REGENT

HORIZONTAL SIDING



GRAY SLATE

PANEL COLOR



PEARL GRAY

BAY COLOR



LIGHT MIST

FRONT DOOR COLOR



Black 200

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



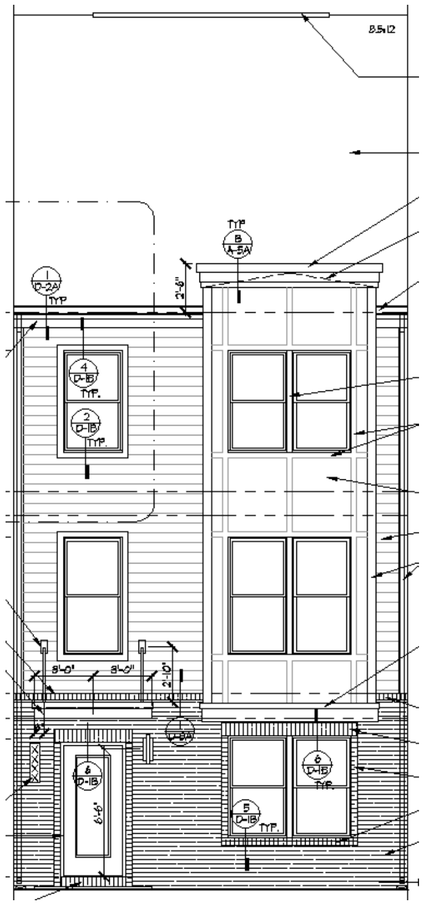
DARK BRONZE

BRICK MORTAR COLOR

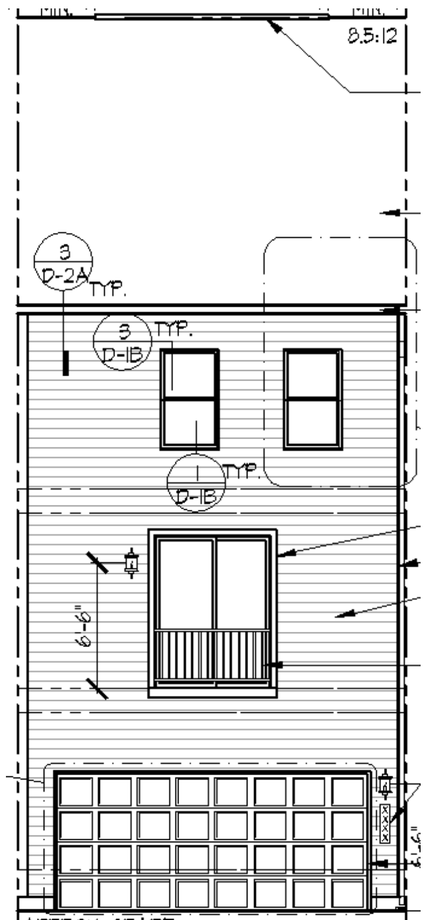


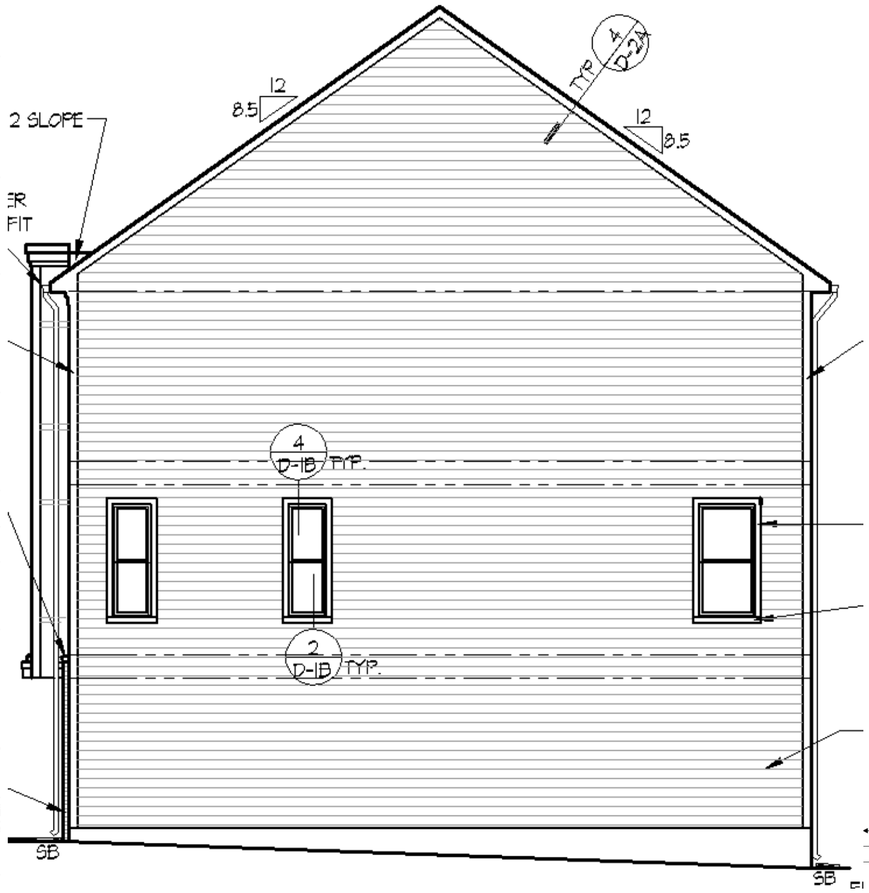
ROANOKE GRAY

Lot 35 - Jenkins



1 FRONT ELEVATION "W"
SCALE 1/4"=1'-0"





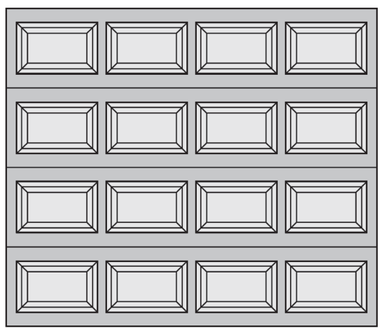


Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



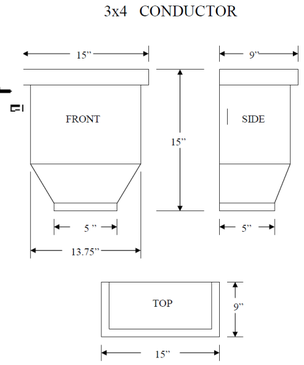
SP • SHORT PANEL

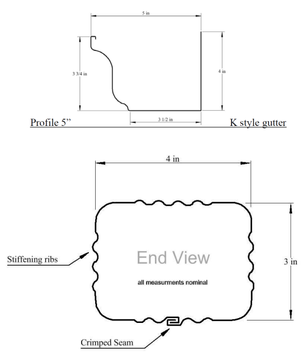




Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress





SCHEME 4

BRICK COLOR



BLUE RIDGE REGENT

HORIZONTAL SIDING



GRAY SLATE

PANEL COLOR



PEARL GRAY

BAY COLOR



LIGHT MIST

FRONT DOOR COLOR



Black 200

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



DARK BRONZE

BRICK MORTAR COLOR



ROANOKE GRAY

Lot 36 - Jenkins



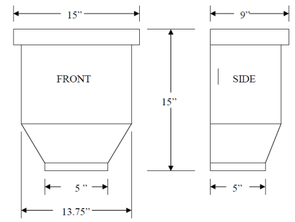
1 FRONT ELEVATION "T"
SCALE 1/4"=1'-0"



Hardie® Plank

Thickness	5/16 in
Length	12 ft planks
Select Cedarmill® & Smooth	
Width	8.25 in
Exposure	7 in

3x4 CONDUCTOR



SCHEME 4

BRICK COLOR



BLUE RIDGE REGENT

HORIZONTAL SIDING



GRAY SLATE

PANEL COLOR



PEARL GRAY

BAY COLOR



LIGHT MIST

FRONT DOOR COLOR



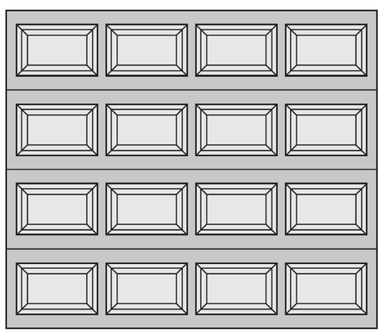
Black 200

Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



DARK BRONZE

BRICK MORTAR COLOR



ROANOKE GRAY

Lot 37 - Jenkins



1 FRONT ELEVATION "X"
SCALE 1/4"=1'-0"



SCHEME 2

BRICK COLOR



OLD MILL

Hardie® Plank

Thickness 5/16 in
Length 12 ft planks
Select Cedarmill® & Smooth
Width 8.25 in
Exposure 7 in

HORIZONTAL SIDING



TIMBER BARK

PANEL COLOR



COBBLESTONE

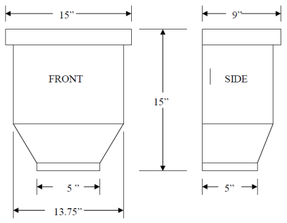
BAY COLOR

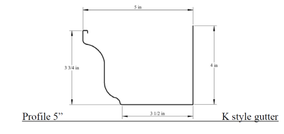


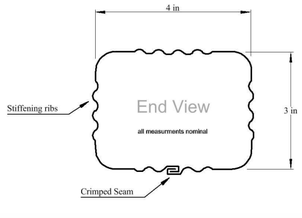
EVENING BLUE

FRONT DOOR COLOR

Mckinney Stone 475





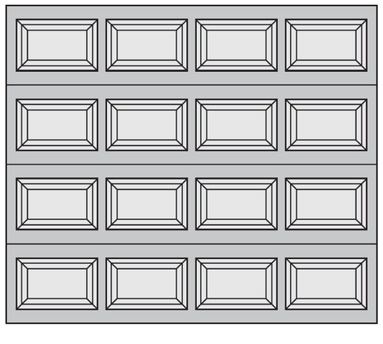


Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



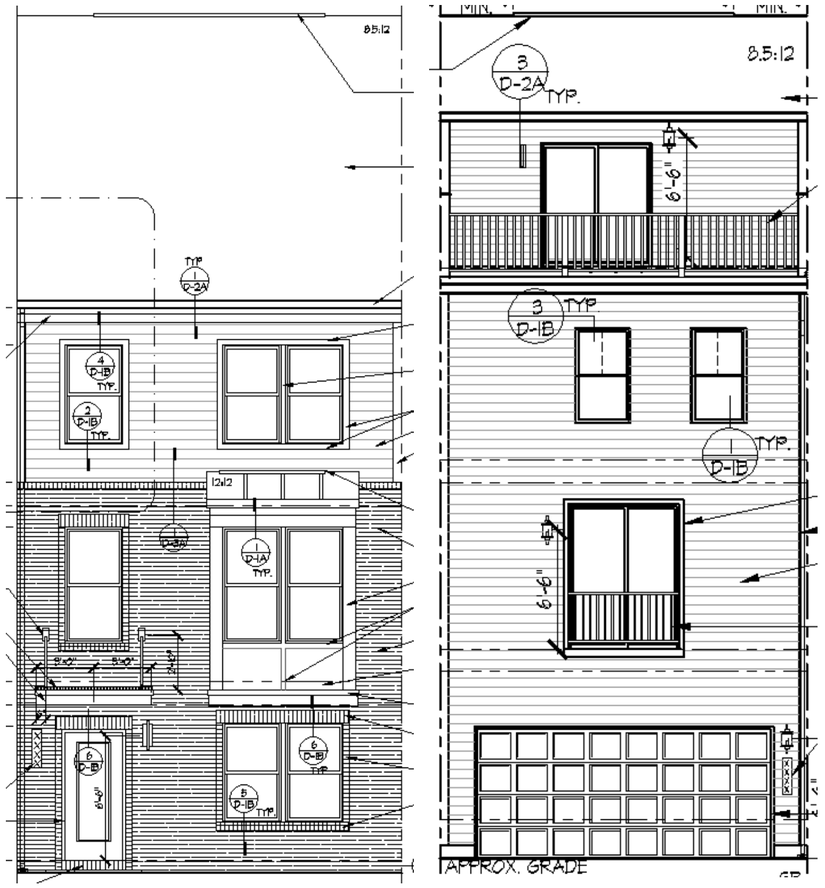
DARK BRONZE

BRICK MORTAR COLOR



ROANOKE GRAY

Lot 38 - Jenkins



1 FRONT ELEVATION "U"
SCALE 1/4"=1'-0"



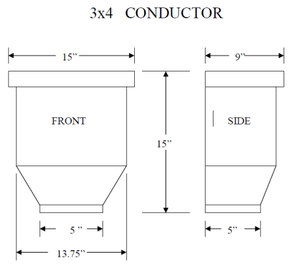
Hardie® Plank

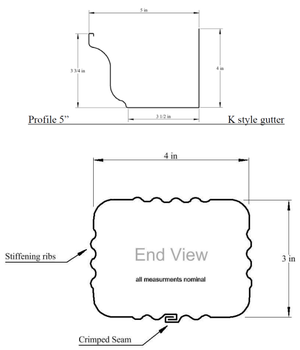
Thickness 5/16 in
Length 12 ft planks

Select Cedarmill® & Smooth

Width 8.25 in

Exposure 7 in





SCHEME 1

BRICK COLOR



COLONY POINTE

HORIZONTAL SIDING



EVENING BLUE

PANEL COLOR



COBBLESTONE

BAY COLOR



COBBLESTONE

FRONT DOOR COLOR



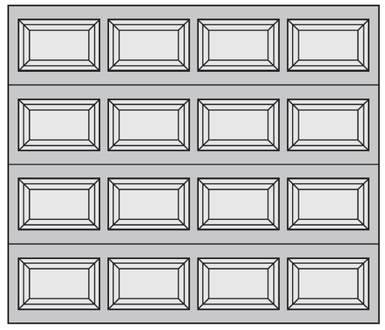
Williamsburg 227

Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



DARK BRONZE

BRICK MORTAR COLOR



ROANOKE GRAY

Lot 39 - Jenkins



1 FRONT ELEVATION "T"
SCALE 1/4"=1'-0"

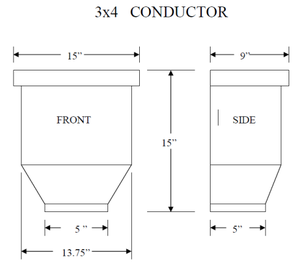


Hardie® Plank

Thickness	5/16 in
Length	12 ft planks

Select Cedarmill® & Smooth

Width	8.25 in
Exposure	7 in



SCHEME 7

BRICK COLOR



SPALDING TUDOR

HORIZONTAL SIDING



COBBLESTONE

PANEL COLOR



IRON GRAY

BAY COLOR



IRON GRAY

FRONT DOOR COLOR



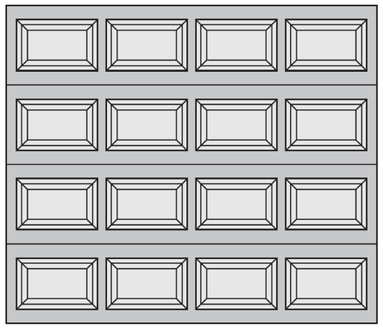
Williamsburg 227

Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



DARK BRONZE

BRICK MORTAR COLOR



ROANOKE GRAY

Lot 40 - Jenkins



1 FRONT ELEVATION "W"
SCALE 1/4"=1'-0"



SCHEME 7

BRICK COLOR



SPALDING TUDOR

Hardie® Plank

Thickness	5/16 in
Length	12 ft planks
Select Cedarmill® & Smooth	
Width	8.25 in
Exposure	7 in

HORIZONTAL SIDING



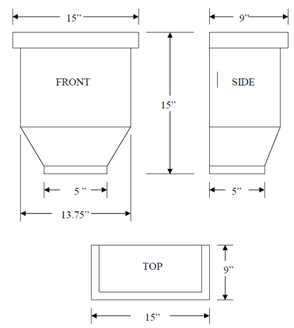
COBBLESTONE

PANEL COLOR



IRON GRAY

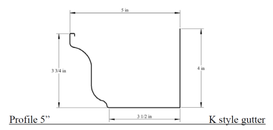
3x4 CONDUCTOR



BAY COLOR



IRON GRAY



FRONT DOOR COLOR



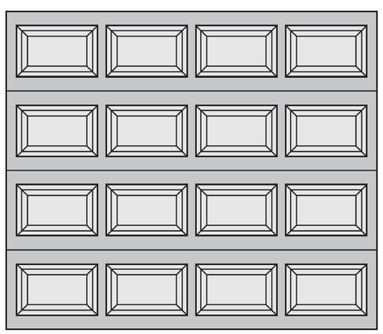
Williamsburg
227



Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid

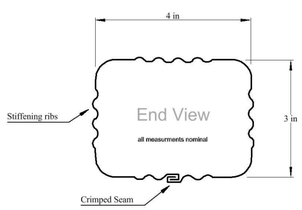
SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress



FOR ALL BUILDING SCHEMES

WINDOW COLOR	RAILING COLOR	CORNICE COLOR	GUTTER & DOWNSPOUT COLOR	CANOPY COLOR	BRICK MORTAR COLOR
					
DARK BRONZE	DARK BRONZE	MUSKET BROWN	DARK BRONZE	DARK BRONZE	ROANOKE GRAY

Lot 40 - Jenkins



1 FRONT ELEVATION "W"
SCALE 1/4"=1'-0"



SCHEME 7

BRICK COLOR



SPALDING TUDOR

Hardie® Plank

Thickness	5/16 in
Length	12 ft planks
Select Cedarmill® & Smooth	
Width	8.25 in
Exposure	7 in

HORIZONTAL SIDING



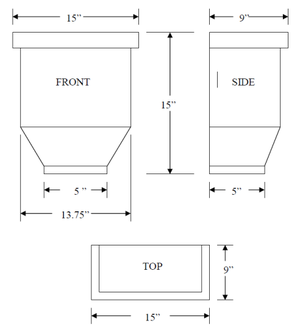
COBBLESTONE

PANEL COLOR



IRON GRAY

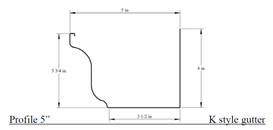
3x4 CONDUCTOR



BAY COLOR



IRON GRAY



FRONT DOOR COLOR



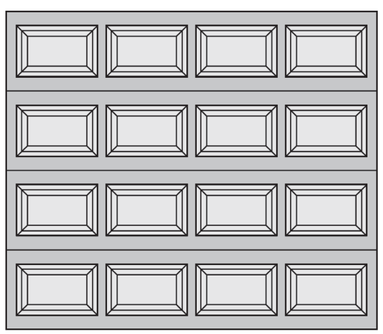
Williamsburg
227



Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid

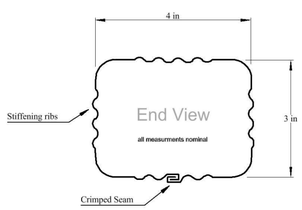
SP • SHORT PANEL





Features

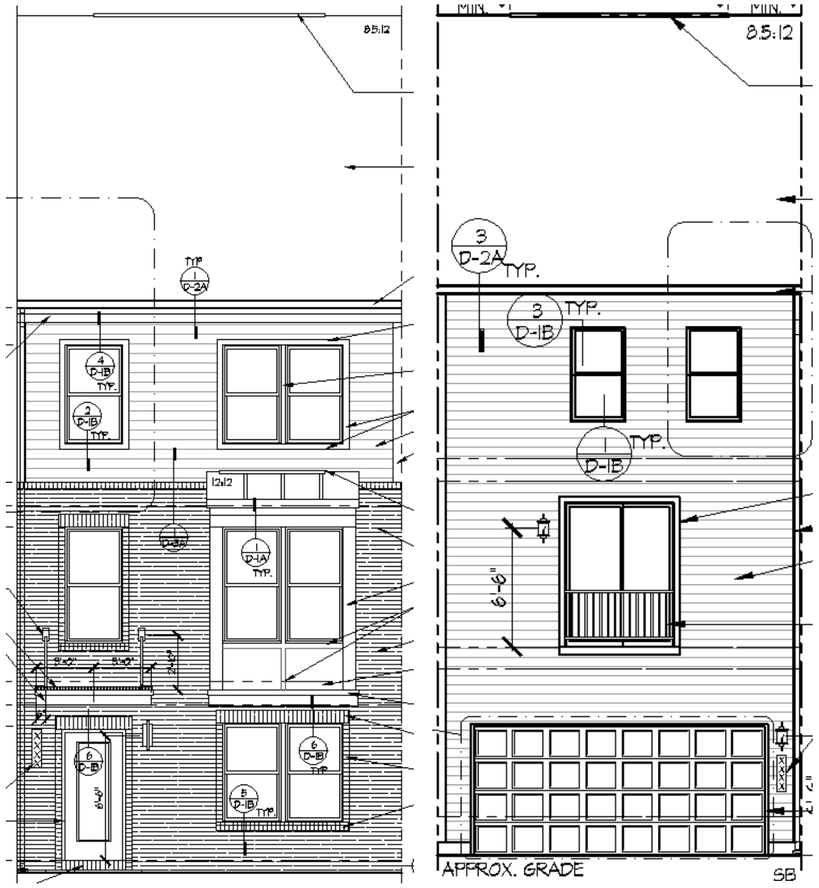
- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress



FOR ALL BUILDING SCHEMES

WINDOW COLOR	RAILING COLOR	CORNICE COLOR	GUTTER & DOWNSPOUT COLOR	CANOPY COLOR	BRICK MORTAR COLOR
					
DARK BRONZE	DARK BRONZE	MUSKET BROWN	DARK BRONZE	DARK BRONZE	ROANOKE GRAY

Lot 41 - Jenkins



1 FRONT ELEVATION "U"
SCALE 1/4"=1'-0"



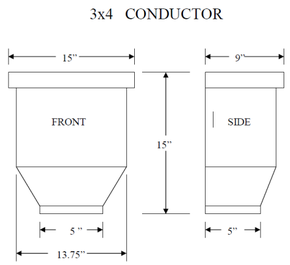
Hardie® Plank

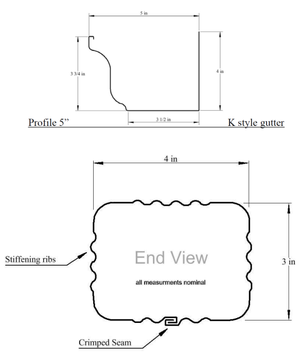
Thickness 5/16 in
Length 12 ft planks

Select Cedarmill® & Smooth

Width 8.25 in

Exposure 7 in



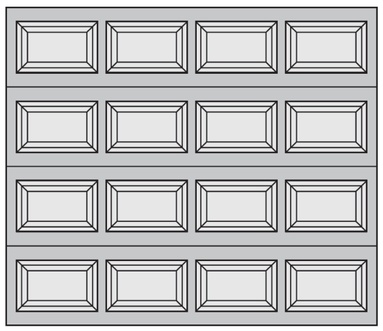


Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



SP • SHORT PANEL





Features

- Frame Depth- 3 1/4"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

SCHEME 4

BRICK COLOR



BLUE RIDGE REGENT

HORIZONTAL SIDING



GRAY SLATE

PANEL COLOR



PEARL GRAY

BAY COLOR



LIGHT MIST

FRONT DOOR COLOR



Black 200

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



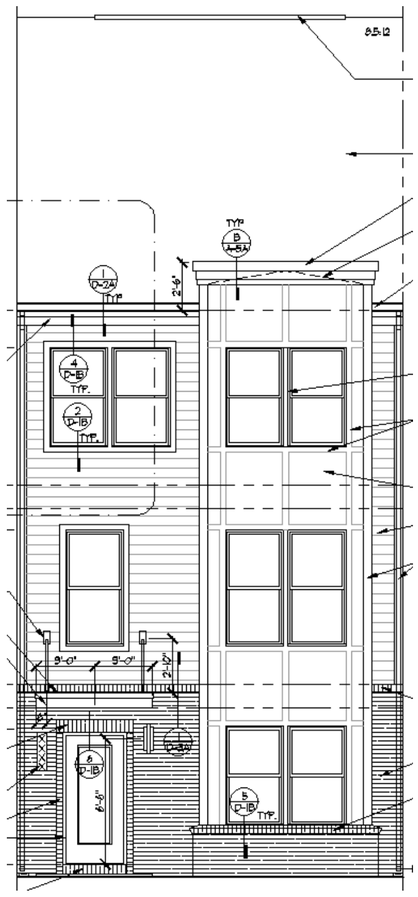
DARK BRONZE

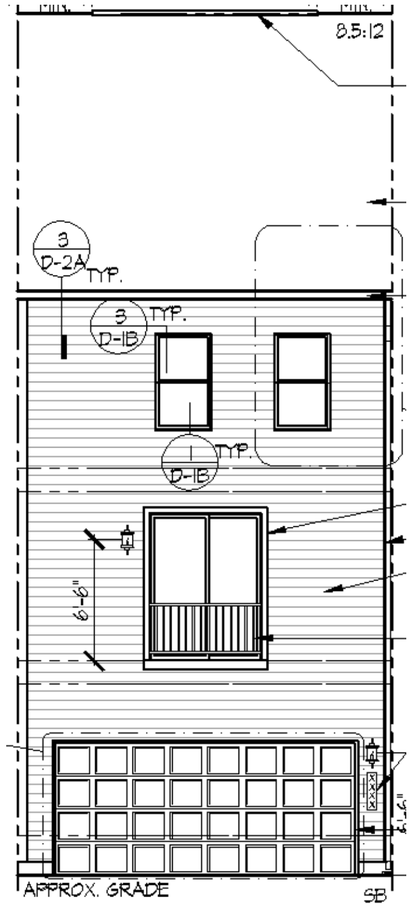
BRICK MORTAR COLOR



ROANOKE GRAY

Lot 42





1 FRONT ELEVATION "X"
SCALE 1/4"=1'-0"



SCHEME 4

BRICK COLOR



BLUE RIDGE REGENT

HORIZONTAL SIDING



GRAY SLATE

Hardie® Plank

Thickness 5/16 in
Length 12 ft planks
Select Cedarmill® & Smooth
Width 8.25 in
Exposure 7 in

PANEL COLOR



PEARL GRAY

BAY COLOR

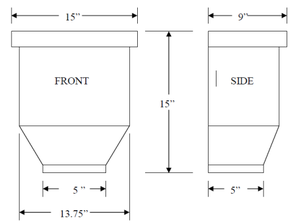


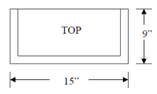
LIGHT MIST

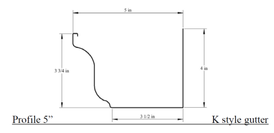
FRONT DOOR COLOR

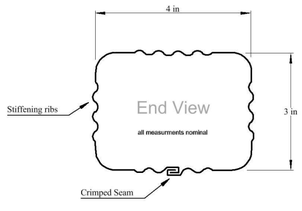
Black
200

3x4 CONDUCTOR







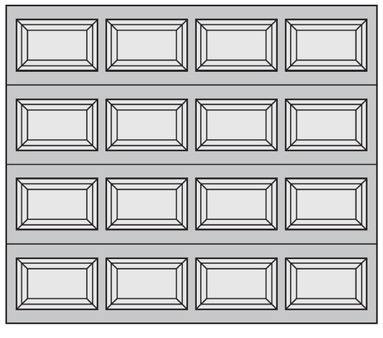


Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid



SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



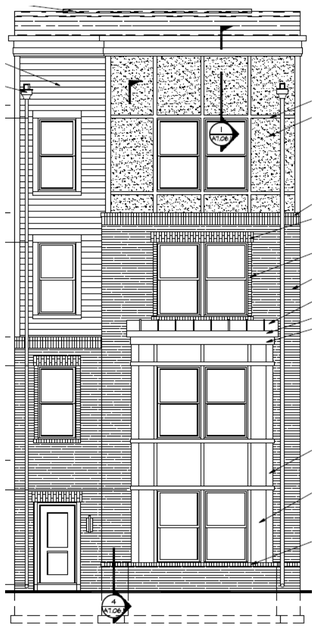
DARK BRONZE

BRICK MORTAR COLOR

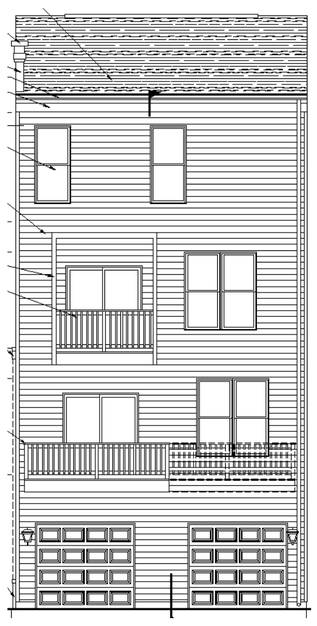


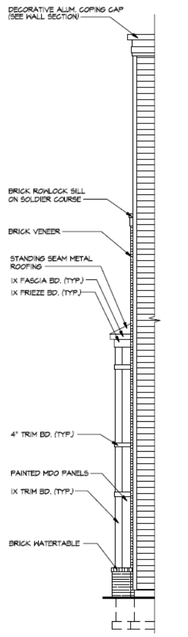
ROANOKE GRAY

Lots 100 & 101



ELEVATION "B1"
SCALE : 1/4" = 1'-0"



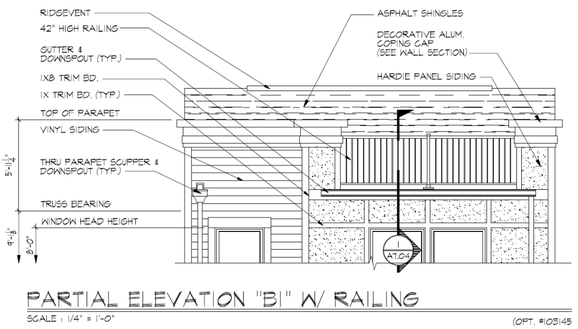


ELEV. B1



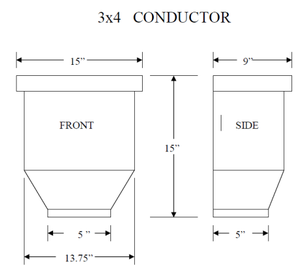
Hardie® Plank

Thickness	5/16 in
Length	12 ft planks
Select Cedarmill® & Smooth	
Width	8.25 in
Exposure	7 in

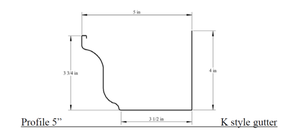


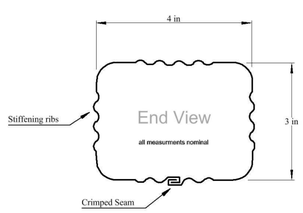
PARTIAL ELEVATION "B1" W/ RAILING
SCALE : 1/4" = 1'-0"







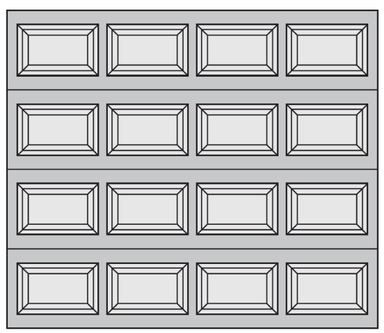






RF24S
Shaker Style Panel
22-Gauge

SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

PARK PLACE SCHEME 1

BRICK COLOR



COLONY POINTE

HORIZONTAL SIDING



EVENING BLUE

PANEL COLOR



COBBLESTONE

BAY COLOR



COBBLESTONE

FRONT DOOR COLOR



Williamsburg
227

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



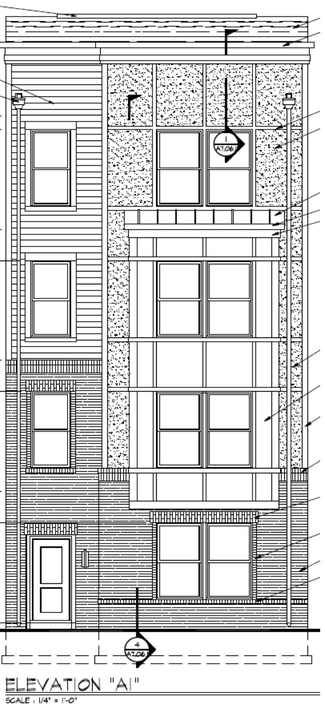
DARK BRONZE

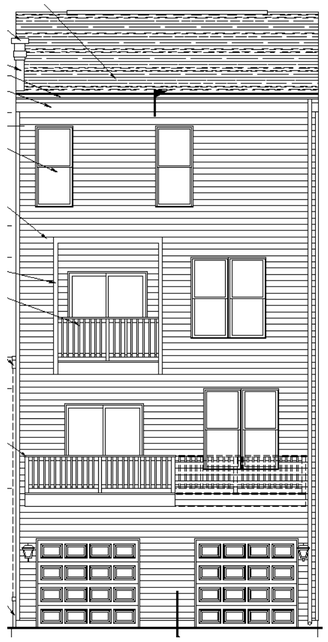
BRICK MORTAR COLOR

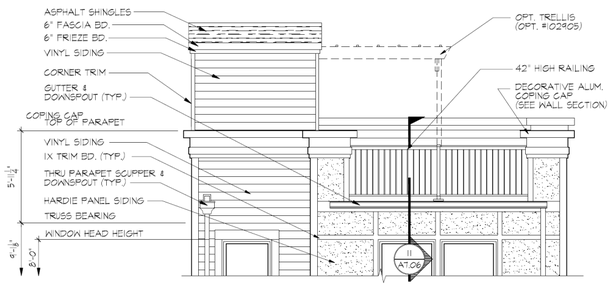


ROANOKE GRAY

Lots 102 & 103







PARTIAL ELEVATION "A1" @ OPT. TERRACE W/ RAILING



SCHEME 1

BRICK COLOR



COLONY POINTE

Hardie® Plank

Thickness	5/16 in
Length	12 ft planks

Select Cedarmill® & Smooth

Width	8.25 in
Exposure	7 in

HORIZONTAL SIDING



EVENING BLUE

PANEL COLOR



COBBLESTONE

BAY COLOR



COBBLESTONE

FRONT DOOR COLOR

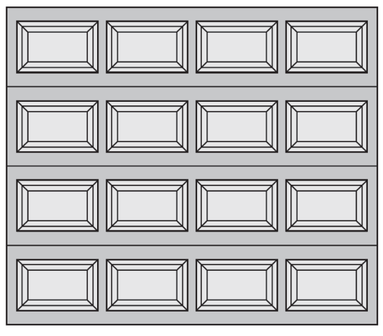


Williamsburg 227



RF24S
Shaker Style Panel
22-Gauge

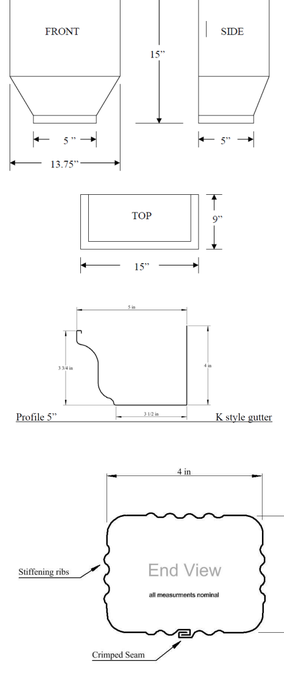
SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress



FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



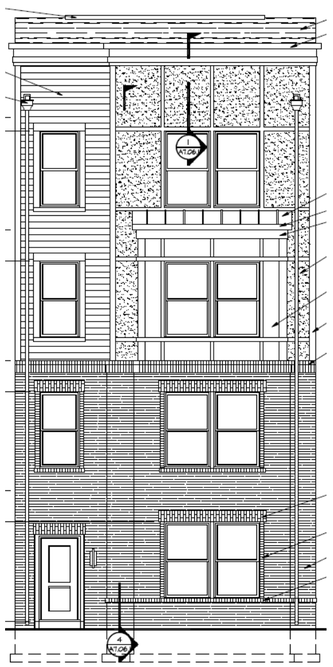
DARK BRONZE

BRICK MORTAR COLOR

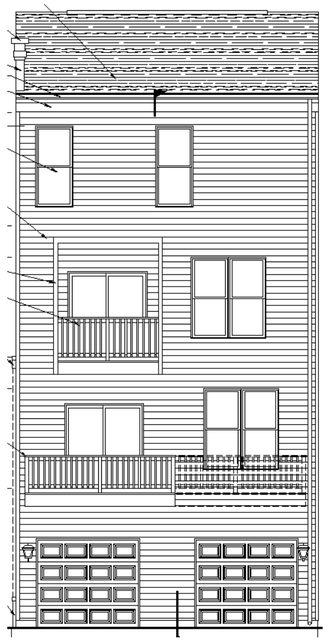


ROANOKE GRAY

Lots 104 & 105



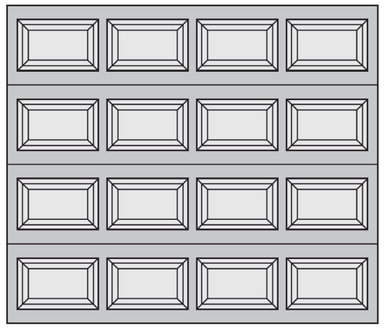
ELEVATION "C1"
SCALE : 1/4" = 1'-0"

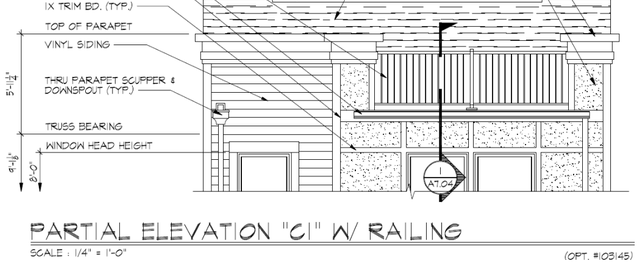




RF24S
Shaker Style Panel
22-Gauge

SP • SHORT PANEL





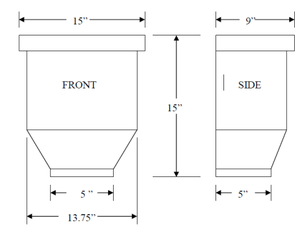
PARTIAL ELEVATION "C1" W/ RAILING
SCALE : 1/4" = 1'-0"
(OPT. #103145)





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress



Hardie® Plank

Thickness	5/16 in
Length	12 ft planks
Select Cedarmill® & Smooth	
Width	8.25 in
Exposure	7 in

SCHEME 3

BRICK COLOR



BLUE RIDGE REGENT

HORIZONTAL SIDING



GRAY SLATE

PANEL COLOR



COBBLESTONE

BAY COLOR



GRAY SLATE

FRONT DOOR COLOR



FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



DARK BRONZE

BRICK MORTAR COLOR



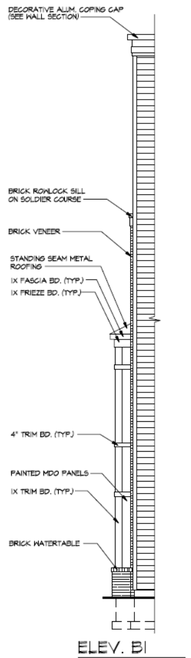
ROANOKE GRAY

Lots 106 & 107



ELEVATION "B1"
SCALE : 1/4" = 1'-0"



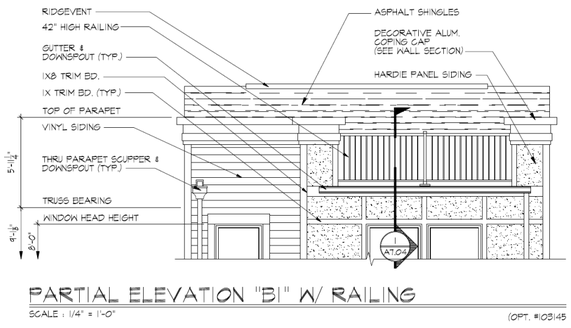


ELEV. B1



Hardie® Plank

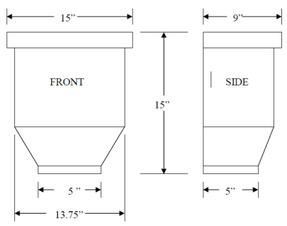
Thickness	5/16 in
Length	12 ft planks
Select Cedarmill® & Smooth	
Width	8.25 in
Exposure	7 in

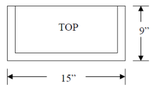


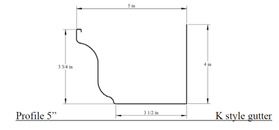
PARTIAL ELEVATION "B1" W/ RAILING
SCALE : 1/4" = 1'-0"

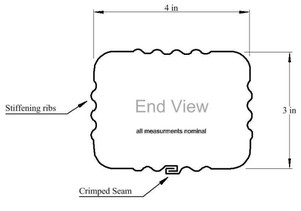


3x4 CONDUCTOR





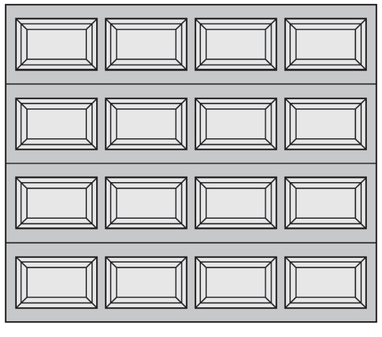






RF24S
Shaker Style Panel
22-Gauge

SP • SHORT PANEL





Features

- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

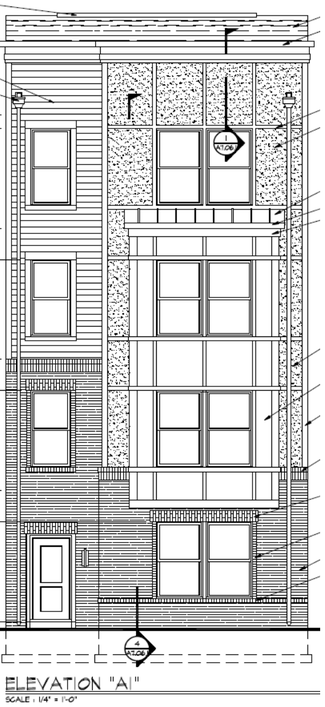
PARK PLACE SCHEME 2

BRICK COLOR	 OLD MILL
HORIZONTAL SIDING	 TIMBER BARK
PANEL COLOR	 COBBLESTONE
BAY COLOR	 EVENING BLUE
FRONT DOOR COLOR	 Mckinney Stone 475

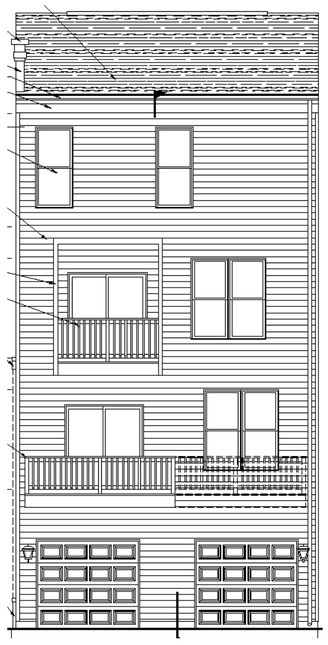
FOR ALL BUILDING SCHEMES

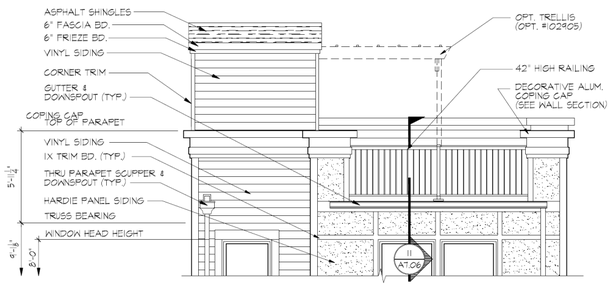
WINDOW COLOR	RAILING COLOR	CORNICE COLOR	GUTTER & DOWNSPOUT COLOR	CANOPY COLOR	BRICK MORTAR COLOR
					
DARK BRONZE	DARK BRONZE	MUSKET BROWN	DARK BRONZE	DARK BRONZE	ROANOKE GRAY

Lots 108 & 109



ELEVATION "A1"
SCALE : 1/4" = 1'-0"





PARTIAL ELEVATION "A1" @ OPT. TERRACE W/ RAILING



SCHEME 2

BRICK COLOR



OLD MILL

Hardie® Plank

Thickness	5/16 in
Length	12 ft planks
Select Cedarmill® & Smooth	
Width	8.25 in
Exposure	7 in

HORIZONTAL SIDING



TIMBER BARK

PANEL COLOR



COBBLESTONE

BAY COLOR



EVENING BLUE

FRONT DOOR COLOR

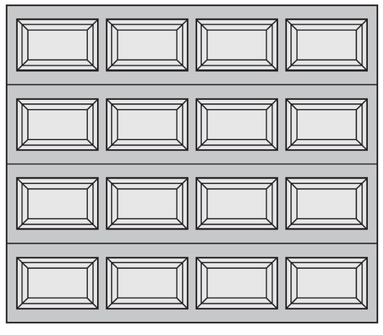


Mckinney Stone
475



RF24S
Shaker Style Panel
22-Gauge

SP • SHORT PANEL

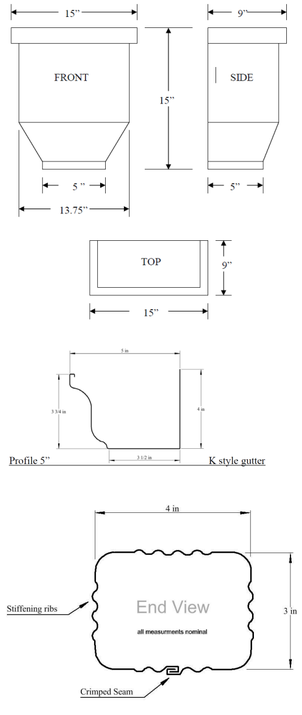




Features

- Frame Depth- 3 1/4"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

3x4 CONDUCTOR



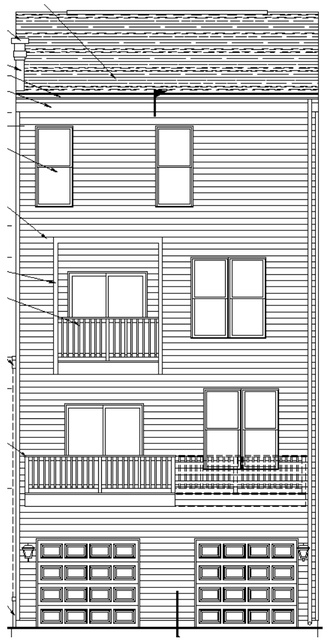
FOR ALL BUILDING SCHEMES

WINDOW COLOR	RAILING COLOR	CORNICE COLOR	GUTTER & DOWNSPOUT COLOR	CANOPY COLOR	BRICK MORTAR COLOR
					
DARK BRONZE	DARK BRONZE	MUSKET BROWN	DARK BRONZE	DARK BRONZE	ROANOKE GRAY

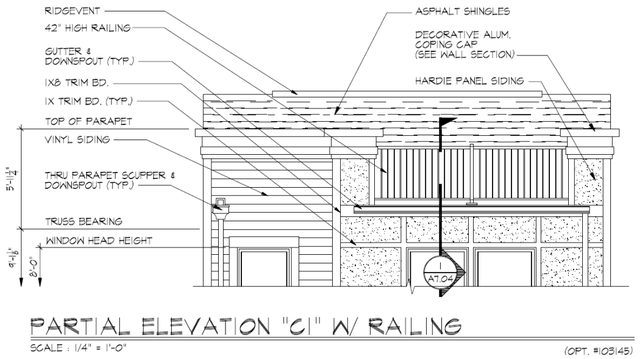
Lots 110 & 111



ELEVATION "C1"
SCALE : 1/4" = 1'-0"





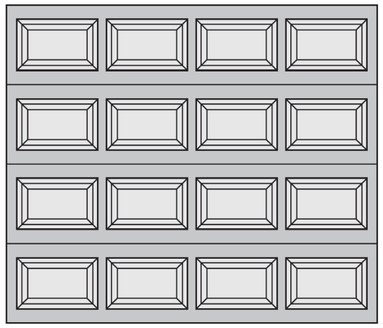


PARTIAL ELEVATION "C1" W/ RAILING
SCALE : 1/4" = 1'-0"
(OPT. #103145)



RF24S
Shaker Style Panel
22-Gauge

SP • SHORT PANEL



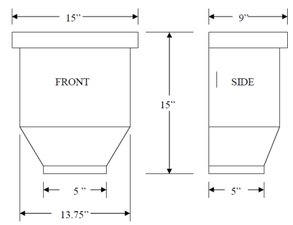


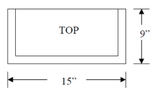


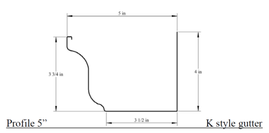
Features

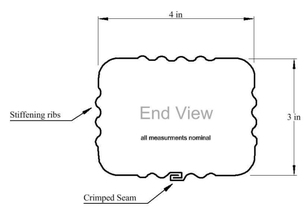
- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

3x4 CONDUCTOR









SCHEME 3

BRICK COLOR



BLUE RIDGE REGENT

Hardie® Plank

Thickness	5/16 in
Length	12 ft planks
Select Cedarmill® & Smooth	
Width	8.25 in
Exposure	7 in

HORIZONTAL SIDING



GRAY SLATE

PANEL COLOR



COBBLESTONE

BAY COLOR



GRAY SLATE

FRONT DOOR COLOR



Black
200

FOR ALL BUILDING SCHEMES

WINDOW COLOR



DARK BRONZE

RAILING COLOR



DARK BRONZE

CORNICE COLOR



MUSKET BROWN

GUTTER & DOWNSPOUT COLOR



DARK BRONZE

CANOPY COLOR



DARK BRONZE

BRICK MORTAR COLOR



ROANOKE GRAY

General Shale

DATA SHEET | Clay Facing Bricks

Cleveland County, NC Mfg. Plant
04 21 00-US 11/16

PRODUCT DESCRIPTION

BASIC USE A clay facing brick unit used in masonry construction for both interior and exterior applications.

For residential, commercial and institutional applications.

COMPOSITION AND MATERIAL Brick are manufactured from clay, shale or similar naturally occurring earthy substances and subjected to a heat treatment at elevated temperatures (firing) creating a bond between the particulate constituents resulting in a severe-weathering brick with one or more finished faces. Custom shapes and sizes are available.

SHAPES AND SIZES General Shale brick products are available in a variety of standard sizes.

	Height	Length	Bed
Modular	2-1/4"	7-5/8"	3-5/8"
Norman	2-1/4"	11-5/8"	3-5/8"
Closure	3-5/8"	7-5/8"	3-5/8"
Utility	3-5/8"	11-5/8"	3-5/8"
Monarch	3-5/8"	15-5/8"	3-5/8"
Engineer	2-3/4"	7-5/8"	3-5/8"

General Shale produces many architectural shapes to work with most brick sizes, and can also produce custom brick shapes and arches.

TOLERANCES Cleveland County Plant brick is manufactured to meet the FBX, FBS or FBA tolerances of ASTM C216.

General Shale bricks are inspected to be sound and free of cracks, blemishes or other defects that would either affect the serviceability or strength of the unit, or become exposed once installed and visible when viewed from a distance of not less than 20 ft. under diffused light.

LIMITATIONS Manufactured masonry products are generally intended for above grade installations. Manufactured masonry units, regardless of their composition, are inherently absorptive, and as such, are not intended for use below grade. Units installed below grade will wick moisture from the soil that is in contact with the masonry units effectively creating a condition known as "rising damp" in the masonry veneer.

Standard brick units are not intended to be used as pavers. General Shale offers paving brick in a variety of colors for light traffic paving installations.
In colder climates, masonry walls at grade may also become exposed to de-icing compounds. As with other types of manufactured masonry units, clay brick masonry units should not be installed where they will be directly exposed to de-icing compounds used to melt snow and ice from pavements.

The function of caps and copings is to prevent moisture from entering the building envelope through the top of the wall. As most manufactured masonry units are produced in relatively short lengths, if they are used as a cap or coping material more mortar joints are required. These horizontal mortar joints are the most likely entry point for moisture to infiltrate the building envelope. As such, it is generally recommended within the industry to install proper flashings below all caps and copings or to use longer components such as quarried stone or metal parapet caps to reduce the number of joints thereby limiting the areas that may allow moisture infiltration of the building envelope.

COLORS AND FINSHES
The Cleveland County Plant produces brick in a wide spectrum of through the body colors and a variety of textures, including velour, smooth and rockface.

As a manufactured material, General Shale brick products are monitored for color consistency. Slight variations between batches may occur and it is recommended that the installer mix units from different skids during installation. Consultants should review samples prior to selecting a particular color and finish.

TECHNICAL DATA

APPLICABLE STANDARDS Required properties for clay or shale brick units are described in ASTM C 216, Standard Specification for Facing Brick (Solid Masonry Units Made from Clay or Shale).

These standards classify clay and shale products as either moderate-weathering or severe-weathering depending on the material's tested physical properties of compressive strength and 24-hour absorption.

General Shale brick products meet and exceed the requirements necessary to comply with the severe-weathering classification. They have been extensively tested using standardized test methods found in ASTM C 67 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile. Test reports are available upon request.

INSTALLATION

HANDLING - Lift skids with proper and sufficiently long slings or forks with protection to prevent damage to units. Protect edges and corners.

STORAGE - Store General Shale products in a manner designed to prevent damage and staining of units. Stack units on timbers or platforms at least 3" above grade. Place polyethylene or other plastic film between wood and other finished surfaces of units when stored for extended periods of time.

Stored units should be covered if exposed to extreme weather conditions.

Do not use de-icing compounds to remove ice from masonry surfaces.

PREPARATORY WORK It may be advantageous under hot, dry weather or windy conditions to adjust mortar proportions or take further precautions to insure good bond between mortar and masonry units. For additional information refer to ASTM C 270 Standard Specification for Mortar for Unit Masonry.

For additional information when constructing in cold weather refer to General Shale technical bulletins titled Cold Weather Recommendations and Cold Weather Admixtures.

INSTALLATION General Shale brick products must be installed using approved materials and techniques for each specific installation.

Construct masonry veneer with an adequate number of elastic movement joints, properly located to accommodate differential movement.

Construct masonry veneer in accordance with ACI 530-05/ASCE 5-05/TMS 402-05, Building Code Requirements for Masonry Structures in the United States, and any local requirements stipulated by the authorities having jurisdiction.

Mortar joints between bricks in any direction should be nominally 3/8" thick.

Mortar for unit masonry veneer should be a type N masonry cement mix proportioned to a 1 : 2-1/4 – 3 ratio. This ratio refers to:

1 part Type N masonry cement (ASTM C270 Table 1)
- 2-1/4 – 3 parts masonry sand (ASTM C 144)

When properly combined with the appropriate quantity of water, it will produce a general-purpose mortar, exhibiting good workability and board life in its plastic state, and good durability and flexibility in its hardened state; and conforming to ASTM C 270-05a; Standard Specification for Mortar for Unit Masonry.

General Shale recommends constructing masonry veneer with proper drainage mechanisms, including clear draining air spaces, through wall flashing membranes and weep hole vents. The air spaces must be at least 1" wide, and kept clear of debris, protrusions, mortar fins and droppings. Weep hole vents should be installed at the same level as through wall flashing membranes and spaced not more than 24" on centre horizontally.

General Shale brick products must be connected to a structural substrate with an approved masonry connection system, designed by the consultant for each specific installation.

AVAILABILITY AND COST

AVAILABITY General Shale brick products are available throughout the continental United States, as full-bed masonry units.

Availability and various product details (colors, textures etc.) may vary by location. Please consult with your General Shale sales representative.

Delivery times for orders will vary based on the complexity of what is required. General Shale cannot be responsible for delays due to fire, acts of God, or any other cause beyond its control or which could not be reasonably foreseen.

Contact General Shale for a list of dealers in your area.

COST Quoted on a project basis for job-specific manufacturing to project requirements.

MAINTENANCE

General Shale brick products should have excess mortar removed from their faces by brushing as they are placed within the wall at the point of tooling.

Clean General Shale brick products in accordance with the cleaning guidelines in General Shale Technical Bulletin Brick Cleaning Information. Various masonry detergents and cleaning systems can change the color of masonry products. Acid-based cleaning agents will darken the color of the masonry units.

Always pre-test cleaning agents and methods on the job-site mock-up panel or a small inconspicuous area of the wall. The Consultant and/or Owner should approve the test area prior to the start of full-scale cleaning operations.

General Shale does not recommend the application of water repellent or graffiti-proofing sealers to its masonry products.

TECHNICAL SERVICES

General Shale offers consultation services to assist with design, detailing and specification questions and with pricing. Enquiries are attended to promptly and without obligation.

RELATED REFERENCES

General Shale distributes an integrated technical information system, comprised of the following components:

Sample detail drawings which are available in .pdf format.
- General Shale Technical Bulletins which are available in .pdf format.
- Architectural Catalog Shape drawings,
- BIA Technical Notes and NCMA Tek Notes.

All of these technical resources are available to be downloaded from the General Shale web site at www.GeneralShale.com.

General Shale also makes available samples for color and finish, coursing charts, and copies of test reports upon request.

Safety Data

Date Completed: 01/05/11
Latest Revision: 01/07/2016

BRICK

SECTION 1 – IDENTIFICATION

Manufacturer: General Shale Brick, Inc.
P.O. Box 3547
Johnson City, TN 37602
(423) 282-4661

Emergency Info: (423) 952-4205

Product Name: Brick, Thin Brick and Brick Pavers

Chemical Family/Name: Predominately Aluminum Silicates

Formula: Mixture

Product Use: Masonry building material/component

SECTION 2 – Hazard(s) Identification





SIGNAL WORD: Danger

Bricks as shipped do not present an inhalation, ingestion or contact hazard. However, operations such as sawing and grinding may result in the following effects.

ACUTE EFFECTS OF OVEREXPOSURE:

Eye: May cause irritation by abrasion with dust or chips.

Skin: Brick dust or chips may cause allergic reactions in hypersensitive individuals; May cause cuts and skin abrasions.

Inhalation: Brick dust or chips may cause congestion and irritation in nasal and respiratory passages.

Ingestion: No known acute effects.

CHRONIC EFFECTS OF OVEREXPOSURE:

Excessive exposures to respirable particulates (dust) over an extended period of time may result in the development of pulmonary diseases such as silicosis

SECTION 3 – Composition / Information on Ingredients

Ingredients	CAS #	% Weight	Exposure Limits	
			OSHA PEL mg/m^3	ACGIH TLV mg/m^3
Aluminum Silicates	Various	50 – 85	15	10
Quartz	14808-60-7	Varies	10 / %SiO2 + 2 (respirable)	0.05 (respirable)
Chromium compounds	Various	0 – 3	Not available	Not available
Manganese compounds	Various	0 – 3	Not available	Not available
Iron Compounds as granular body additives	Various	0 – 3	Not available	Not available
Calcium compounds	Various	0 – 3	Not available	Not available

The above chemistries are provided for industrial hygiene and environmental purposes and are not intended to represent product specifications. This information has been compiled from data believed to be reliable. Elements such as aluminum, arsenic, boron, calcium, chromium, cobalt, copper, lead, molybdenum, nickel, tin, titanium, vanadium, and zirconium may be present in trace amounts. Brick products as shipped do not present an exposure hazard.

SECTION 4 – First-Aid Measures

Inhalation:	Remove from exposure to airborne particulates. Consult a physician if breathing does not return to normal.
Skin:	Wash with soap and water. If an allergic reaction causes a rash that does not heal within a few days consult a physician. Treat abrasions as any other scrape or cut with disinfectants and bandages.
Eye:	Flush with running water. Obtain medical assistance if irritation continues.
Medical Conditions Aggravated by Exposure:	Excessive dust exposure may aggravate any existing respiratory disorders or diseases. Possible complications or allergies resulting in irritation to skin, eyes, and respiratory tract may occur from excessive exposure to dusts.

SECTION 5 – Fire Fighting Measures

Bricks as shipped do not pose a fire or explosion hazard**.**

SECTION 6 – Accidental Release Measures

Bricks as shipped do not present a human or environmental hazard that requires special clean-up measures.

SECTION 7 – Handling and Storage

Provide adequate ventilation to maintain exposures below the OSHA PEL and ACGIH TLV for quartz and other substances.

SECTION 8 – Exposure Controls / Personal Protection

Respiratory Protection:	For airborne concentration exceeding the OSHA PEL or ACGIH TLV use a NIOSH and/or MSHA approved respirator.
Eye and Face:	Face shields should be used when sawing brick.
Skin:	Use gloves and or protective clothing if abrasions or allergic reactions are experienced.
Other:	Use of steel toe shoes is recommended when handling brick.
Other Controls:	Use of wet sawing methods is recommended anytime that bricks must be cut.

SECTION 9 – Physical and Chemical Properties

Boiling Point: NA	Melting Point: NA	Specific Gravity: 2.6
Vapor Pressure: NA	Vapor Density: NA	Soluble in Water: Negligible

Appearance and Odor: Granular solid, essentially odorless. Bricks come in a wide range of colors.

SECTION 10 – Stability and Reactivity

Bricks as shipped are not reactive

SECTION 11 – Toxicological Information

CARCINOGENICITY:

The following carcinogenicity classifications for crystalline silica have been established by the following agencies:
OSHA: Not regulated as a carcinogen
IARC: Group 1 carcinogenic in humans
NIOSH: Carcinogen, with no further categorization
NTP: Known carcinogen

WARNING: Brick dust may contain crystalline silica, a chemical that has been determined by the agencies listed above to cause cancer.

SECTION 12 – Ecological Information

No data is currently available

SECTION 13 – Disposal Considerations

Brick in its solid form is typically considered a non-hazardous waste for disposal, but local regulation may vary, therefore all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations. Water containing brick solids, such as from wet sawing operations, should also be disposed of in accordance with federal, state and local environmental regulation. Brick waste should not be used as a blasting agent.

SECTION 14 – Transport Information

DOT Shipping Name: Not regulated by DOT

DOT Hazard Class:

Identification Number:

Canada TDG: Not regulated by TDG.

Hazard Class:

UN Number:

SECTION 15 – Regulatory Information

RCRA: Bricks as shipped are not hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

SARA/EPCRA: Bricks as shipped are not hazardous substances subject to the federal Emergency Planning and Community Right to Know Act (EPCRA) for inventory reporting (SARA 311/312), nor Toxic Release Inventory (SARA 313).

DOT: Bricks as shipped are not hazardous materials per Department of Transportation (DOT) regulations.

SECTION 16 – Other Information

We recommend only wet sawing of brick.

This SDS was prepared with information believed accurate at the time of preparation and was prepared and provided in good faith. However, General Shale Brick, Inc. assumes no responsibility as to the accuracy or suitability of such information and no warranty expressed or implied is made.

Technical Bulletin – Brick Specification

Part I

QUALITY ASSURANCE – Brick Tests

1. All tests shall be in accordance with ASTM C-67 latest edition

Submittals

1. Test reports shall inslude:
    a) Compressive strength
    b) 24-hour cold water absorption.
    c) 5-hour boil absorption
    d) Saturation Coefficient
    e) Initial Rate of Absorption (IRA)
    f) Weather classification
2. Certificate of conformance shall state that brick meets or exceeds applicable ASTM specifications indicated herein.

Sample Panels

1. Sample panel size shall be 4'x4' showing the proposed color range, texture, bond, mortar, workmanship, cleaning, and water repellents where applicable.

Part II

Facing Bricks

1. All brick shown on contract documents shall be *color, texture* as manufactured by **General Shale, PO Box 3547, 3015 Bristol Highway, Johnson City, TN 37602-3547.**
2. ASTM C-216 latest edition, Grade SW, Type FBS or ASTM C-652 latest edition, Grade SW, Type HBS, Class H40V.
3. Dimensions *$3^1/2$"x $2^1/4$"x $7^5/8$" (W x H x L)*

Structural Bricks

1. All brick shown on contract documents shall be *color, texture* as manufactured by **General Shale, PO Box 3547, 3015 Bristol Highway, Johnson City, TN 37602-3547.**
2. ASTM C-652 latest edition, Grade SW, Type HBS, Class H40V.
3. Dimensions *$5^5/8$"x $2^3/4$"x $11^5/8$"* (W x H x L)

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. Because of the variations in methods, conditions and equipment used in various forms of masonry installing, cleaning, and / or repairing, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. GENERAL SHALE BRICK, INC. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond GENERAL SHALE BRICK, INC. direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Please consult a building professional before installing, cleaning or repairing any masonry product.

General Shale Brick, Inc. / 3015 Bristol Highway, Johnson City, Tennessee 37602 / 800.414.4661 © 2014 General Shale Brick Inc., All rights reserved. All marks are the property of General Shale Brick, inc. • www.generalshale.com

Thin Bricks

1. All brick shown on contract documents shall be *color, texture* as manufactured by **General Shale, PO Box 3547, 3015 Bristol Highway, Johnson City, TN 37602-3547.**
2. ASTM C-1088 latest edition, Exterior Grade, Type TBX (except for chips) .
3. Dimensions *1/2"x 2 1/4"x 7 5/8"* (W x H x L)

Shapes

1. Where special shapes are shown on architectural drawings, manufacturer shall provide shop drawings for architect's approval prior to manufacturing shapes.

Mortar

Mortar shall be type consisting by proportion:

_____Part Portland cement (ASTM C-150 Type I or II)
_____Part hydrated lime (ASTM C-207)
_____Parts sand (ASTM C-144)

Grout

Grout shall conform to ASTM C-476 for fine grout mix. Slump shall be 10"

1. Part Portland cement (ASTM C-150, Type I or II)
2. 1/4 to 3 parts sand (ASTM C-404)

Part III

EXECUTION

1. Bond - Bond shall be running bond unless otherwise shown on contract documents.
2. Jointing - Mortar joints shall be concave and struck with a smooth steel tool.
3. Construction - All construction strictly adheres to (ACI 530)
4. Cleaning - Cleaning shall conform to Technical Bulletin 4: Section 4200, Brick Cleaning Recommendations and to BIA Technical Note #20-R. Contact manufacturer for recommendations.
5. Water Repellent & Coatings - Where water repellents are specified consult Technical Bulletin 1: Section 1700, Water Repellent Coatings.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. Because of the variations in methods, conditions and equipment used in various forms of masonry installing, cleaning, and / or repairing, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. GENERAL SHALE BRICK, INC. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond GENERAL SHALE BRICK, INC. direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Please consult a building professional before installing, cleaning or repairing any masonry product.

General Shale Brick, Inc. / 3015 Bristol Highway, Johnson City, Tennessee 37602 / 800.414.4661 © 2014 General Shale Brick Inc., All rights reserved. All marks are the property of General Shale Brick, inc. • www.generalshale.com

90-Minute RSP Series Fire Doors

RSP Series Doors are commonly referred to as the RF Series Steel Edge Fire Doors. These doors can withstand a 90 minute fire rating when hung in a split steel frame and are rated with a neutral pressure label. The hinge and strike locations manufactured into the door match Therma-Tru's standard Full Size, or Book Size, specifications. They utilize a 5/8″ radius corner hinge with a Z pattern. Fire doors should always be self-latching with either self-closing hinges or a reinforced door slab with a door closer.

Panel Types

There are three panel types. First is a raised panel with a triple shadowed embossment around the panel referred to as High Definition. Next is a raised panel with a standard sticking around the panel referred to as Standard Definition. Finally is a flat panel with shaker sticking around the panel.



High Definition Panel



Standard Definition Panel

Shaker Style Flat Panel

Door Dimensions

RF series doors fit in Reeb's RSP Split Steel Frame. These frames accomodate full width doors with mortised hinge preps and door heights of 79-1/4", 83-1/4" and 95-1/4" before sweep. This fire door can be cut down by Reeb up to 3", from the bottom only. If any door is cut down, the bore and hinge locations will shift down with the cut and cannot be adjusted due to the steel skin and edge.

Door Height	Top of Door to Top of Each Hinge				Top of Door to Center of Bore
6/8	8-3/8"	37-5/8"	66-7/8"		44"
7/0	8-3/8"	37-5/8"	66-7/8"		48"
8/0	5 1/4"	30-3/4"	56-1/4"	81-3/4"	60″

Measurements above are from top of door to Top of Hinges. 4" on-center double bore is available.

Door Layouts

RF1
Flush
24-Gauge



RF11
High Definition Panel
24-Gauge



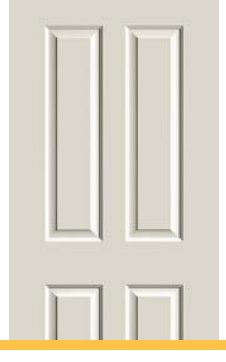
RF24
High Definition Panel
24-Gauge



RF29
High Definition Panel
24-Gauge









RF26
High Definition Panel
24-Gauge



RF31
High Definition Panel
24-Gauge



RF52
Standard Definition Panel
24-Gauge



RF55
Standard Definition Panel
24-Gauge



RF60
High Definition Panel
24-Gauge

RF11S
Shaker Style Panel
22-Gauge

RF24S
Shaker Style Panel
22-Gauge

RF31S
Shaker Style Panel
22-Gauge

RF24ADAS

The RF24S and the RF24ADAS have the same size panels and the same sticking profile.

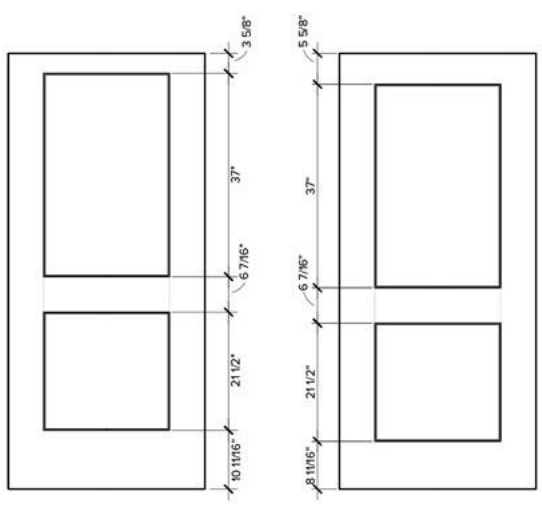
The top rail of the RF24ADAS is 2 inches smaller.

This moves the panels and intermediate rail up.

The result is that the bottom rail is 2 inches taller.

This gives the RF24ADAS an ADA compliant bottom rail.





Left – RF24ADAS | Right – RF24S

ough Openings

ough openings vary depending on the sill type and the door width. Sill options include a standard sill, no l, and a public access (ADA) sill for both inswing and outswing units. Ensure the closure package jamb epth and sill application match what is needed in the field. Below are the minimum drywall rough enings. For 7′ doors, add 4″ to the height dimensions and for 8′ doors, add 16″ to the height dimension.

Size	Standard Sill	No Sill	ADA Sill
2668	31-1/8″ x 81-21/32″	31-1/8″ x 80-13/32″	N/A
2868	33-1/8″ x 81-21/32″	33-1/8″ x 80-13/32″	N/A
21068	35-1/8″ x 81-21/32″	35-1/8″ x 80-13/32″	35-1/8″ x 80-29/32″
3068	37-1/8″ x 81-21/32″	37-1/8″ x 80-13/32″	37-1/8″ x 80-29/32″





Updated on May 3, 2023

Tagged: Residential Fire Doors Steel Edge Doors

SHARE THIS ARTICLE

ARTICLE CONTENTS

Panel Types

Door Dimensions

Door Layouts

RF24ADAS

Rough Openings

SUBSCRIBE FOR UPDATES

Subscribe today to receive updates as we release new Learning Center content.

Enter your email address ...

SUBSCRIBE

RELATED ARTICLES

Fire Door Labels

Understanding Fire Door Ratings

20-Minute Fire Rated Units

Fire-Rated Unit

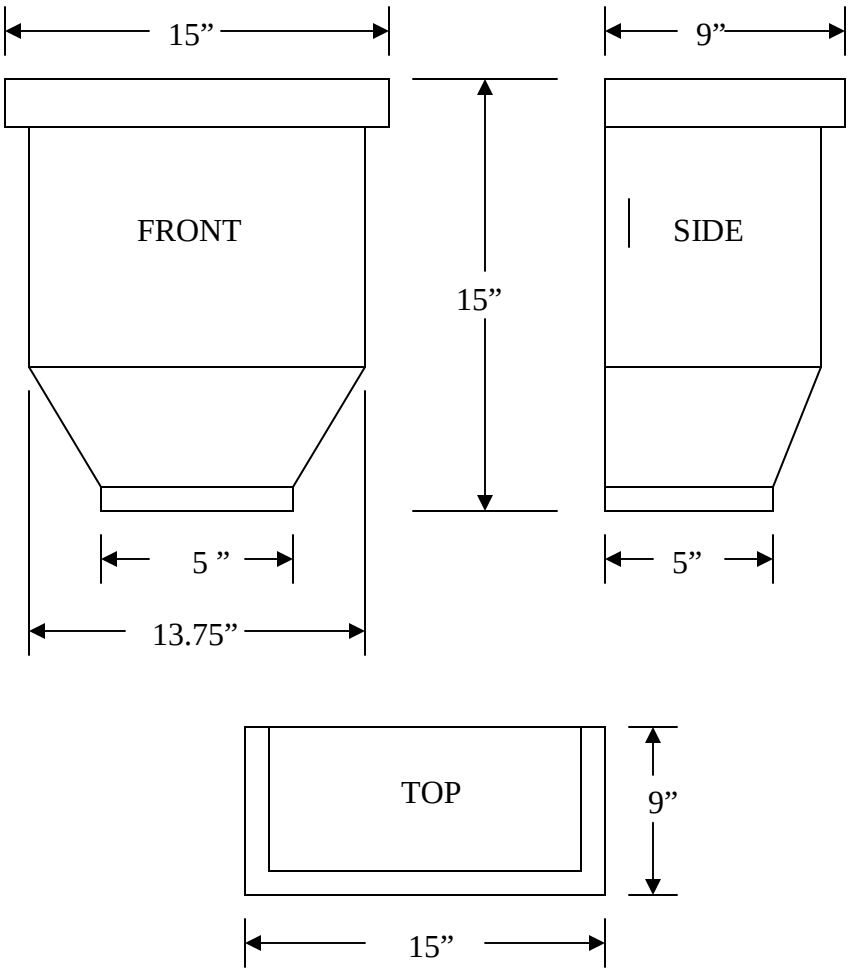
RSP Outswing Fire Sill

RSP Inswing ADA Tile Back Fire Sill

Terms of Use Privacy Policy

All content © 2023-2024 REEB Millwork II, LLC. All rights reserved.

3x4 CONDUCTOR



Not to scale, all measurements nominal

SPECIFICATIONS

Aluminum: 3105-H24 which meets the specifications set forth in the “Aluminum Standards and Data 1988” published by the Aluminum Association. The gauge is .027, plus or minus .002.

- The surface of the aluminum sheet is thoroughly cleaned and dried to remove The surface of the aluminum sheet is thoroughly cleaned and dried to remove residual oils and impurities using a 140°F-160°F hot water solution of potassium hydroxide provided by Henkel Surface Technologies and then applying a chromate or titanium base conversion coating, 1402W or 1455SF by Henkel Surface Technologies
- A thermo setting polyester enamel is roller coated and baked at high temperatures for the outside coating. The reverse side of the coil, or wash coat, is a thermo setting polyester enamel applied to help resist corrosion and promote formability.
- The color range of the applied finish is .8 mils, plus or minus .1 mils (.7-.9)
- Made in the USA
- Testing includes:

  180 degree-2T bend flex test no tape off using Scotch Brand #610 tape (ASTM D-4145-83)

  Reverse impact –2 lbs./mil no tape off in positive direction using Scotch Brand #610 tape (ASTM D-4146-83)

  Pencil Hardness-F minimum using Eagle Turquoise Brand pencil (ASTM D-3363-92A)

  M.E.K. resistance - 100 double rubs using cheesecloth-mesh size 28 x 24 (ASTM D-5402-92)

Dry Heat flexibility – no tape off on 2T bend after 2minutes at 160 degrees F

Product Data

FLASHING & SHEET METAL | 07 60 00

PAC-CLAD PETERSEN
A CARLISLE COMPANY

PRODUCT NAME

PAC-CLAD prefinished sheet and coil aluminum and steel

MANUFACTURER

Petersen Aluminum Corporation
1005 Tonne Road
Elk Grove Village, IL 60007
P: 800-323-1960
847-228-7150
F: 800-722-7150
pac-clad.com

PRODUCT DESCRIPTION

PAC-CLAD is a pre-finished specification grade aluminum sheet or commercial-quality extra-smooth galvalume steel sheet, primed and coated with Petersen's full-strength fluoropolymer (PVDF) high-performance coating system of 1.0 mil (0.025 mm) total dry film thickness and, on the reverse side, a wash coat of 0.3 -0.4 mil (0.008-0.01 mm) dry film thickness.

BASIC USE: PAC-CLAD is for general sheet metal use in building applications, as well as formed roofing and wall panels produced by Petersen Aluminum. PAC-CLAD is frequently used in the following forms:

- Roofing and mansard panels
- Wall panels
- Fascia and soffit panels
- Gravel stops and copings
- Store front components
- Flashing and trim

MATERIALS AND FINISHES: PAC-CLAD consists of either Aluminum Association specification ASTM B209 aluminum sheet, temper H14 or H34; hot-dipped ASTM A 653 Grade A structural quality steel sheets, or ASTM A792 Galvalume commercial weight. PAC-CLAD sheets, coil and panels are coated with a 2-coat system using a combination of 70% Kynar 500®/ Hylar 5000® polyvinylidenefluoride (PVDF), acrylic resins, pigments and solvents. The system consists of Fluropon® top coat applied over a polyester primer. A wash coat is applied to the reverse side for additional protection.

STANDARD SIZES: Aluminum is available in .032" - .063" (0.8 – 1.6 mm) thickness in 48" (1219 mm) widths. Steel is available in 24 and 22 GA in 48" (1219 mm) widths.

COLORS: For standard colors, refer to Table on Page 2. Custom match colors are available in minimum quantities of 5000 lb (4540 kg) for standard gauges.

FINISH: Sheens available – Dull, matte and specular, gloss rating of 25-35% at 60° viewing angle.

TEXTURES AVAILABLE: Smooth

LIMITATIONS: PAC-CLAD performance depends on the integrity of the coating film. PAC-CLAD should not be used in areas of high abrasion or where it will be subject to mechanical damage.

TECHNICAL DATA

APPLICABLE STANDARDS:

- Aluminum Association Specifications for Aluminum Structures
- Specifications for Cold Formed Steel Design Manual
- American Architectural Manufacturers Assoc – AAMA 621-02

AMERICAN SOCIETY FOR TESTING & MATERIALS (ASTM)

- ASTM A792/A792M Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot Dip Process
- ASTM A755/A755M – Standard Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil Coating Process for exterior Exposed Building Products
- ASTM B209 Standard Specification for Aluminum and Aluminum Alloy Sheet and Plate

PHYSICAL QUALITY

- ASTM B117-95 – Operating Salt Spray (Fog) Apparatus
- ASTM D 523 – Standard Test for Specular Gloss
- ASTM D 968 – Standard Test Methods for Abrasion Resistance for Organic Coatings by Falling Abrasive
- ASTM D 2244 – Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates
- ASTM D 2247 – Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity
- ASTM D 2794 – Standard Test Method for Resistance of organic Coatings to the Effects of Rapid Deformation (Impact)
- ASTM D 4214 – Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films
- ASTM D 3363 - Standard Test Method for Film Hardness by Pencil Test
- ASTM D 4145 - Standard Test Method for Coating Flexibility of Prepainted Sheet
- ASTM D 3359 - Standard Test Methods for Measuring Adhesion by Tape Test
- ASTM D 1308 - Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes
- ASTM D 522 - Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings
- ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials

NATIONAL COIL COATERS ASSOCIATION (NCAA)

- NCAA Procedure No. 11-5
- NCCA Procedure No. 11-18
- NCCA Technical Bulletin No. 11-6

SHEET METAL & AIR CONDITIONING CONTRACTORS

NATIONAL ASSOCIATION (SMACNA) - Architectural Sheet Metal Manual

Physical Properties of Fluoropolymer Coating – See PAC-CLAD Chart on Page 2.

INSTALLATION

Methods: Fabricate and install PAC- CLAD sheet metal in accordance with SMACNA sheet metal practices. PAC-CLAD can be cut, formed, nailed, screwed or riveted using conventional hand or power tools. PAC-CLAD coatings must be mechanically removed if soldering or welding is necessary. For best results, cutting edges should be kept sharp, clean, properly dressed and closely aligned.

A strippable vinyl film can be applied for protection during fabrication and installation if necessary. Vinyl film may remain on the coating during fabrication and installation. Vinyl must be removed prior to or immediately after installation.

PAC-CLAD is a finished material; care must be taken during fabrication and erection to avoid damage to the surface. Proper bend radii must be used in fabrication.

1005 Tonne Road
Elk Grove Village, IL 60007
P: 800-PAC-CLAD
F: 800-722-7150

9060 Junction Drive
Annapolis Junction, MD 20701
P: 800-344-1400
F: 301-953-7627

10551 PAC Road
Tyler, TX 75707
P: 800-441-8661
F: 903-581-8592

102 Northpoint Parkway
Acworth, GA 30102
P: 800-272-4482
F: 770-420-2533

1800 S. 7th Ave., Suite 130
Phoenix, AZ 85007
P: 833-750-1935
F: 602-254-6504

9817 233rd Ave. E Suite A
Bonney Lake, WA 98391
P: 253-501-2450

PAC-CLAD® is a registered trademark of Petersen Aluminum Corporation. 4/2023

Product Data

FLASHING & SHEET METAL | 07 60 00

PAC-CLAD PETERSEN
A CARLISLE COMPANY

AVAILABILITY & COST

AVAILABILITY: PAC-CLAD sheets are available nationwide and are stocked in standard colors and gauges. Special finishes require additional time for color matching and approvals. **Note:** 5000 pound minimum for non-standard colors. Delivery time and price to be quoted upon inquiry.

COST: Contact the manufacturer for specific cost.

WARRANTY

A 30-year non-prorated warranty covering color, fade, chalking and film integrity is available at no additional cost. Please see our website for sample warranty. Warranty terms vary slightly for Award Blue and Cardinal Red and metallic finishes. The warranty is issued on a per-project basis upon request. Contact Petersen for specific requirements.

There is no finish warranty available on perforated materials.

MAINTENANCE

Maintenance is not required. The panel finish is a member of the Teflon family and is self-cleaning. If cleaning is desired, panels can be washed with mild soap and water followed by a clean water rinse.

TECHNICAL SERVICES

Technical services are available from Petersen Aluminum Corporation and regional architectural representatives.

STORAGE & PACKAGING

PAC-CLAD sheet and coil should be stored in a clean, dry location. Suitable facilities at the jobsite for storage and protection of the material should be provided and should be well ventilated.

Store material out of traffic areas to prevent dents, bending, abrasion, etc. Materials should be protected with waterproof paper cover – plastic should be avoided to eliminate condensation. Keep the material off the ground in an inclined position.

PAC-CLAD COLOR AVAILABILITY

REFLECTIVITY	EMISSIVITY	3-YEAR EXPOSURE	SRI	STEEL		ALUMINUM			
				24 GA.	22 GA.	.032	.040	.050	.063
0.69 to 0.04	0.89 to 0.14	0.69 to 0.04	-2 to 85	44 colors	17 colors	36 colors	23 colors	28 colors	6 colors

The chart above indicates performance ranges and availability of all PAC-CLAD colors and materials. For complete information visit pac-clad.com.

STANDARD COLORS



PREMIUM COLORS



* Denotes PAC-CLAD Cool Color

NOTE: Colors above are not exact representations of actual PAC-CLAD colors. Ask a PAC representative for a color-chip chart or painted metal samples before making final color selection.

HQ: 1005 Tonne Road
Elk Grove Village, IL 60007
P: 800-PAC-CLAD
F: 800-722-7150

9060 Junction Drive
Annapolis Junction, MD 20701
P: 800-344-1400
F: 301-953-7627

10551 PAC Road
Tyler, TX 75707
P: 800-441-8661
F: 903-581-8592

102 Northpoint Parkway
Acworth, GA 30102
P: 800-272-4482
F: 770-420-2533

1800 S. 7th Ave., Suite 130
Phoenix, AZ 85007
P: 833-750-1935
F: 602-254-6504

9817 233rd Ave. E Suite A
Bonney Lake, WA 98391
P: 253-501-2450

PAC-CLAD® is a registered trademark of Petersen Aluminum Corporation. 4/2023

Service Partners Gutter Supply, LLC

Specification Sheet

.019 x 13 ¾" Aluminum Downspout Coil
3"x 4" Aluminum Downspout

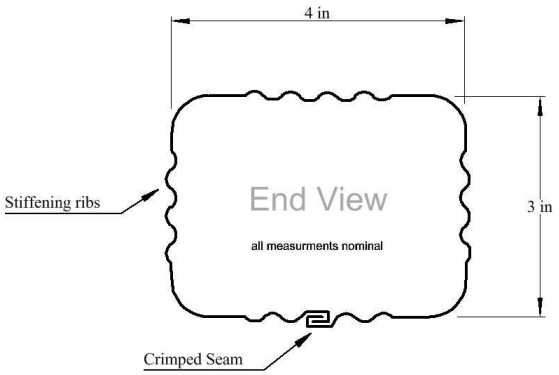
Specifications on the paint, metal preparation, and finish coating for aluminum downpipe coil:

- The aluminum used is alloy 3105-H25 which meets the specifications set forth in the "Aluminum Standards and Data 1988" published by the Aluminum Association. The gauge of the aluminum for the pipe is .019, plus or minus .002.
- The surface of the aluminum sheet is thoroughly cleaned and dried to remove residual oils and impurities using a 140°F-160°F hot water solution of potassium hydroxide provided by Henkel Surface Technologies and then applying a chromate or titanium base conversion coating, 1402W or 1455SF by Henkel Surface Technologies.
- A thermo setting polyester enamel is roller coated and baked at high temperatures for the outside coating. The reverse side of the coil, or wash coat, is a thermo setting polyester enamel applied to help resist corrosion and promote formability.
- The color range of the applied finish is .8 mils, plus or minus .2 mils. (1.0)
- The physical test used on our coated panels includes

180 degree-2T bend flex test no tape off using Scotch Brand #610 tape (ASTM D-4145-83)
Reverse impact –2 lbs./mil no tape off in positive direction using Scotch Brand #610 tape (ASTM D-4146-83)
Pencil Hardness-F minimum using Eagle Turquoise Brand pencil (ASTM D-3363-92A)
M.E.K. resistance - 100 double rubs using cheesecloth-mesh size 28 x 24 (ASTM D-5402-92)
Dry Heat flexibility – no tape off on 2T bend after 2minutes at 160 degrees F

Specifications & features of the finished product:

- The overall length is 10 or 15 feet, standard
- The pipe's opening is 2 ¾ x 4 inches
- The pipe is corner crimped on one end for ease of assembly
- The finish of this product is covered by a 20 year limited warranty
- Made in the USA



Amarr® Lincoln

Value Traditional Steel Garage Doors



Long Panel design with Stockton DecraTrim in True White

Traditional style. Exceptional value. The Amarr Lincoln collection combines unique, yet timeless traditional designs and color options with the durability & strength of steel and conventional hardware. Along with 21 decorative window choices, this affordable collection delivers premium style at a competitive price.

The Amarr Lincoln collection. A new tradition of style and value.

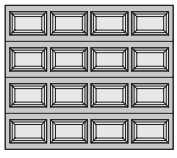


Flush Panel design with Frost Mosaic window option in Charcoal Gray.

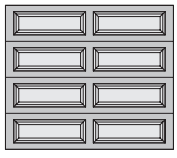


PANEL DESIGNS

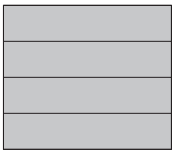
SP • SHORT PANEL



LP • LONG PANEL



FP • FLUSH PANEL



CURRENTLY UNAVAILABLE
RP • RIBBED PANEL*



*Available in Amarr Lincoln LI3138 and LI3000 only.

www.amarr.com

Amarr® Lincoln

Construction

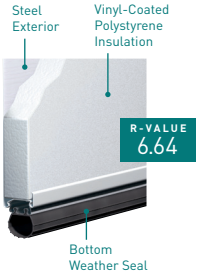
LI1000
Single-Layer: Steel

- Heavy-duty Exterior Steel
- Durable, Reliable, Low Maintenance



LI2000
Double-Layer: Steel + Insulation

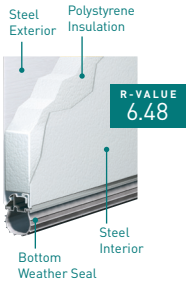
- Heavy-duty Exterior Steel
- Durable, Reliable, Low Maintenance
- Environmentally Safe Polystyrene Thermal Insulation with Vinyl Backing
- Energy Efficient
- Quiet Operation



LI3138/LI3000
Triple-Layer: Steel + Insulation + Steel

- Heavy-duty Exterior and Interior Steel
- Durable, Reliable, Low Maintenance
- Environmentally Safe Polystyrene Thermal Insulation
- Two Energy Efficiency Options
- Extra Quiet Operation

LI3138 – 1-3/8"



LI3000 – 2"



Specifications

	AMARR LINCOLN LI1000	AMARR LINCOLN LI2000	AMARR LINCOLN LI3138	AMARR LINCOLN LI3000
PANEL DESIGNS				
Short	•	•	•	•
Long	•	•	•	•
Flush (Steel Embossment)	Stucco	Stucco	Woodgrain	Woodgrain
Ribbed			CURRENTLY UNAVAILABLE	CURRENTLY UNAVAILABLE
INSULATION[1]		Polystyrene	Polystyrene	Polystyrene
R-VALUE[2]		6.64	6.48	9.05
DOOR THICKNESS	2" (5.1cm)	2" (5.1cm)	1-3/8" (3.5cm)	2" (5.1cm)
STEEL THICKNESS	25 ga	25 ga	27/27 ga	27/27 ga
INSULATED GLASS OPTION†			•	•
WIND LOAD[3] AVAILABLE	•	•	•	•
PAINT FINISH WARRANTY[4]	15 Years	25 Years	Lifetime	Lifetime
WORKMANSHIP/HARDWARE WARRANTY[4]	1 Year	2 Years	3 Years	3 Years

[1] Insulation has passed self-ignition, flamespread and smoke developed index fire testing.

[2] Calculated door section R-value is in accordance with DASMA TDS-163.

†Price upcharge applies.

[3] It is your responsibility to make sure your garage door meets local building codes.

[4] For complete warranty details, visit amarr.com or contact your local Amarr dealer.

Colors
Actual paint colors may vary from samples shown.



Amarr Color Zone®
Over 700 SnapDry™ paint colors. Approved color list is at **amarr.com/amarr_color_zone**.

Check your local Sherwin-Williams store for SnapDry paint chips.

† LI3138 only when available.
* Price upcharge applies.

Woodgrain finishes are dual directional for all panel designs.

Amarr doors are pre-painted; homeowners can use exterior latex paint for custom colors.
Visit **amarr.com** for painting instructions.
Non-factory painting of garage door voids the paint finish warranty.

Glass Options
Insulated glass† available in Clear, Frost and Dark Tint.

CLEAR (C)



3/32" (0.24cm) Single Strength

OBSCURE (O)†



FROST (WF)†



DARK TINT (WD)†



†Price upcharge applies.

DecraTrim Window Inserts
Window inserts shown on Clear glass; inserts also available with Obscure, Frost and Dark Tint glass.

SHORT PANEL

NO INSERT



STOCKTON (20)



PRAIRIE (21)



CATHEDRAL (22)



CASCADE (23)



WATERFORD (25)



WAGON WHEEL (26)



SUNRAY (27)



FULL SUNRAY (28) Available for 16', 17' and 18' only.



FIVE PIECE SUNRAY (29) for 10' door (True White only)



LONG PANEL

NO INSERT



STOCKTON (20)



PRAIRIE (21)



CATHEDRAL (22)



CASCADE (23)



MOONLITE (24)



WATERFORD (25)



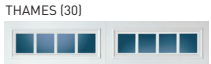
WAGON WHEEL (26)



SUNRAY (27)



THAMES (30)



ARCHED THAMES (31)



FULL SUNRAY (28) Available for 15'6", 15'8", 16', 17' and 18' only.



DecraGlass™ Windows
Tempered obscure glass with baked-on ceramic designs; design visibility varies due to lighting.

SHORT PANEL

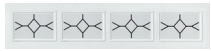
VICTORIAN (54)



RIVIERA (55)*



CHALET (56)



AMERICANA (57)



HEARTLAND (70)



MISSION (71)



PRAIRIE (72)†



JARDIN (75)



TRELLIS (76)



LONG PANEL

VICTORIAN (54)



RIVIERA (55)*



CHALET (56)



AMERICANA (57)



HEARTLAND (70)



MISSION (71)



PRAIRIE (72)†



JARDIN (75)

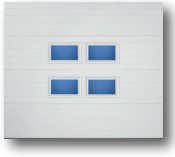


TRELLIS (76)



* Clear glass with printed frost pattern.
† Obscure glass with v-groove.

Mosaic Window Options



The choice is yours.
Add visual interest to your contemporary, mid-century modern or transitional home. With Mosaic Window Options you decide the number and location of windows to create the door design you want. Visit **amarr.com/mosaic** for design inspirations.

Entrematic
165 Carriage Court
Winston-Salem, NC 27105
800.503.DOOR
www.amarr.com

Door specifications and technical data subject to change without notice.
Sectional door products from Entrematic may be the subject of one or more U.S. and/or foreign, issued and/or pending, design and/or utility patents.
Entrematic and Amarr as words and logos are trademarks owned by Entrematic Group AB or companies within the Entrematic Group.
©Entrematic Group AB 2020. All rights reserved. Printed in USA Form #6770721/PDF

MADE IN USA

RECYCLED STEEL

Service Partners Gutter Supply, LLC

Specification Sheet

.027 x 11 ¾" – Gutter Coil
.027 x 11 $^{7}/_{8}$" – Gutter Coil
5K .027" Aluminum Gutter

Listed below are the specifications on the paint, metal preparation, and finished coating for aluminum gutter coil.

- The aluminum used is alloy 3105-H24which meets the specifications set forth in the "Aluminum Standards and Data 1988" published by the Aluminum Association. The gauge of the aluminum for the gutter is .027, plus or minus .002.

- The surface of the aluminum sheet is thoroughly cleaned and dried to remove residual oils and impurities using a 140°F-160°F hot water solution of potassium hydroxide provided by Henkel Surface Technologies and then applying a chromate or titanium base conversion coating, 1402W or 1455SF by Henkel Surface Technologies.

- A thermo setting polyester enamel is roller coated and baked at high temperatures for the outside coating. The reverse side of the coil, or wash coat, is a thermo setting polyester enamel applied to help resist corrosion and promote formability.

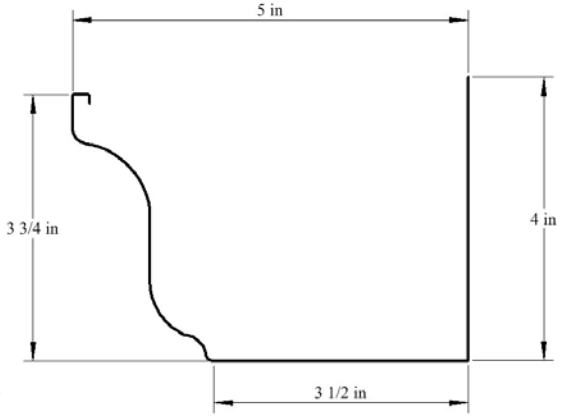
- The color range of the applied finish is .8 mils, plus or minus .2 mils (1.0)

- Made in the USA

- The physical test used on our coated panels includes:

  180 degree-2T bend flex test no tape off using Scotch Brand #610 tape (ASTM D-4145-83)
  Reverse impact –2 lbs./mil no tape off in positive direction using Scotch Brand #610 tape (ASTM D-4146-83)
  Pencil Hardness-F minimum using Eagle Turquoise Brand pencil (ASTM D-3363-92A)
  M.E.K. resistance - 100 double rubs using cheesecloth-mesh size 28 x 24 (ASTM D-5402-92)

Dry Heat flexibility – no tape off on 2T bend after 2minutes at 160 degrees F



Profile 5" K style gutter

Statement Collection™ Products

It's your turn to let your home stand out with our Statement Collection™ products. Curated by our design experts, this collection of Hardie® siding and trim products with ColorPlus® Technology finishes are unique to your home's region. This gorgeous selection is locally stocked in your area, making it easier than ever to find the exterior style of your dreams.

COLORPLUS® TECHNOLOGY

ColorPlus® Technology finishes combine distinct beauty and high performance in a way that no other finish does. They're the easiest way to choose a gorgeous pre-finished color for your house, and feel confident in its staying power.

Hardie® Plank, Hardie® Panel, Hardie® Shingle and Hardie® Trim Batten Color Offering



Scan code to request a sample.

Hardie® Trim Color Offering



Hardie® Soffit Color Offering

Colors shown are as accurate as printing methods will permit. Please see actual product sample for true color.

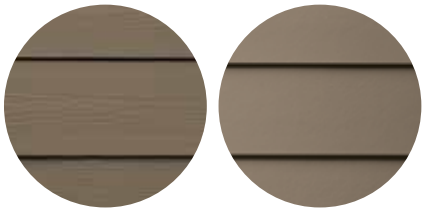
Hardie® Plank

Thickness 5/16 in
Length 12 ft planks

Select Cedarmill® & Smooth

Width 8.25 in

Exposure 7 in

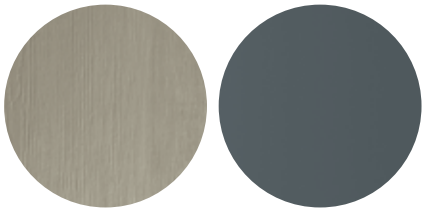


Hardie® Panel

Thickness 5/16 in

Select Cedarmill® & Smooth

Size 4 ft x 10 ft



Hardie® Shingle

Thickness 1/4 in
Length 48 in

Straight Edge Panel

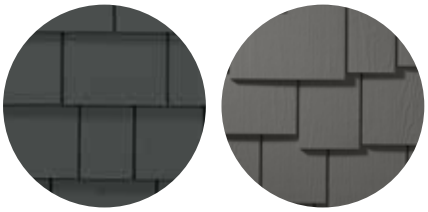
Height 15.25 in

Exposure 7 in

Staggered Edge Panel

Height 15.25 in

Exposure 6 in

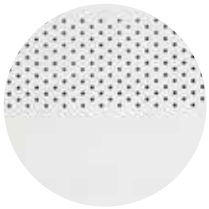


Hardie® Soffit

Thickness 1/4 in

Vented Smooth

Width	12 in	16 in	24 in
Length	12 ft	12 ft	8 ft



Non-Vented Smooth

Width	12 in	16 in	24 in
Length	12 ft	12 ft	8 ft

Hardie® Trim

Length 12 ft

4/4 Smooth

Thickness .75 in

Width 3.5 in* 5.5 in 7.25 in 9.25 in* 11.25 in

5/4 Smooth

Thickness 1 in

Width 3.5 in 4.5 in 5.5 in 7.25 in 9.25 in* 11.25 in

*This size is only available in Arctic White

Batten Boards

Smooth

Thickness .75 in

Length 12 ft. boards

Width 2.5 in

Hardie® Plank



Select Cedarmill®



Smooth



Beaded Select Cedarmill®



Beaded Smooth

Select Cedarmill® & Smooth

Thickness 5/16 in **Length** 12 ft planks

Width	5.25 in	6.25 in	7.25 in	8.25 in	9.25 in*	12 in*
Exposure	4 in	5 in	6 in	7 in	8 in	10.75 in
Prime Pcs/Pallet	360	308	252	230	190	152
ColorPlus® Pcs/Pallet	324	280	252	210	—	—
Pcs/Sq.	25.0	20.0	16.7	14.3	12.5	9.3

Select Cedarmill®

Width	5.25 in	6.25 in	7.25 in	8.25 in
Statement Collection™				•
Dream Collection™	•	•	•	•
Prime		•	•	•

Smooth

Width	5.25 in	6.25 in	7.25 in	8.25 in
Statement Collection™				•
Dream Collection™	•	•	•	•
Prime		•	•	•

Beaded Select Cedarmill®

Width	8.25 in
Exposure	7 in
ColorPlus® Pcs/Pallet	210
Pcs/Sq.	14.3
Statement Collection™	
Dream Collection™	•
Prime	•

Beaded Smooth

Width	8.25 in
Exposure	7 in
ColorPlus® Pcs/Pallet	210
Pcs/Sq.	14.3
Statement Collection™	
Dream Collection™	
Prime	•

*9.25 in and 12 in widths do not feature the drip edge

Hardie® Shingle



Staggered Edge Panel

Staggered Edge Panel

Length	48 in
Height	15.25 in
Exposure	6 in
Prime Pcs/Pallet	100
ColorPlus® Pcs/Pallet	100
Sq/Pallet	2
Pcs/Sq.	50.0
Statement Collection™	•
Dream Collection™	•
Prime	•



Straight Edge Panel

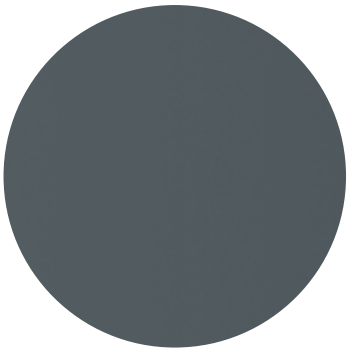
Straight Edge Panel

Length	48 in
Height	15.25 in
Exposure	7 in
Prime Pcs/Pallet	86
ColorPlus® Pcs/Pallet	86
Sq/Pallet	2
Pcs/Sq.	43.0
Statement Collection™	•
Dream Collection™	•
Prime	•

Hardie® Panel



Select Cedarmill®



Smooth



Stucco



Sierra 8

Select Cedarmill®, Smooth, Stucco & Sierra 8

Thickness 5/16 in

Size	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
Prime Pcs/Pallet	50	50	50
ColorPlus® Pcs/Pallet	50	—	50
Pcs/Sq.	3.2	2.8	2.5

Select Cedarmill®

Size	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
Statement Collection™			•
Dream Collection™	•		•
Prime	•	•	•

Smooth

Size	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
Statement Collection™			•
Dream Collection™	•		•
Prime	•	•	•

Stucco

Size	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
Statement Collection™			
Dream Collection™	•		•
Prime	•	•	•

Sierra 8

Size	4 ft x 8 ft	4 ft x 9 ft	4 ft x 10 ft
Statement Collection™			
Dream Collection™			
Prime	•	•	•

Hardie® Trim

4/4 Smooth

Thickness .75 in **Length** 12 ft boards

Width	3.5 in	5.5 in	7.25 in	9.25 in	11.25 in
Prime Pcs/Pallet	312	208	156	104	104
ColorPlus® Pcs/Pallet	312	208	156	104	104
Statement Collection™	•	•	•	AW	•
Dream Collection™	•	•	•	•	•
Prime	•	•	•	•	•

5/4 Smooth

Thickness 1 in **Length** 12 ft boards

Width	3.5 in	4.5 in	5.5 in	7.25 in	9.25 in	11.25 in
Prime Pcs/Pallet	240	200	160	120	80	80
ColorPlus® Pcs/Pallet	240	200	160	120	80	80
Statement Collection™	•	•	•	•	AW	•
Dream Collection™	•	•	•	•	•	•
Prime	•	•	•	•	•	•

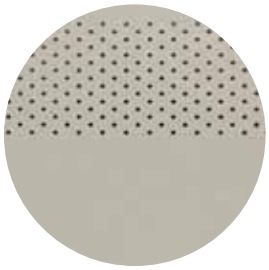
Batten Boards

Thickness	.75 in
Length	12 ft
Width	2.5 in
Prime Pcs/Pallet	437
ColorPlus® Pcs/Pallet	190

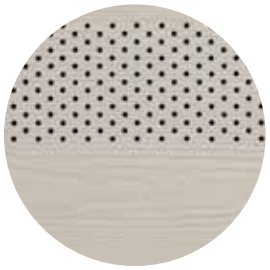
Rustic Grain	
Statement Collection™	
Dream Collection™	•
Prime	•

Smooth	
Statement Collection™	•
Dream Collection™	•
Prime	•

Hardie® Soffit



Vented
Smooth



Vented
Select Cedarmill®



Non-Vented
Smooth

Non-Vented
Select Cedarmill®

Thickness 1/4 in

Length	12 ft	12 ft	8 ft	8 ft
Width	12 in	16 in	24 in	48 in
Prime Pcs/Pallet	200	150	100	50
ColorPlus® Pcs/Pallet	216	156	108	—

Vented Smooth

Size	12 ft x 12 in	12 ft x 16 in	8 ft x 24 in
Statement Collection™	•	•	•
Dream Collection™	•	•	•
Prime	•	•	•

Non-Vented Smooth

Size	12 ft x 12 in	12 ft x 16 in	8 ft x 24 in
Statement Collection™	•	•	•
Dream Collection™	•	•	•
Prime	•	•	•

Vented Select Cedarmill®

Size	12 ft x 12 in	12 ft x 16 in	8 ft x 24 in
Statement Collection™			
Dream Collection™	•	•	•
Prime	•	•	•

Non-Vented Select Cedarmill®

Size	12 ft x 12 in	12 ft x 16 in	8 ft x 24 in
Statement Collection™			
Dream Collection™	•	•	•
Prime	•	•	•

Division: 04 00 00 Masonry
Division: 09 24 23 Portland Cement Plaster

MASONRY CEMENT TYPE N

TITAN AMERICA® Type N Masonry Cement has a proven track record on many applications including stucco, mortar for concrete block, clay brick, glass block, stone and decorative masonry jobs. Its qualities are pleasing to designers, masons, and property owners.

- Extensively tested
- Controlled production
- Superb workability
- Excellent crack reduction qualities
- Characteristics desired by masons



MASONRY CEMENT TYPE N



RECOMMENDED USES

Titan America® Masonry Cement Type N is a general purpose masonry cement. Type N Masonry Cement consistency is specifically designed for use in abovegrade unit masonry applications with products such as concrete block, clay brick, glass block and stone.

SPECIFICATIONS AND QUALITIES

Titan America® Masonry Cement is a top quality, multi-purpose product formulated with finely ground Portland cement and special admixtures to meet a wide variety of job requirements. The qualities of the cement include: workability, sand-carrying capacity, adhesiveness, water retention and setting time. Titan America® Masonry Cement Type N when mixed and tested according to the property specifications section of ASTM C-270, will meet the strength requirements for Type N Masonry Cement. Titan America® Masonry Cement Type N meets or exceeds the requirements of ASTM C-91.

INSTRUCTIONS

Titan America® Masonry Cement Type N

Type	PROPORTIONAL MIXING GUIDELINES			Blocks per Bag
	Titan America® Masonry 70 lb. bags	Sand/Arena		Bloques per Saco
		Parts/Partes Cement : Sand Cemento : Arena	Shovels/Part Palas/Parte	
N	1 Bag	2½ : 3½	15–21	66–75

- No allowances for waste, aggregate size or field conditions.
- One bag of Masonry Cement is approximately one cubic foot by volume.
- Approximately 6 #2 shovels of damp, loose sand equals one cubic foot by volume.
- Actual coverage will vary.

CEMENT PREPARATION

Titan America® Masonry Cement Type N will not perform as designed if themixing instructions and proportions are not followed correctly. It is important to ensure that the product does not dry out prematurely; this condition can affect overall strength and durability of the finished product. Mix mortar in a mechanical mixer as follows:

1) Add approximately 2/3 of the potable water required.
2) Add 1/2 of the sand (ASTM C-144 approved) required.
3) Add Titan America® Masonry Cement Type N.
4) Add the remainder of the sand (ASTM C-144 approved).
5) Add enough potable water to bring the mortar to the desired consistency.
6) Allow mortar to mix 5 minutes from the introduction of the last ingredient.

ACCESSORY PRODUCTS

The water and aggregate used in the mixing process should be free of any substance that could adversely affect the hardened masonry or any metal accessories used in the system.

CAUTION

Causes skin irritation, injurious to eyes. Contains Portland Cement. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water. If any cement or cement mixtures get into the eyes, rinse immediately and repeatedly with water for 15 minutes and get prompt medical attention.

KEEP OUT OF THE REACH OF CHILDREN

Titan Florida
11000 NW 121st Way
Medley, FL 33178

For additional information or to obtain Material Safety Data Sheets, please visit www.titanamerica.com or call Customer Service at (800) 226-2057.

2008 ENERGY STAR QUALIFIED FACILITY
This facility meets strict energy performance levels set by the U.S. EPA.
ENERGY STAR
www.energystar.gov

U.S. GREEN BUILDING COUNCIL MEMBER

©2006 Titan Florida TAR-2138-04 9/06

Types M, N, Stucco & Roof Tile Cement

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 11/09/2020 Date of issue: 05/27/2015 Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Types M, N, Stucco & Roof Tile Cement

Synonyms: Masonry cements, Type N, Type S and Stucco

Chemical Family: Calcium Compounds

Intended Use of the Product

Use of the Substance/Mixture: Building materials, construction.

Name, Address, and Telephone of the Responsible Party

Company

Roanoke Cement Company LLC

6071 Catawba Road

Troutville, VA 24175

Pennsuco Cement Company LLC

1100 NW 121st Way

Medley, FL 33178

Emergency Telephone Number CHEMTREC – 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Skin Irrit. 2 H315

Eye Dam. 1 H318

Skin Sens. 1 H317

Carc. 1A H350

STOT SE 3 H335

STOT RE 1 H372

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :



GHS05 GHS07 GHS08

Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H350 - May cause cancer.
H372 - Causes damage to organs through prolonged or repeated exposure.

Precautionary Statements (GHS-US) : P261 - Avoid breathing dust.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P280 - Wear protective gloves, protective clothing, and eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a poison center or doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see section 4 on this SDS).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362 - Take off contaminated clothing and wash it before reuse.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss. Product becomes alkaline when exposed to moisture or water. Exposure can cause chemical burns, or severe irritation of the mucous membranes, skin, eyes, and other exposed areas.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	**Product Identifier**	**% (w/w)**
Cement, portland, chemicals	(CAS No) 65997-15-1	100
Contains (Name)	**Product Identifier**	**% (w/w)**
Limestone	(CAS No) 1317-65-3	30 - 35
Gypsum (Ca(SO4).2H2O)	(CAS No) 13397-24-5	3 - 6
Quartz	(CAS No) 14808-60-7	0 - 5
Iron oxide (Fe2O3)	(CAS No) 1309-37-1	1 - 4
Chromium, ion (Cr 6+)	(CAS No) 18540-29-9	< 0.05

Full text of H-phrases: see section 16

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

**A range of concentration as prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

***More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

****Hexavalent chromium is included due to dermal sensitivity associated with the component.

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Inhalation of large amounts of Types M, N, Stucco & Roof Tile Cement requires immediate medical attention. Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Heavy exposure Types M, N, Stucco & Roof Tile Cement dust, wet mortar or associated water requires prompt attention. Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Seek medical attention immediately. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 60 minutes. Seek medical attention immediately.

Ingestion: Do not induce vomiting. Rinse mouth. Seek medical attention if any problems arise.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye damage. May cause an allergic skin reaction. May cause cancer. Causes skin irritation. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.

Inhalation: Repeated exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. May cause respiratory irritation.

Skin Contact: May cause an allergic skin reaction. Causes skin irritation. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Eye Contact: Causes serious eye damage. Symptoms may include: Redness. Pain. Blurred vision. Severe burns.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause cancer. May cause damage to organs through prolonged or repeated exposure. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: No fire hazard present for this material.

Unsuitable Extinguishing Media: No fire hazard present for this material.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

Advice for Firefighters

Precautionary Measures Fire: No fire hazard present for this material.

Firefighting Instructions: No fire hazard present for this material.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon dioxide, carbon monoxide, sulfur oxides and metal oxide/oxides

Other Information: Refer to Section 9 for flammability properties.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe dust.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop spill if safe to do so. Eliminate ignition sources. Ventilate area.

Environmental Precautions Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has entered the environment, including waterways, soil or air. Materials can enter waterways through drainage systems.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Do not breathe dust.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Good housekeeping is needed during storage, transfer, handling, and use of this material to avoid excessive dust accumulation.

Storage Conditions: Store in a dry, and well-ventilated place. Keep container closed when not in use. Keep/Store away from incompatible materials. Store away from oxidizers, combustible materials, and all ignition sources.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Wet cement is alkaline and is incompatible with acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

Specific End Use(s)

Building materials, construction.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government

Cement, portland, chemicals (65997-15-1)		
Mexico	OEL TWA (mg/m³)	10 mg/m³
Mexico	OEL STEL (mg/m³)	20 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	1 mg/m³ (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)
USA IDLH	US IDLH (mg/m³)	5000 mg/m³
Alberta	OEL TWA (mg/m³)	10 mg/m³
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (total particulate matter containing no Asbestos and <1% Crystalline silica-total particulate) 3 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable particulate)
Manitoba	OEL TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable fraction)
New Brunswick	OEL TWA (mg/m³)	10 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica)
Newfoundland & Labrador	OEL TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable fraction)
Nova Scotia	OEL TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable fraction)
Nunavut	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Ontario	OEL TWA (mg/m³)	1 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable)
Prince Edward Island	OEL TWA (mg/m³)	1 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable fraction)
Québec	VEMP (mg/m³)	10 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust) 5 mg/m³ (containing no Asbestos and <1% Crystalline silica-respirable dust)

Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³
Yukon	OEL STEL (mg/m³)	20 mg/m³
Yukon	OEL TWA (mg/m³)	30 mppcf 10 mg/m³

Limestone (1317-65-3)		
Mexico	OEL TWA (mg/m³)	10 mg/m³
Mexico	OEL STEL (mg/m³)	20 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)
Alberta	OEL TWA (mg/m³)	10 mg/m³
British Columbia	OEL STEL (mg/m³)	20 mg/m³ (total dust)
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (total dust) 3 mg/m³ (respirable fraction)
New Brunswick	OEL TWA (mg/m³)	10 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica)
Nunavut	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Québec	VEMP (mg/m³)	10 mg/m³ (Limestone, containing no Asbestos and <1% Crystalline silica-total dust)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³
Yukon	OEL STEL (mg/m³)	20 mg/m³
Yukon	OEL TWA (mg/m³)	30 mppcf 10 mg/m³

Gypsum (Ca(SO4).2H2O) (13397-24-5)		
Mexico	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction)
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (inhalable fraction)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (total dust) 5 mg/m³ (respirable dust)
Alberta	OEL TWA (mg/m³)	10 mg/m³
British Columbia	OEL STEL (mg/m³)	20 mg/m³ (total dust)
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (total dust) 3 mg/m³ (respirable fraction)
Manitoba	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction)
Newfoundland & Labrador	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction)
Nova Scotia	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction)
Nunavut	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Ontario	OEL TWA (mg/m³)	10 mg/m³ (inhalable)
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m³ (inhalable fraction)
Québec	VEMP (mg/m³)	10 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust) 5 mg/m³ (containing no Asbestos and <1% Crystalline

		silica-respirable dust)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³
Yukon	OEL STEL (mg/m³)	20 mg/m³
Yukon	OEL TWA (mg/m³)	30 mppcf 10 mg/m³
Quartz (14808-60-7)		
Mexico	OEL TWA (mg/m³)	0.1 mg/m³ (respirable fraction)
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
USA ACGIH	ACGIH chemical category	A2 - Suspected Human Carcinogen
USA OSHA	OSHA PEL (STEL) (mg/m³)	250 mppcf/%SiO_2+5, 10mg/m³/%SiO_2+2
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³ (respirable dust)
USA IDLH	US IDLH (mg/m³)	50 mg/m³ (respirable dust)
Alberta	OEL TWA (mg/m³)	0.025 mg/m³ (respirable particulate)
British Columbia	OEL TWA (mg/m³)	0.025 mg/m³ (respirable)
Manitoba	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
New Brunswick	OEL TWA (mg/m³)	0.1 mg/m³ (respirable fraction)
Newfoundland & Labrador	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Nova Scotia	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Nunavut	OEL TWA (mg/m³)	0.1 mg/m³ (respirable mass) 0.3 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	0.1 mg/m³ (respirable mass) 0.3 mg/m³ (total mass)
Ontario	OEL TWA (mg/m³)	0.10 mg/m³ (designated substances regulation-respirable)
Prince Edward Island	OEL TWA (mg/m³)	0.025 mg/m³ (respirable fraction)
Québec	VEMP (mg/m³)	0.1 mg/m³ (respirable dust)
Saskatchewan	OEL TWA (mg/m³)	0.05 mg/m³ (respirable fraction)
Yukon	OEL TWA (mg/m³)	300 particle/mL
Iron oxide (Fe2O3) (1309-37-1)		
Mexico	OEL TWA (mg/m³)	5 mg/m³
Mexico	OEL STEL (mg/m³)	10 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³ (respirable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m³)	10 mg/m³ (fume) 15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³ (dust and fume)
USA IDLH	US IDLH (mg/m³)	2500 mg/m³ (dust and fume)
Alberta	OEL TWA (mg/m³)	5 mg/m³ (respirable)
British Columbia	OEL STEL (mg/m³)	10 mg/m³ (fume)
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (total particulate matter containing no Asbestos and <1% Crystalline silica-total particulate) 3 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica-respirable particulate) 5 mg/m³ (dust and fume)
Manitoba	OEL TWA (mg/m³)	5 mg/m³ (respirable fraction)
New Brunswick	OEL TWA (mg/m³)	5 mg/m³ (particulate matter containing no Asbestos and <1% Crystalline silica, dust and fume) 10 mg/m³ (regulated under Rouge-particulate matter containing no Asbestos and <1% Crystalline silica)
Newfoundland & Labrador	OEL TWA (mg/m³)	5 mg/m³ (respirable fraction)
Nova Scotia	OEL TWA (mg/m³)	5 mg/m³ (respirable fraction)

Nunavut	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Northwest Territories	OEL TWA (mg/m³)	5 mg/m³ (respirable mass) 10 mg/m³ (total mass)
Ontario	OEL TWA (mg/m³)	5 mg/m³ (respirable)
Prince Edward Island	OEL TWA (mg/m³)	5 mg/m³ (respirable fraction)
Québec	VEMP (mg/m³)	5 mg/m³ (dust and fume) 10 mg/m³ (containing no Asbestos and <1% Crystalline silica, regulated under Rouge-total dust)
Saskatchewan	OEL STEL (mg/m³)	10 mg/m³ (dust and fume) 20 mg/m³ (regulated under Rouge)
Saskatchewan	OEL TWA (mg/m³)	5 mg/m³ (dust and fume) 10 mg/m³ (regulated under Rouge)
Yukon	OEL STEL (mg/m³)	10 mg/m³ (fume) 20 mg/m³ (regulated under Rouge)
Yukon	OEL TWA (mg/m³)	5 mg/m³ (fume) 30 mppcf (regulated under Rouge) 10 mg/m³ (regulated under Rouge)

Chromium, ion (Cr 6+) (18540-29-9)		
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 µg/m³

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Clean water should always be readily available for skin and (emergency) eye washing. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles or safety glasses with side shields. Gloves. Protective clothing. Dust formation: dust mask or Respirator (See Below).



Materials for Protective Clothing: Wear suitable materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Goggles or safety glasses with side shields.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use NIOSH-approved dust mask or properly fitted, particulate filter respirator complying with an approved standard (NIOSH/MSHA), if a risk assessment indicates this is necessary.Respirator selection must be based on known or anticipated exposure levels, the hazards of theproduct, and assigned protection factor of the selected respirator.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Solid
Appearance	:	Not available
Odor	:	Odorless
Odor Threshold	:	Not available
pH	:	>11.5 (in water)
Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available

Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Water: 0.1 - 1 % Slightly soluble
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	:	Not expected to present an explosion hazard due to static discharge.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Reacts slowly with water forming hydrated compounds, releasing heat and producing a strong alkaline solution until reaction is substantially complete.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Contact of dust with strong oxidizers may cause fire or explosion. Wet cement and cement clinker is alkaline and is incompatible with acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafluoride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride.

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation.

pH: 12 (in water) (ASTM D 1293-95)

Serious Eye Damage/Irritation: Causes serious eye damage.

pH: 12 (in water) (ASTM D 1293-95)

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: May cause cancer

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Repeated exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Causes skin irritation. Symptoms may include: Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes serious eye damage. Symptoms may include: Redness. Pain. Blurred vision. Severe burns.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: May cause cancer. May causedamage to organs through prolonged or repeated exposure. Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg

Iron oxide (Fe2O3) (1309-37-1)	
LD50 Oral Rat	> 10000 mg/kg

Quartz (14808-60-7)	
IARC Group	1
National Toxicology Program (NTP) Status	Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Iron oxide (Fe2O3) (1309-37-1)	
IARC Group	3

Chromium, ion (Cr 6+) (18540-29-9)	
IARC Group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity **No additional information available**

Chromium, ion (Cr 6+) (18540-29-9)	
LC50 Fish 1	36.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
LC 50 Fish 2	7.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)

Persistence and Degradability Not available

Bioaccumulative Potential Not available

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Ecology – Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

In Accordance with DOT Not regulated for transport

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Types M, N, Stucco & Roof Tile	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

Cement, portland, chemicals (65997-15-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Limestone (1317-65-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Quartz (14808-60-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

Iron oxide (Fe2O3) (1309-37-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Quartz (14808-60-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Cement, portland, chemicals (65997-15-1)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Limestone (1317-65-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Gypsum (Ca(SO4).2H2O) (13397-24-5)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

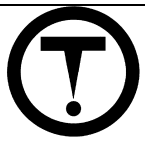
Quartz (14808-60-7)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Iron oxide (Fe2O3) (1309-37-1)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Chromium, ion (Cr 6+) (18540-29-9)
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations

Types M, N, Stucco & Roof Tile	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects



Cement, portland, chemicals (65997-15-1)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
WHMIS Classification	Class E - Corrosive Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Limestone (1317-65-3)	
Listed on the Canadian NDSL (Non-Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Quartz (14808-60-7)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Iron oxide (Fe2O3) (1309-37-1)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Chromium, ion (Cr 6+) (18540-29-9)	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 05/27/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Carc. 1A	Carcinogenicity Category 1A
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H335	May cause respiratory irritation
H350	May cause cancer
H372	Causes damage to organs through prolonged or repeated exposure

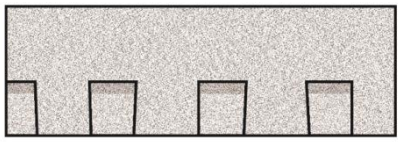
"The information provided herein is believed by seller to be accurate at the time of preparation, or prepared from sources believed to be reliable. Health and safety precautions in this data sheet may not be adequate for all individuals or situations. Users have the responsibility to comply with all laws and procedures applicable to the safe handling and use of the product, to determine the suitability of the product for its intended use, and to understand possible hazards associated with mixing this product with other materials. SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT, THE MERCHANTABILITY, OR FITNESS THEREOF FOR ANY PURPOSE, OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY SELLER".

NA GHS SDS

Technical Data Sheet

Landmark®, Landmark® Premium, Landmark® Pro Shingles, Landmark® Pro/Architect 80 (NW Region Only) Shingles

PRODUCT INFORMATION



Landmark shingles reflect the same high manufacturing standards and superior warranty protection as the rest of CertainTeed's line of roofing products. Landmark Premium (and Algae Resistant-AR), Landmark PRO (and AR) and Landmark (and AR) are built with the industry's toughest fiber glass mat base, and their strict dimensional tolerance assures consistency. Complex granule color blends and subtle shadow lines produce a distinctive color selection. Landmark is produced with the unique NailTrak® nailing feature. ***Please see the installation instruction section below for important information regarding NailTrak.***

In the Northwest Region Landmark PRO (AR) is double-branded as Landmark PRO/Architect 80 (AR).

Landmark algae-resistant (AR) shingles are algae-resistant and help protect against dark or black discoloration, sometimes called staining or streaking, caused by blue-green algae. AR shingles are not available in all regions.

Colors: Please refer to the product brochure or CertainTeed website for the colors available in your region.

Limitations: Use on roofs with slopes greater than 2" per foot. Low-slope applications (2:12 to < 4:12) require additional underlayment. In areas where icing along eaves can cause the back-up of water, apply CertainTeed WinterGuard® Waterproofing Shingle Underlayment, or its equivalent, according to application instructions provided with the product and on the shingle package.

Product Composition: Landmark Series shingles are composed of a fiber glass mat base. Ceramic-coated mineral granules are tightly embedded in carefully refined, water-resistant asphalt. Two pieces of the shingle are firmly laminated together in a special, tough asphaltic cement. All Landmark shingles have self-sealing adhesive strips.

Applicable Standards

ASTM D3018 Type I
ASTM D3462
ASTM E108 Class A Fire Resistance
ASTM D3161 Class F Wind Resistance
ASTM D7158 Class H Wind Resistance
UL 790 Class A Fire Resistance
ICC-ES ESR-1389 and ESR-3537
CSA Standard A123.5 (Regional)
Miami-Dade Product Control Approved
Florida Product Approval # FL5444
Meets TDI Windstorm Requirements

Technical Data:

	Landmark (and AR)	**Landmark PRO* (and AR)**	**Landmark Premium (and AR)**
Weight/Square (approx.)	219 to 238 lb **	240 to 267 lb **	300 lb
Dimensions (overall)	13 1/4" x 38 3/4"	13 1/4" x 38 3/4"	13 1/4" x 38 3/4"
Shingles/Square (approx.)	66	66	66
Weather Exposure	5 5/8"	5 5/8"	5 5/8"

*Includes Landmark PRO AR/Architect 80
**Dependent on manufacturing location

INSTALLATION

Detailed installation instructions are supplied on each bundle of Landmark shingles and must be followed. Separate application sheets may also be obtained from CertainTeed.

Hips and Ridges: For capping hip and ridge apply CertainTeed Shadow Ridge®, Cedar Crest® or Mountain Ridge® shingles of a like color.

MAINTENANCE

These shingles do not require maintenance when installed according to manufacturer's application instructions. However, to protect the investment, any roof should be routinely inspected at least once a year. Older roofs should be looked at more frequently.

WARRANTY

Landmark Premium (and AR), Landmark PRO/Architect 80 AR, Landmark PRO (and AR), and Landmark (and AR) shingles carry a lifetime limited, transferable warranty to the consumer against manufacturing defects when applied to stated CertainTeed application instructions for this product. In addition, Landmark Premium (and AR), Landmark PRO (and AR), Landmark PRO/Architect 80 AR, and Landmark (and AR) carry 10-years of SureStart™ Protection. Landmark AR shingles carry a 10-year algae resistance warranty. Landmark Premium AR, Landmark PRO AR, and Landmark PRO/Architect 80 AR shingles carry a 15-year algae resistance warranty. For specific warranty details and limitations, refer to the warranty itself (available from the local supplier, roofing contractor or on-line at www.certainteed.com).

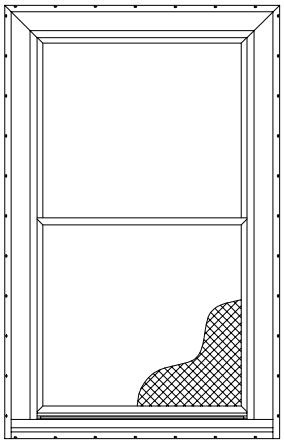
FOR MORE INFORMATION

Sales Support Group: 800-233-8990
Web site: www.certainteed.com
See us at our on-line specification writing tool, CertaSpec®, at www.certainteed.com/certaspec.

CertainTeed
20 Moores Road
Malvern, PA 19355

© 01/20 CertainTeed

Series 3800



INTERIOR VIEW

Features

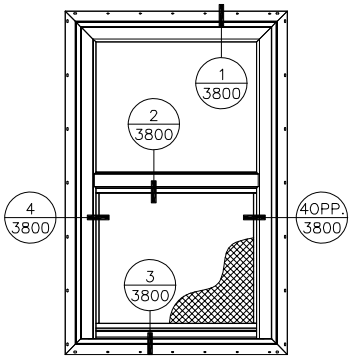
- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - $\frac{3}{4}$" & 1"
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units

Options

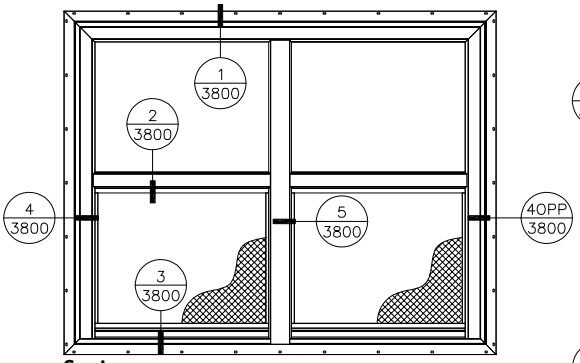
- Low-E and Argon filled glass units available
- Simulated Divided Lites
- Extension Jambs 4 $\frac{9}{16}$ - 6 $\frac{9}{16}$
- Window opening control device
- Nail Fin factory trimmed
- AAMA 450 certified Aluminum Structural mullion

PRODUCT SPECS

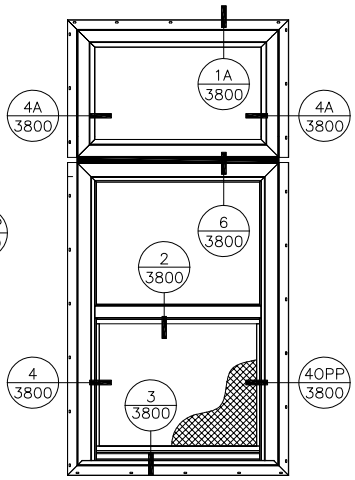
SERIES	PRODUCT TYPE	FRAME DEPTH	AAMA RATING	ENERGY STAR RATING
3800	SINGLE HUNG	3 1/4"	LC-50	ENERGY STAR RATING



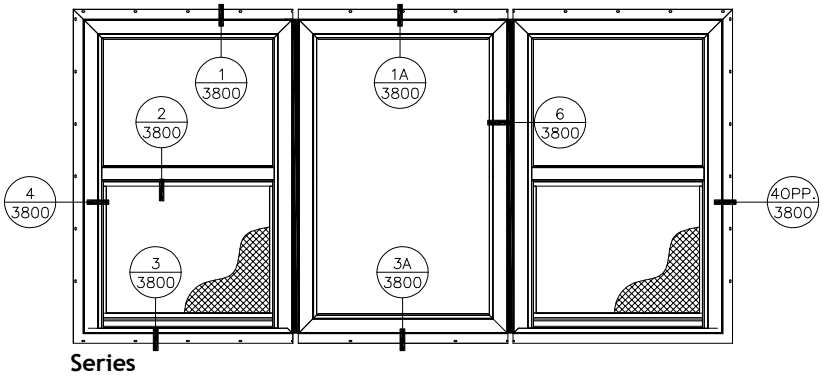
Series
3800SH



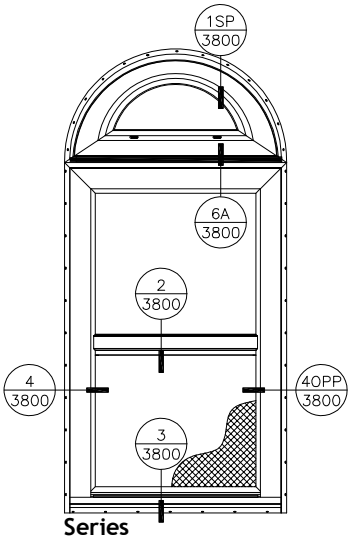
Series
3800-2 SH



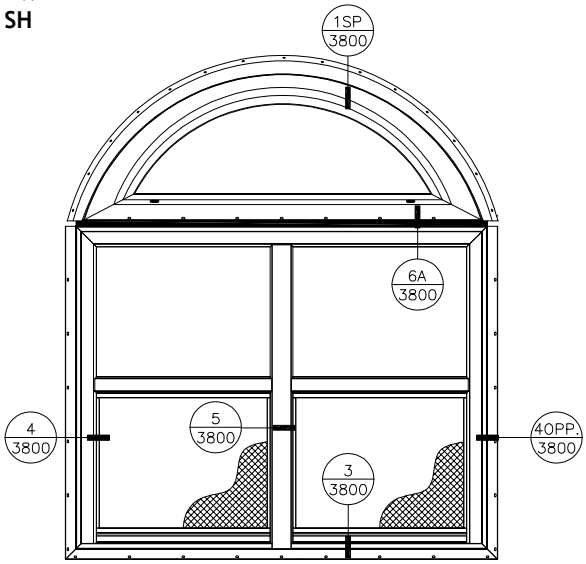
Series
3800 PW
3800 SH



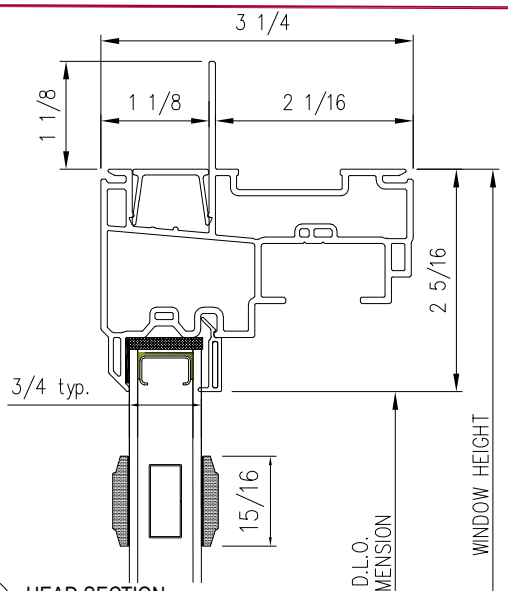
Series
3800 SH
3800 PW
3800 SH



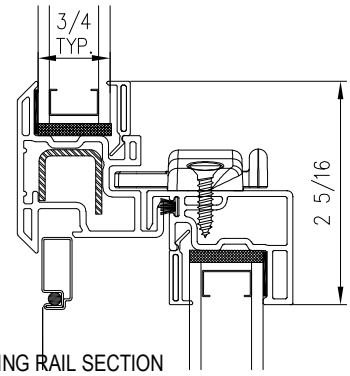
Series
3800 CT
3800 SH



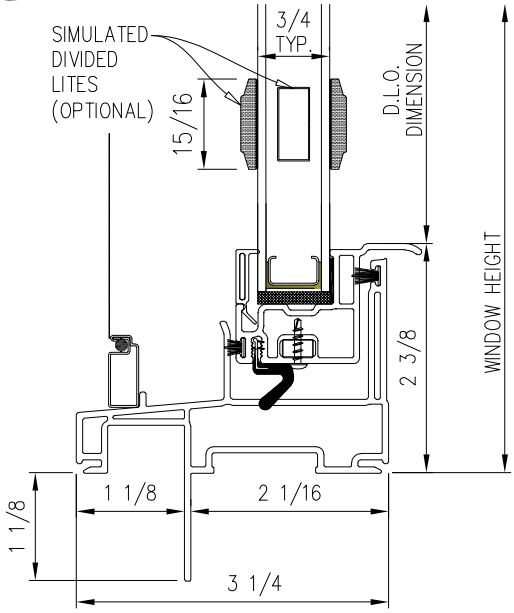
Series
3800 CT
3800-2 SH



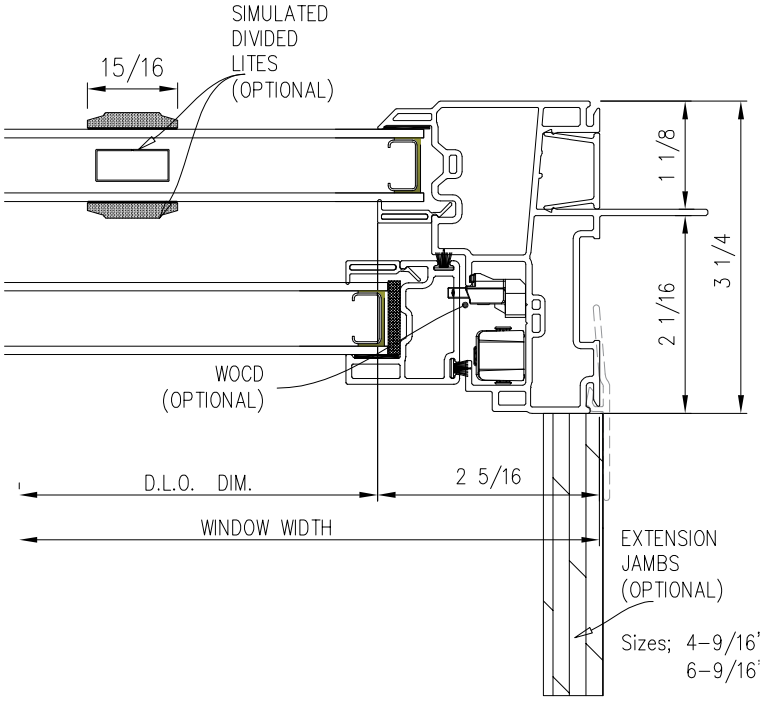
1 / 3800 HEAD SECTION
Scale: N.T.S.



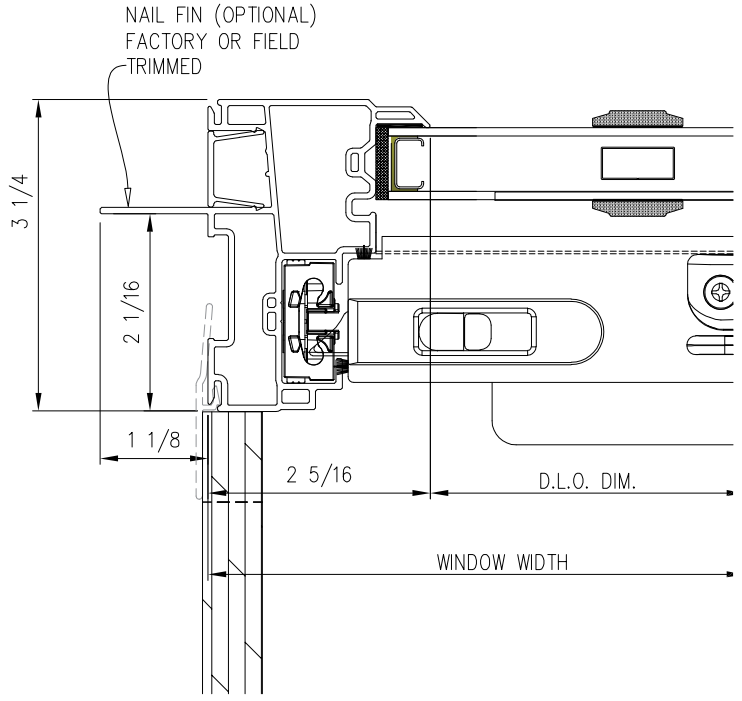
2 / 3800 MEETING RAIL SECTION
Scale: N.T.S.



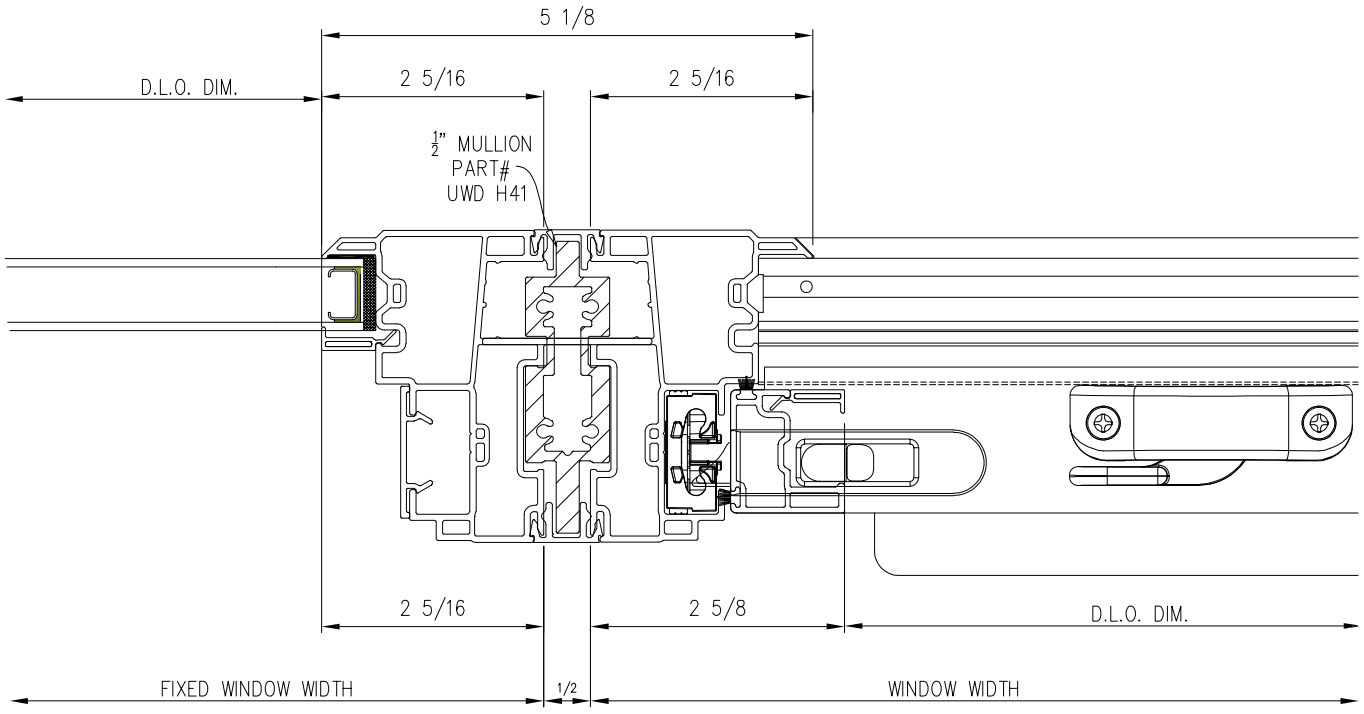
3 / 3800 SILL SECTION
Scale: N.T.S.



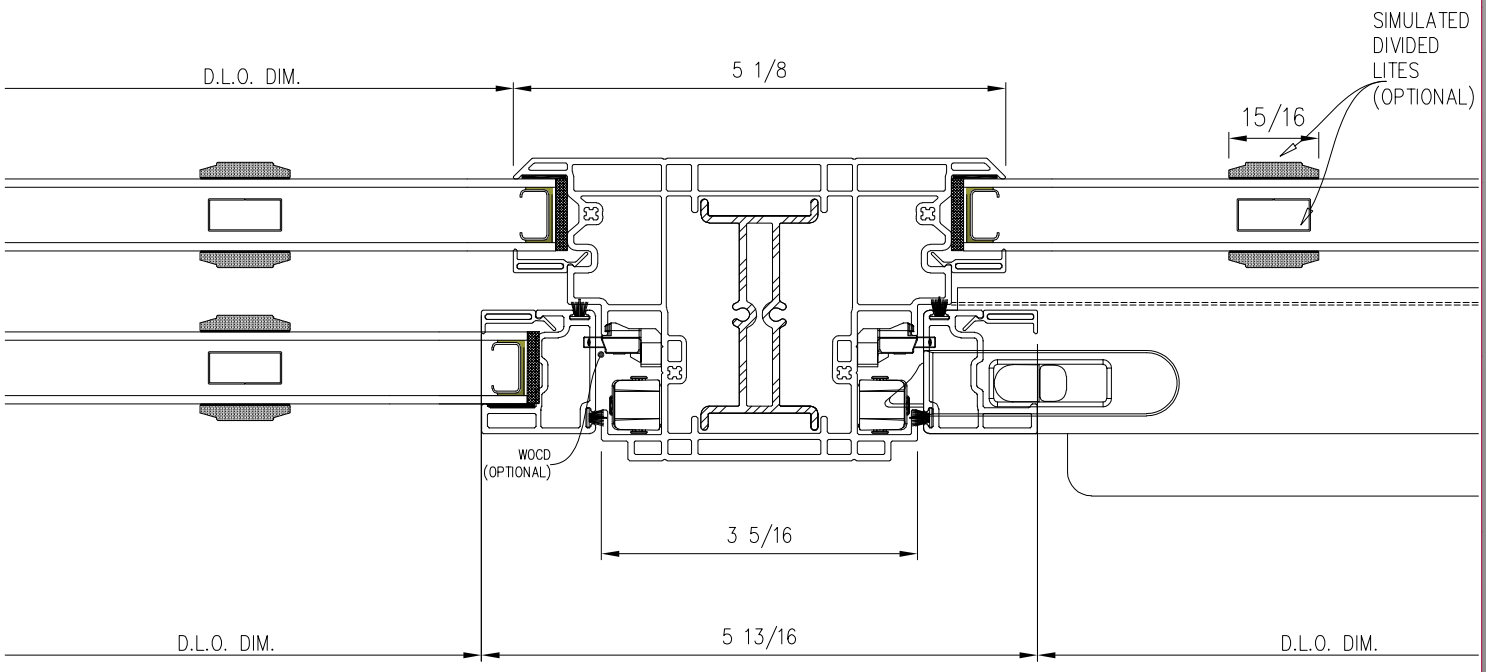
4 OPP / 3800 JAMB SECTION
Scale: N.T.S.



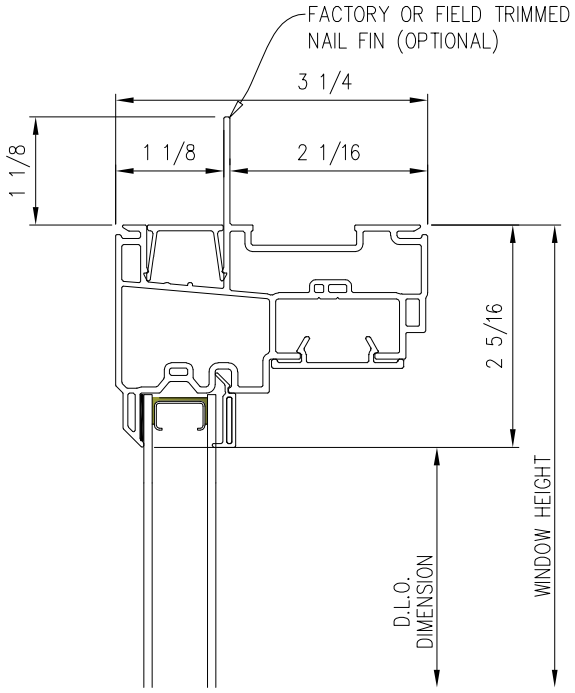
4 / 3800 JAMB SECTION
Scale: N.T.S.



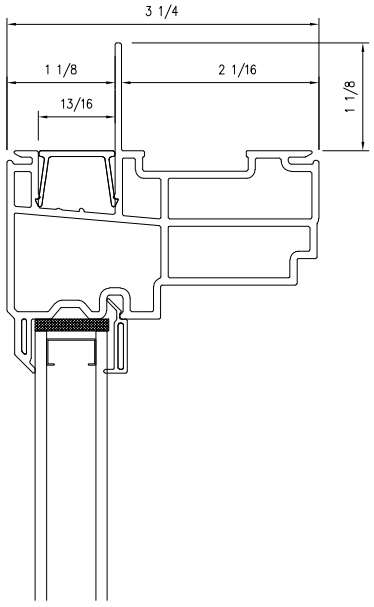
6 / 3800 MULLION V-SECTION
Scale: N.T.S.



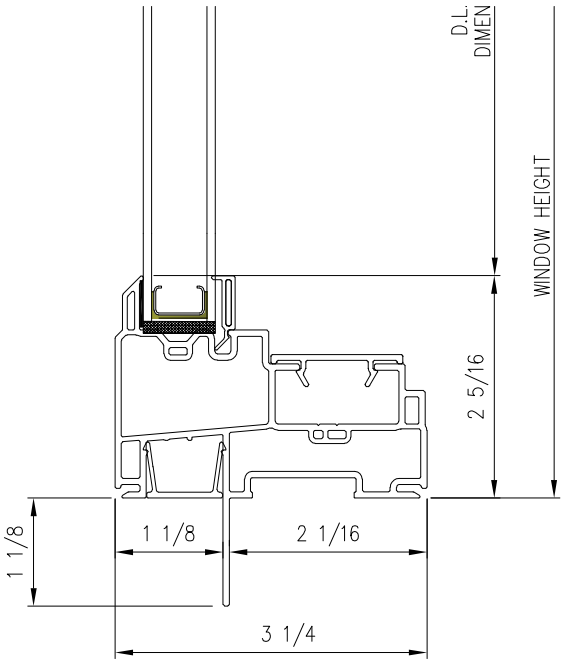
5 / 3800-2 SH COMMON-JAMB SECTION
Scale: N.T.S.



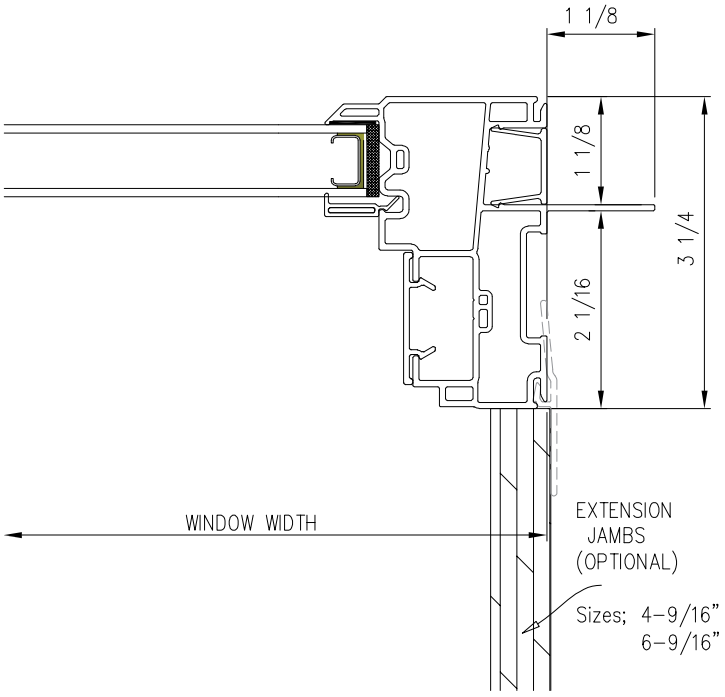
1A 3800 HEAD PW SECTION
Scale: N.T.S.



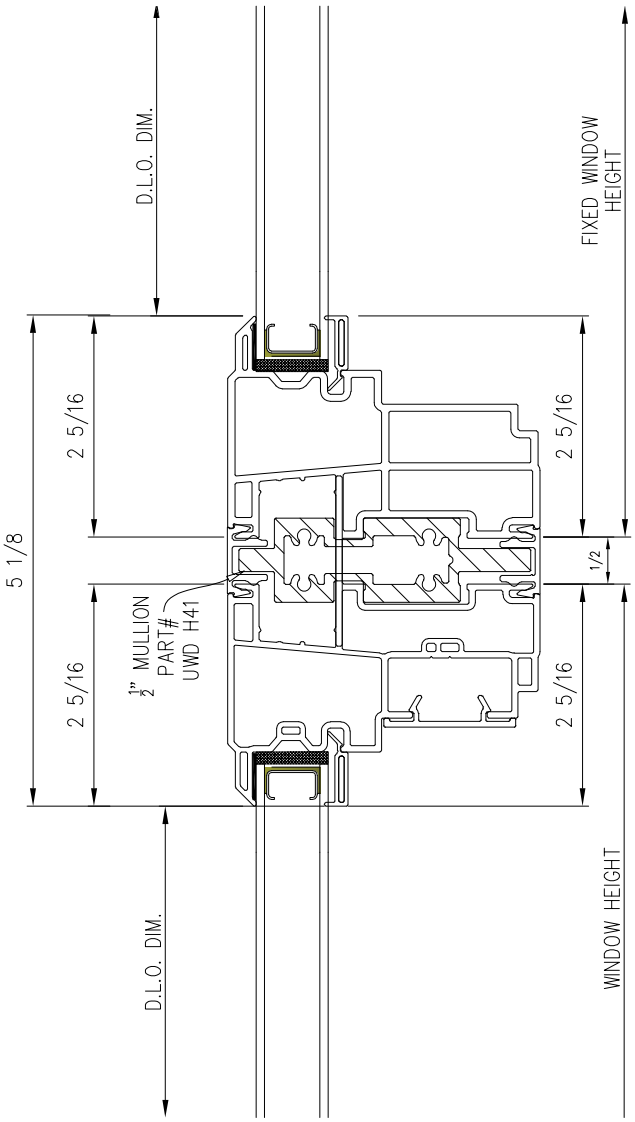
1SP 3800 HEAD CT SECTION
Scale: N.T.S.



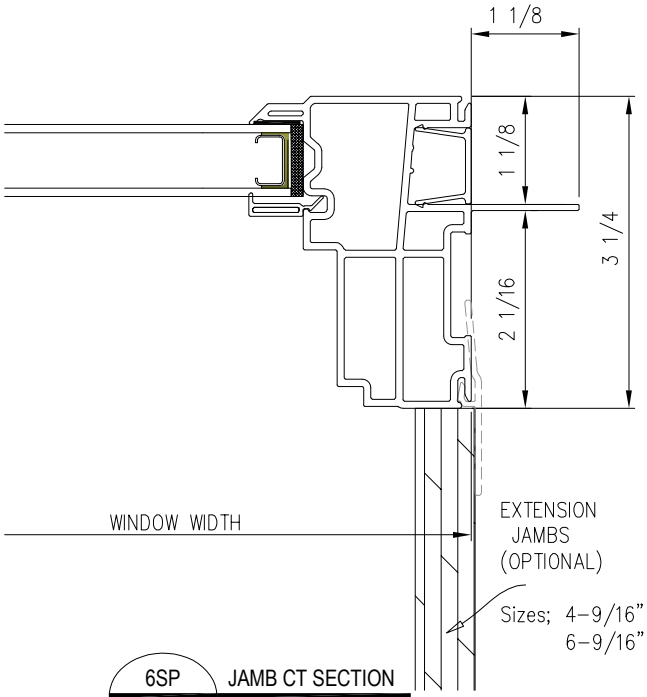
3A 3800 SILL PW SECTION
Scale: N.T.S.



4A 3800 JAMB PW SECTION
Scale: N.T.S.



6A — 3800-1V — MULLIOM H- SECTION
Scale: N.T.S.



6SP — 3800 — JAMB CT SECTION
Scale: N.T.S.

www.unitedwindowmfg.com
24-36 Fadem Road, Springfield NJ 07061

3800 - 3900 Single Hung Window

Product Performance:

AAMA 101 Results:

Window Size	Configuration	AAMA Rating (psf)	Air (cfm/ft2)	Water (psf)
40" x 60"	Single-Sheetrock Pass thru	Class LC-PG35-H	0.15	5.43
72" x 72"	Twin-Sheetrock Pass thru	Class LC-PG35-H	0.20	5.43
44" x 75"	Single	Class LC-PG30-H	0.22	4.6
40" x 84"	Single	Class LC-PG40-H	0.26	6.06
36" x 74"	Single	Class LC-PG50-H	"	7.52
72" x 62"	Twin	Class LC-PG50-H	"	"
72" x 74"	Twin	Class LC-PG50-H	0.3	7.52
108" x 74"	Triple	Class LC-PG50-H	0.27	7.52
60" x 60"	Fixed	Class CW-PG50-FW	0.01	7.52
44" x 74"	Fixed	Class CW-PG50-FW	0.01	7.52
105" x 84"	Twin Fixed-Structual Mull	Class LC-PG50-FW	0.07	12.12

Performance Grade is a numeric designator that defines the performance of a product upon the completion of three tests, structural performance under wind load, resistance to water penetration and resistance to air leakage. The Performance Grade of a window unit is limited by the lowest performance rating of the three tests. The results apply to all window units smaller or equal to the window unit tested.

Product Dimensions:

Vinyl Wall Thickness:	0.065"
Typ. Glass Thickness:	3/4"
Jamb Depth:	3.25"
Mullion Adder:	1/2"
Nail Fin Setback:	1.125"

Rough Opening:

Window Width + 1/2"
Window Height + 1/2"

Size Restrictions:

	Min:	Max:
Width	18"	48"
Height	25"	84"

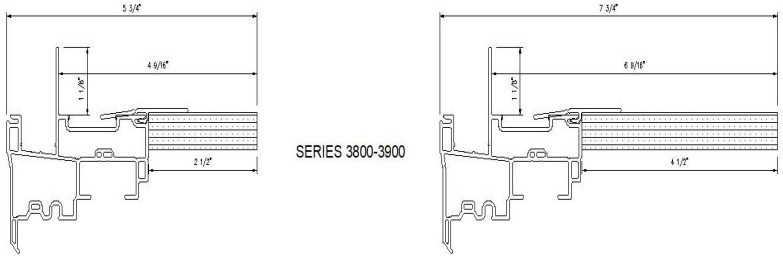
(Max. United Inches 144")



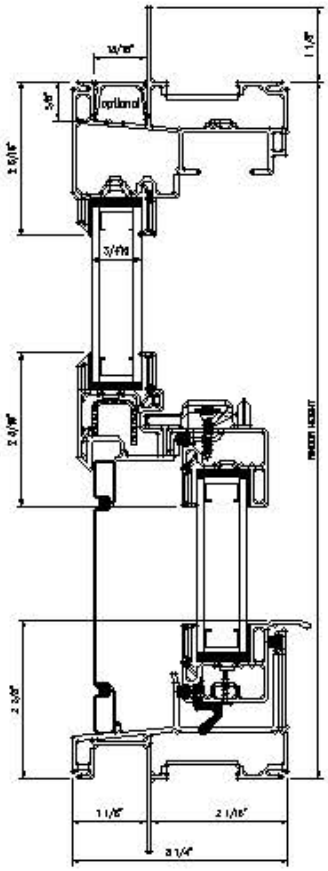
www.unitedwindowmfg.com
24-36 Fadem Road, Springfield NJ 07061

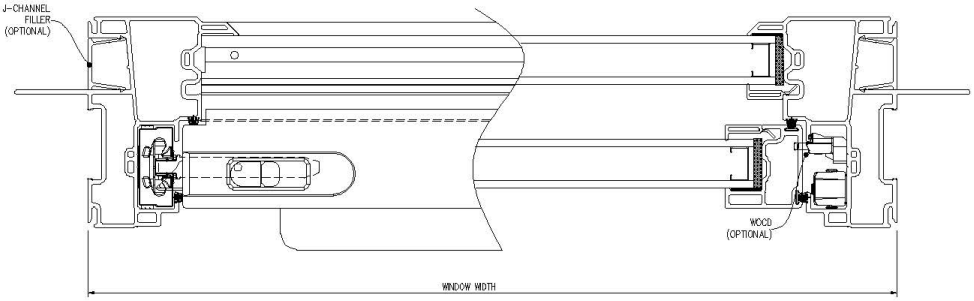
3800-3900 Single Hung Window

Wood Extension jamb: 4-9/16 **6-9/16**



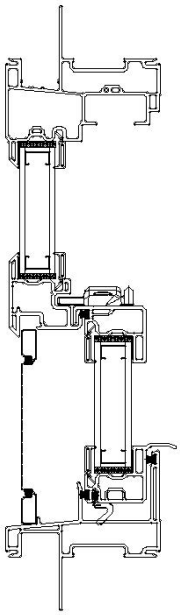
Series 3800 Vertical Diagram



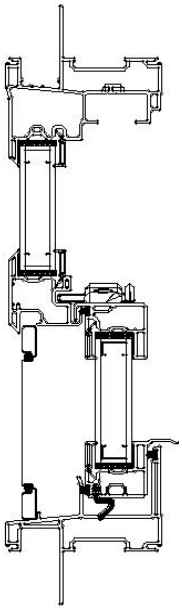


Series 3800 Horizontal Diagram

Vertical Diagrams

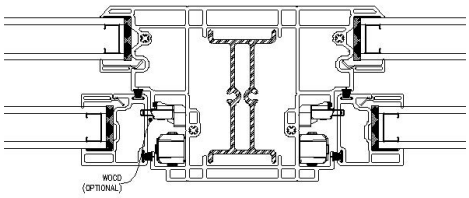


3800 SERIES

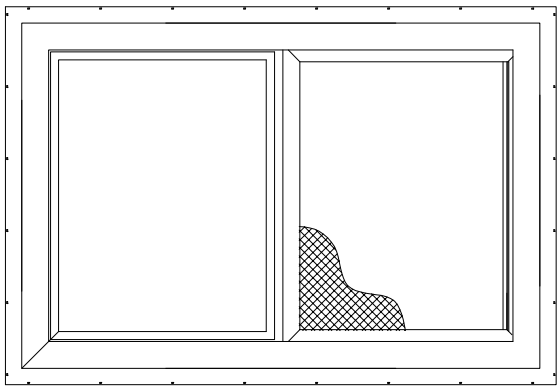


3900 SERIES

3800-3900 Intermediate Jamb



Series 3800



INTERIOR VIEW

Features

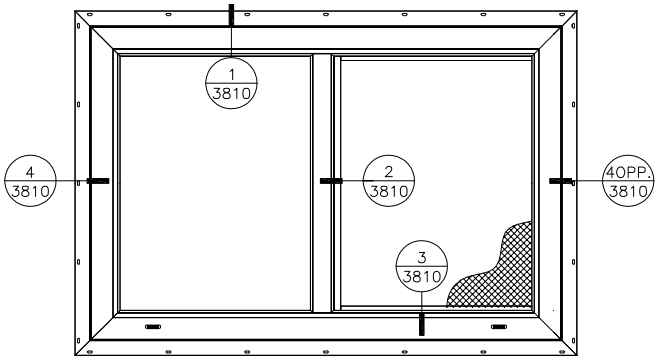
- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- New Construction Application
- Integral J-Channel

Options

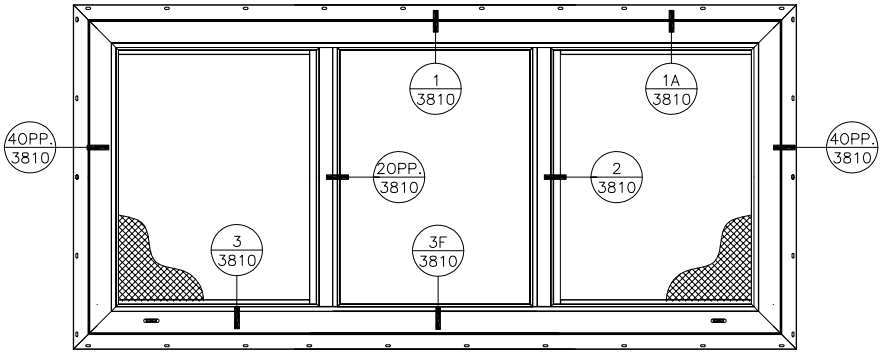
- Low-E and Argon filled glass units available
- Simulated Divided Lites
- Extension Jambs 4 $\frac{9}{16}$ - 6 $\frac{9}{16}$
- Sash Limiter
- Nail Fin factory removed
- Exterior Lamination Black & Bronze

PRODUCT SPECS

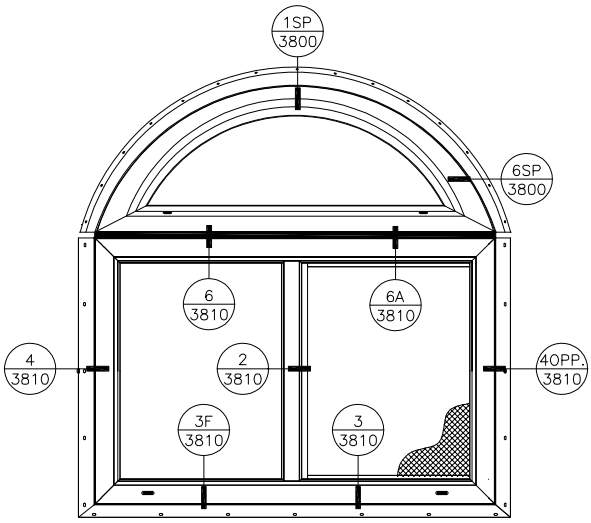
SERIES	PRODUCT TYPE	FRAME DEPTH	AAMA RATING	ENERGY STAR RATING
3800	HORIZONTAL SLIDER	3 1/4"	R-25	ENERGY STAR RATING



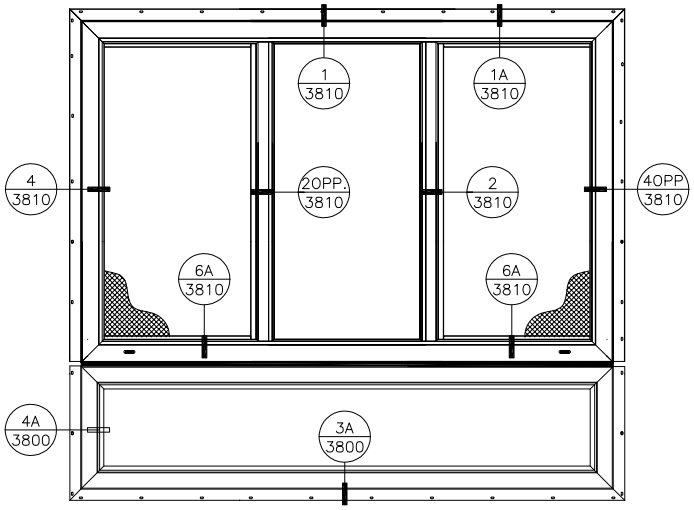
Series
3810 HS



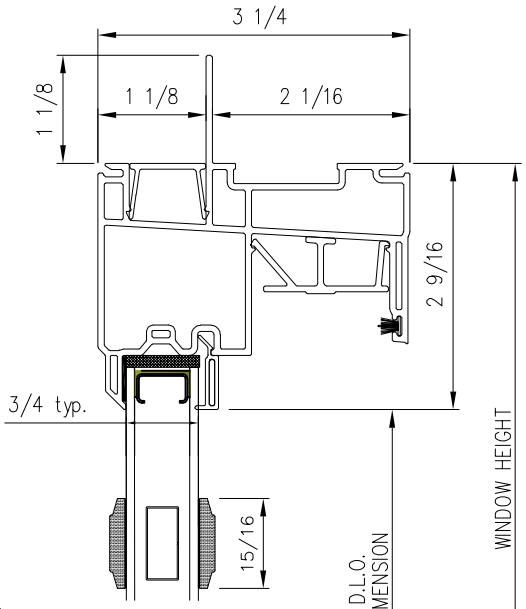
Series
3810-3 HS



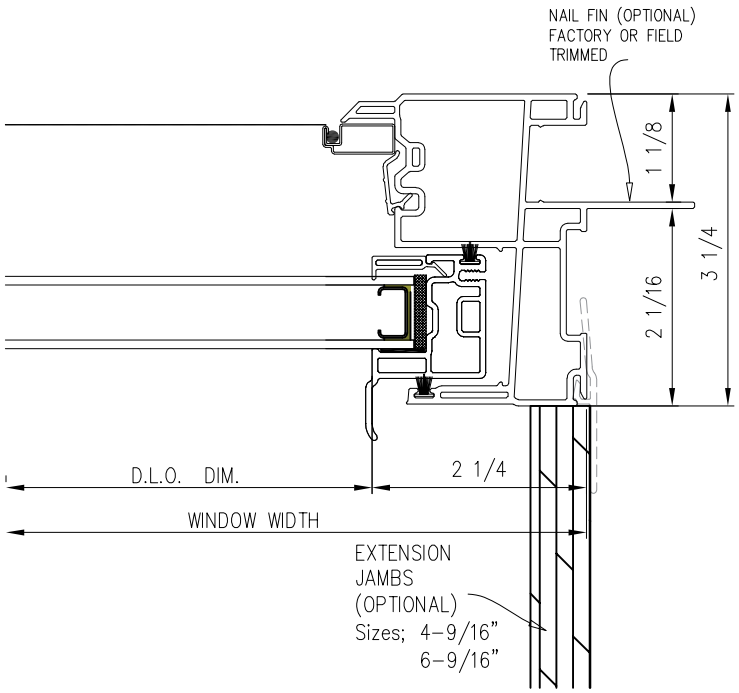
Series
3800 CT
3810 HS



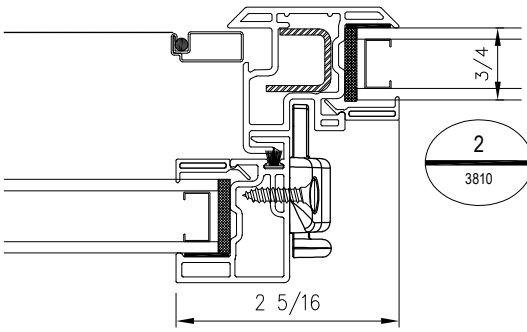
Series
3810 HS
3800 FW



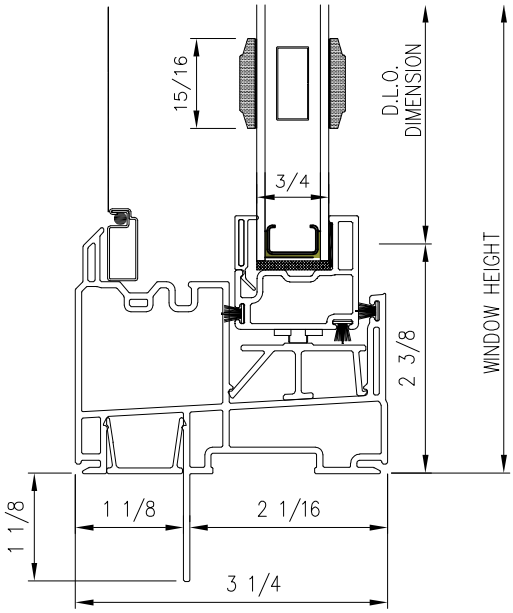
1 / 3810 HEAD SECTION
Scale: N.T.S.



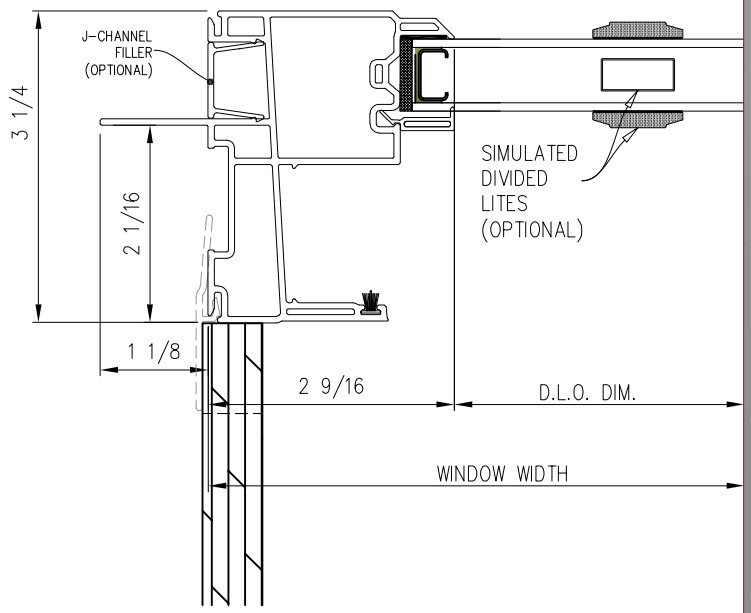
4 OPP / 3810 JAMB SECTION
Scale: N.T.S.



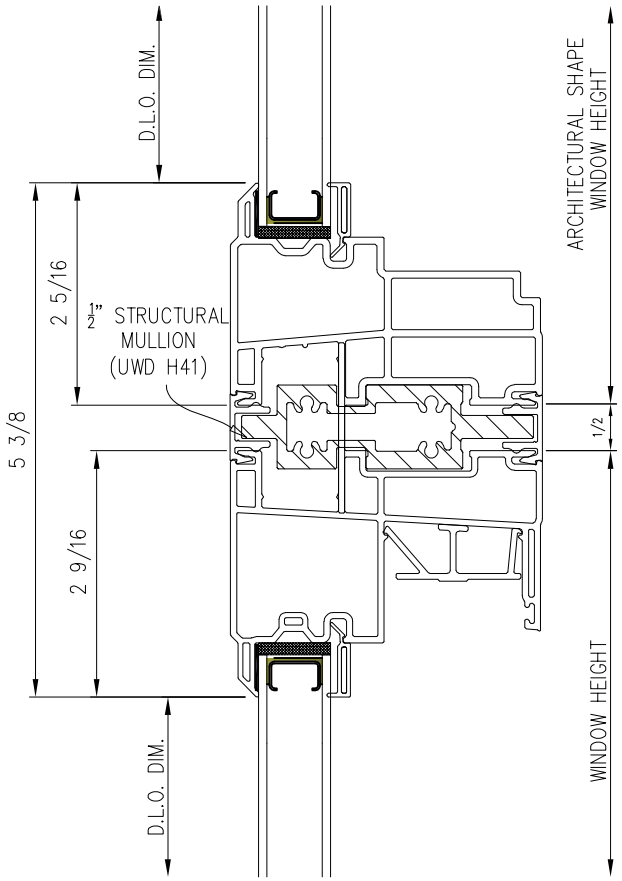
2 / 3810 MEETING RAIL SECTION
Scale: N.T.S.



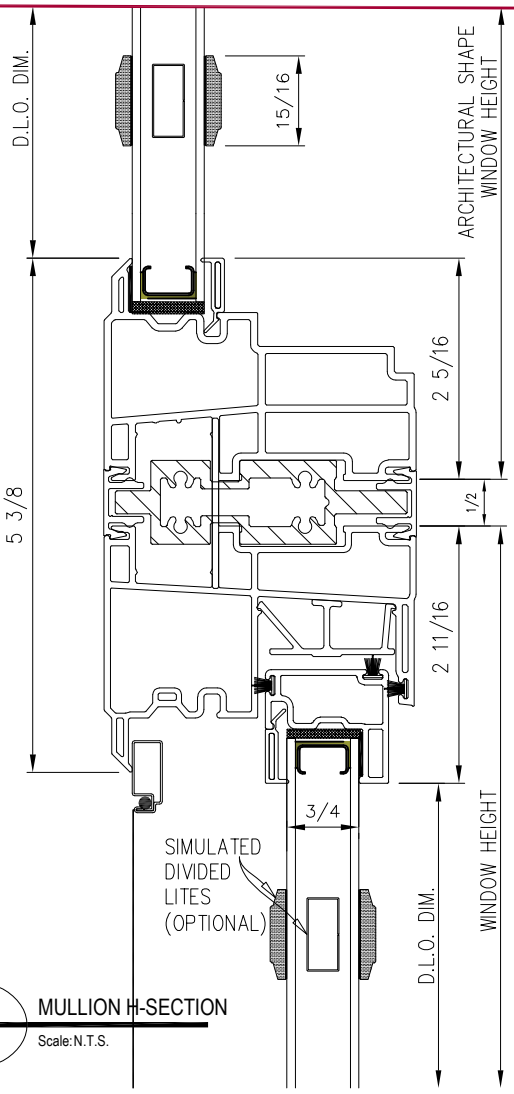
3 / 3810 SILL SECTION
Scale: N.T.S.



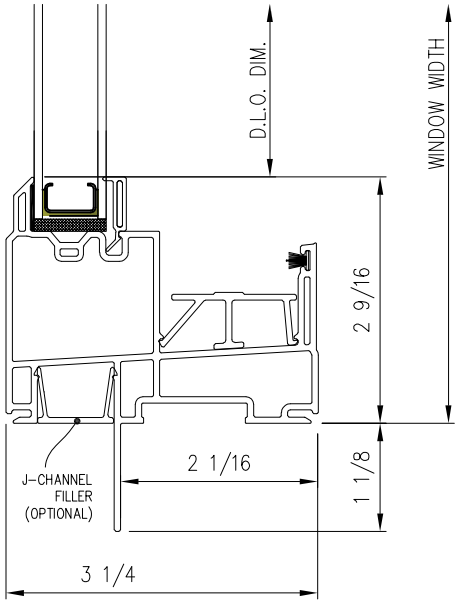
4 / 3810 JAMB SECTION
Scale: N.T.S.



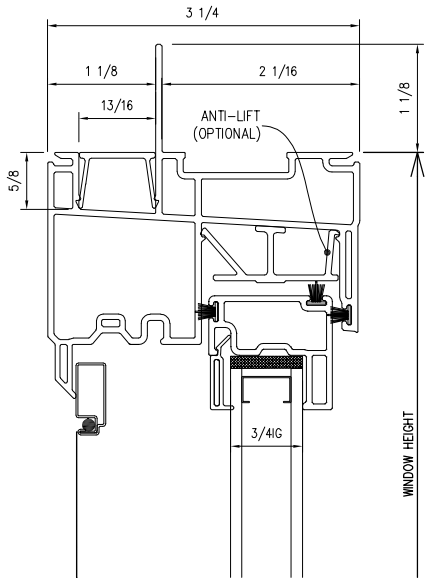
6 — 3810 — MULLION H-SECTION — Scale: N.T.S.



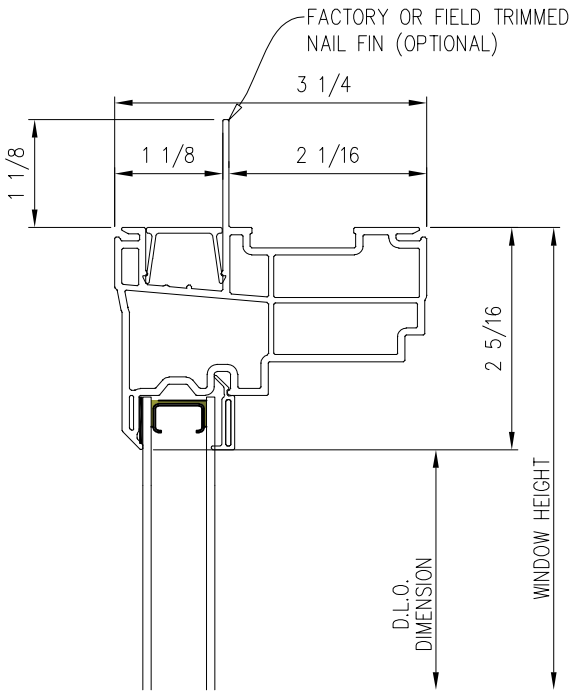
6A — 3810 — MULLION H-SECTION — Scale: N.T.S.



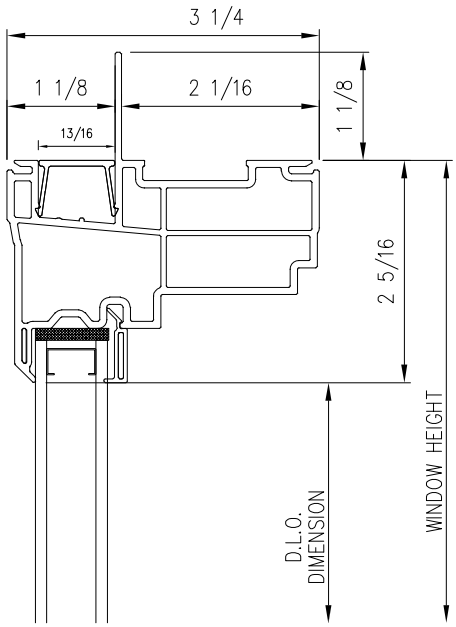
3F — 3810 — Fixed Slider-SILL SECTION — Scale: N.T.S.



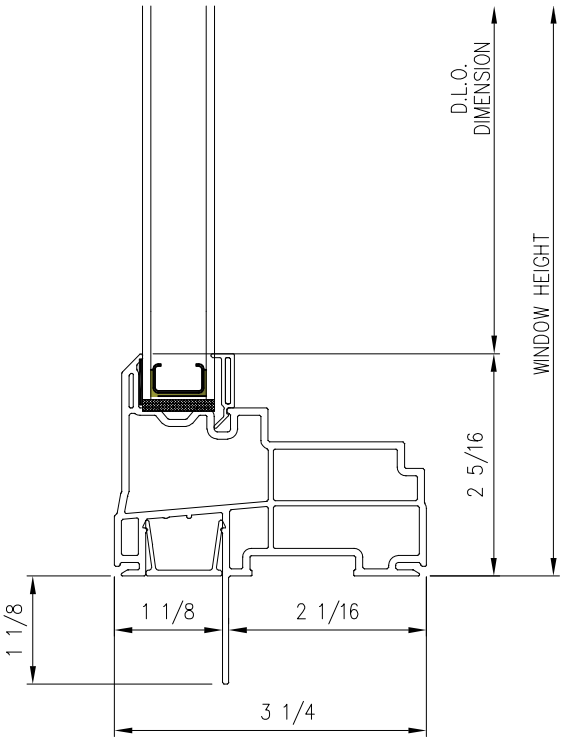
1A — 3810 — HEAD SECTION — Scale: N.T.S.



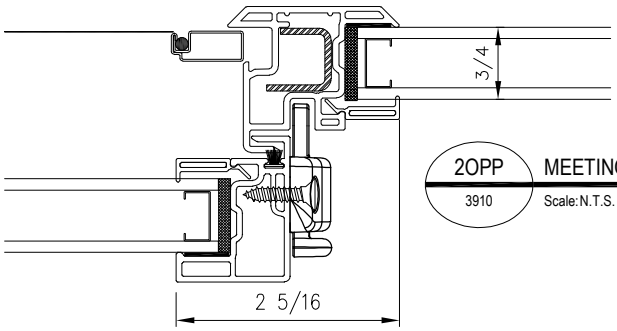
1A 3900 HEAD PW SECTION
Scale: N.T.S.



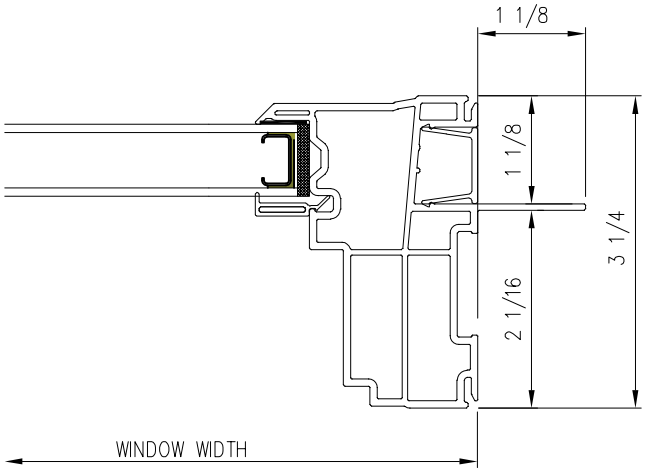
1SP 3900 HEAD CT SECTION
Scale: N.T.S.



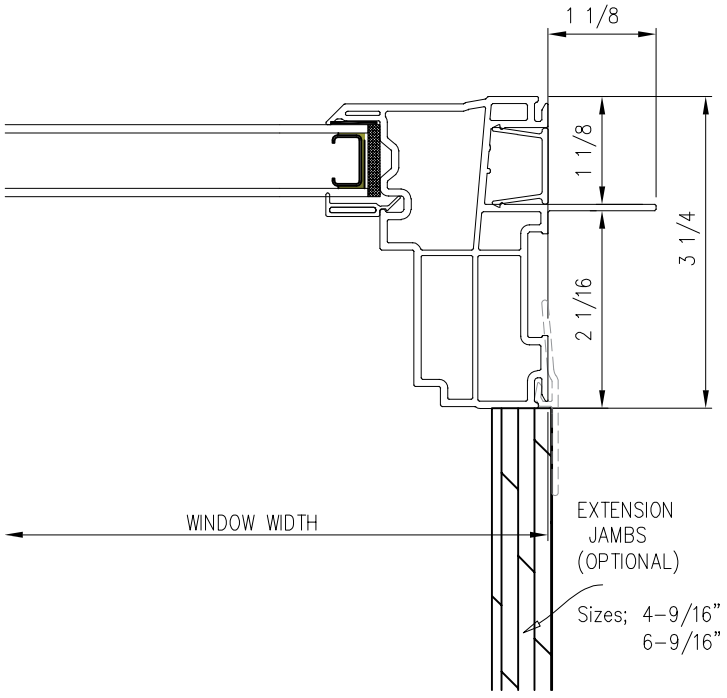
3A 3900 SILL PW SECTION
Scale: N.T.S.



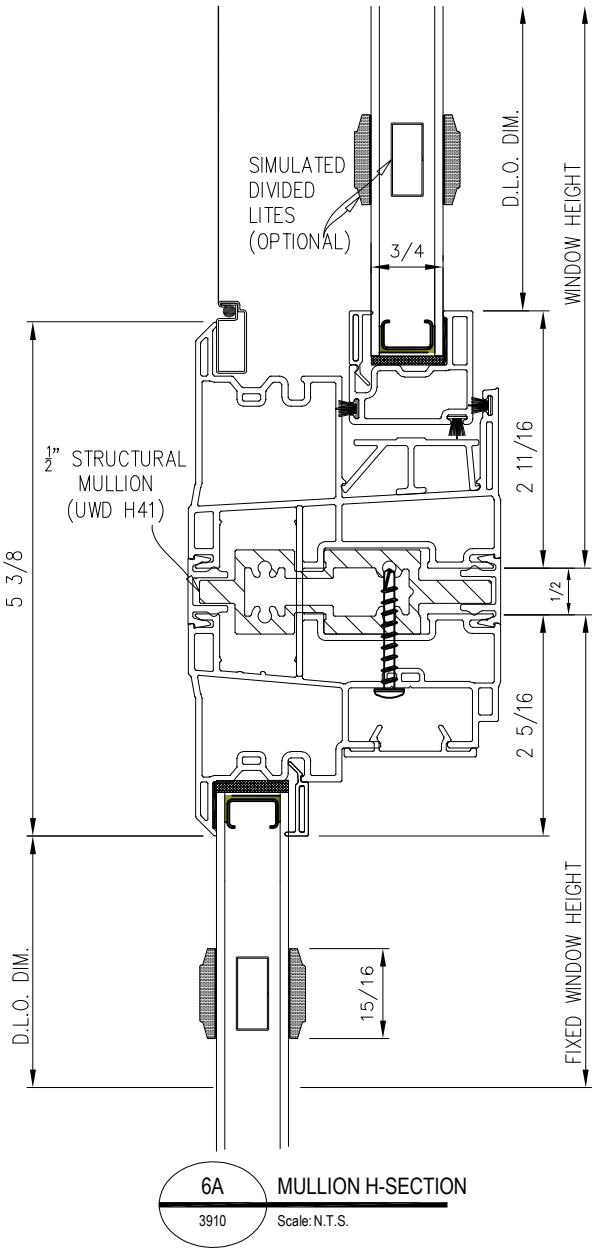
2OPP 3910 MEETING RAIL SECTION
Scale: N.T.S.



6SP / 3900 JAMB CT SECTION
Scale: N.T.S.

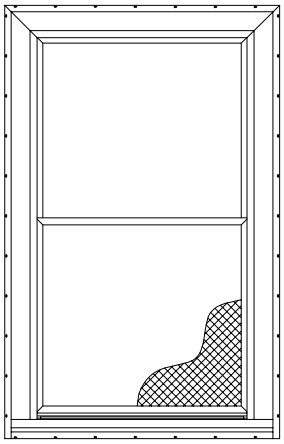


4A / 3900 JAMB PW SECTION
Scale: N.T.S.



6A / 3910 MULLION H-SECTION
Scale: N.T.S.

Series 3900



INTERIOR VIEW

Features

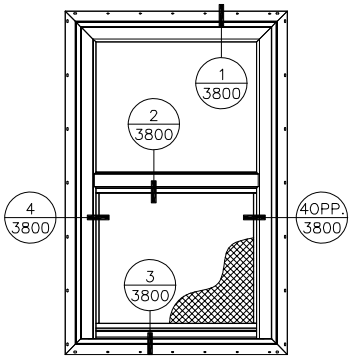
- Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- Brick mold Face
- Integral Nailing Fin
- Inverted Block & Tackle Balance System
- Continuous Head & Sill on Twin & Triple units
- 3/0 x 5/0 SH meets Egress

Options

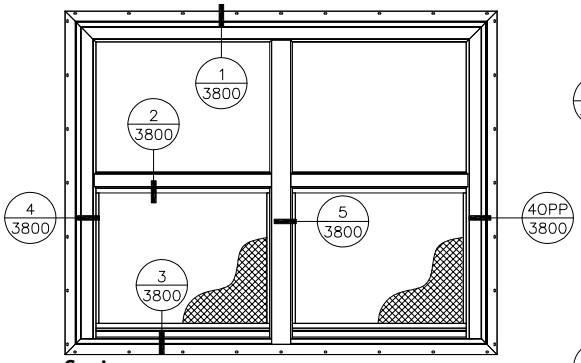
- Low-E and Argon filled glass units available
- Simulated Divided Lites
- Extension Jambs 4 $\frac{9}{16}$ - 6 $\frac{9}{16}$
- Vent Latch
- Sash limiter w/ custodial tilt latch
- Window opening control device
- Nail Fin factory removed
- AAMA 450 certified Aluminum Structural mullion
- Exterior; Lamination (Black & Bronze)
- STC, OITC sound rated

PRODUCT SPECS

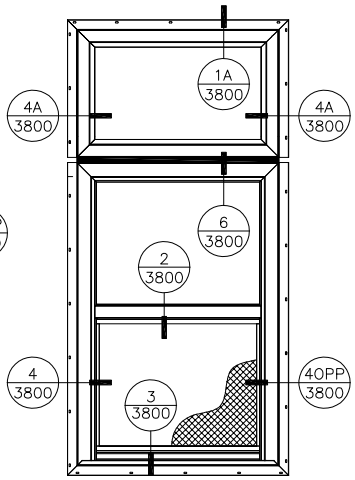
SERIES	PRODUCT TYPE	FRAME DEPTH	AAMA RATING	ENERGY STAR RATING
3900	SINGLE HUNG	3 1/4"	LC-50	ENERGY STAR RATING



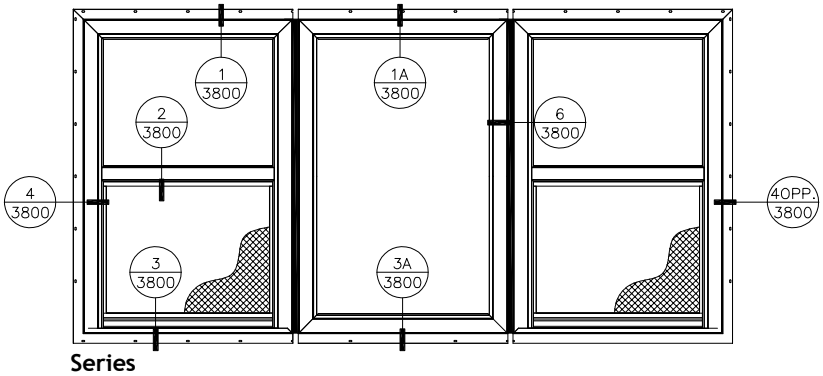
Series
3900SH



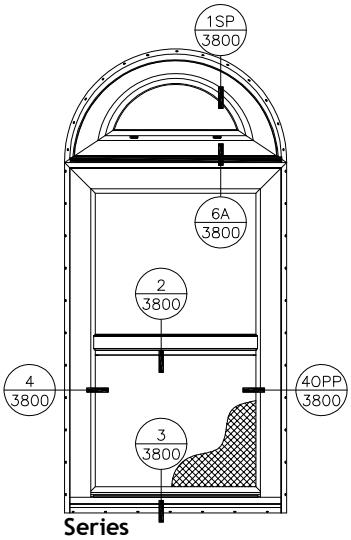
Series
3900-2 SH



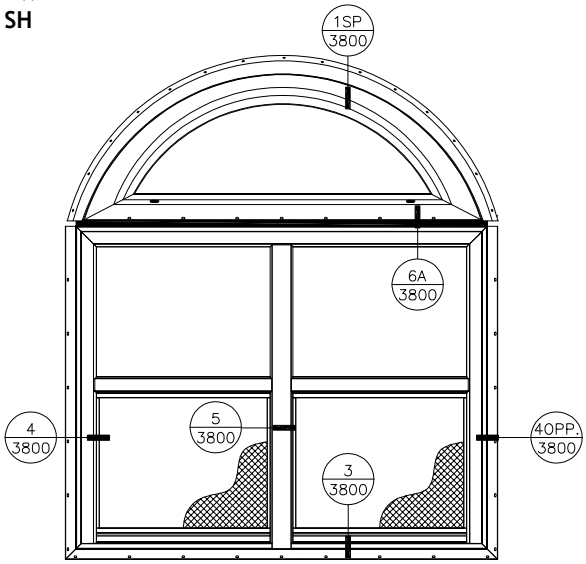
Series
3900 PW
3900 SH



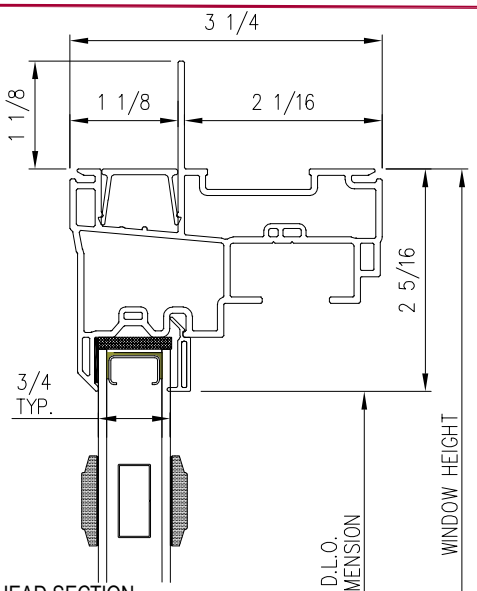
Series
3900 SH
3900 PW
3900 SH



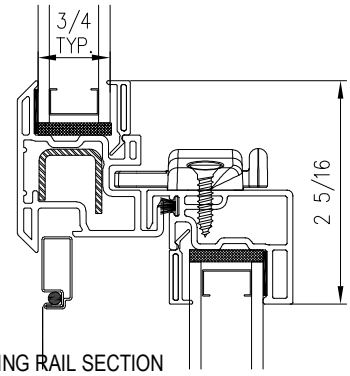
Series
3900 CT
3900 SH



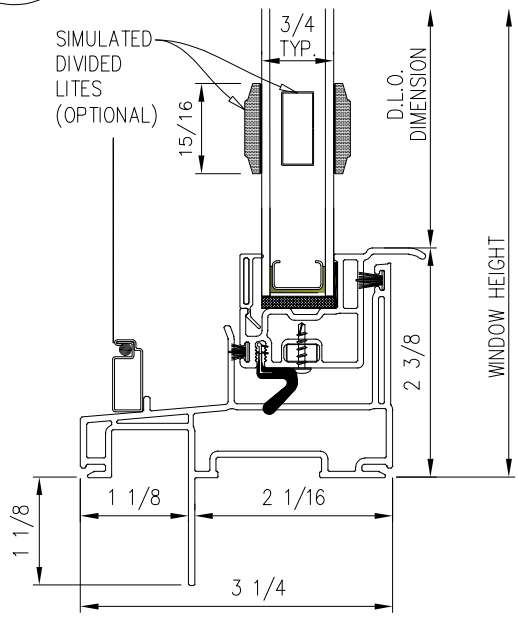
Series
3900 CT
3900-2 SH



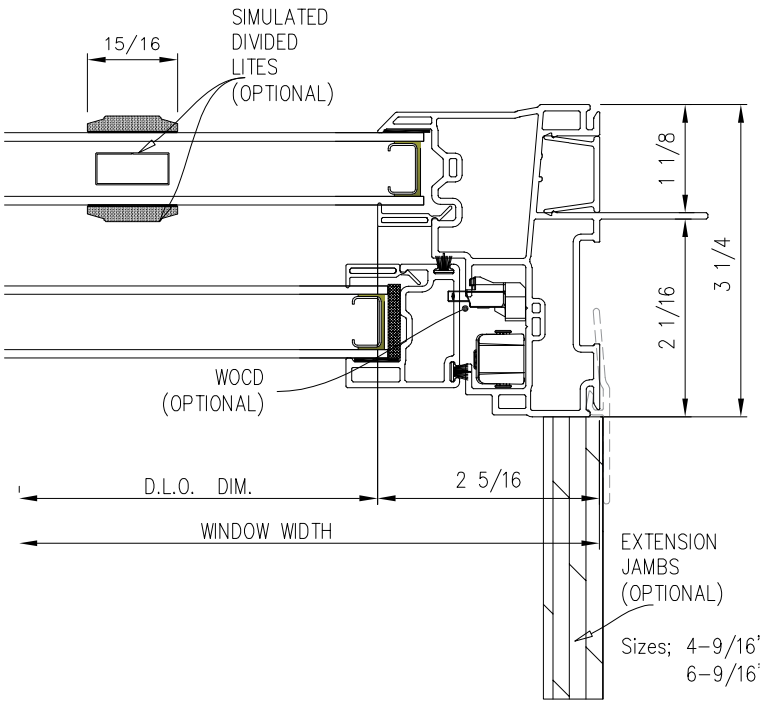
1 / 3900 HEAD SECTION
Scale: N.T.S.



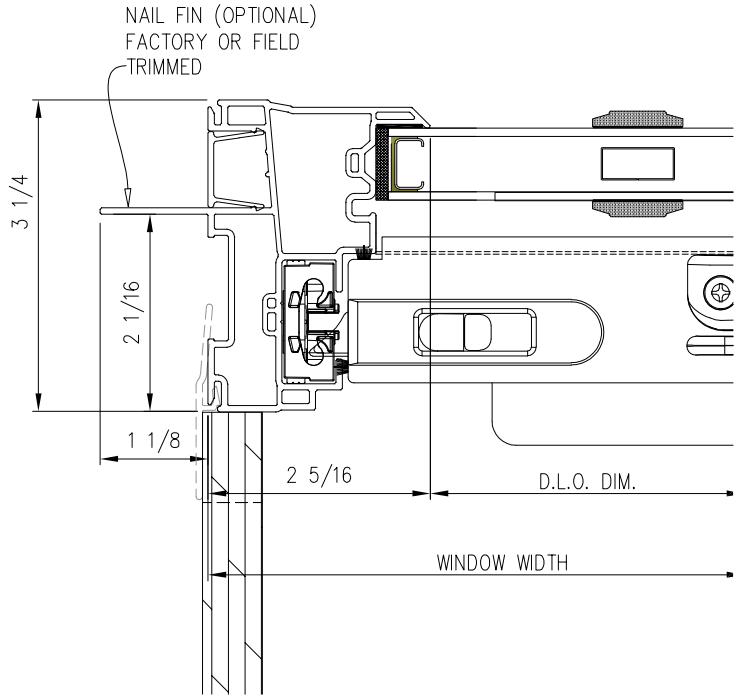
2 / 3900 MEETING RAIL SECTION
Scale: N.T.S.



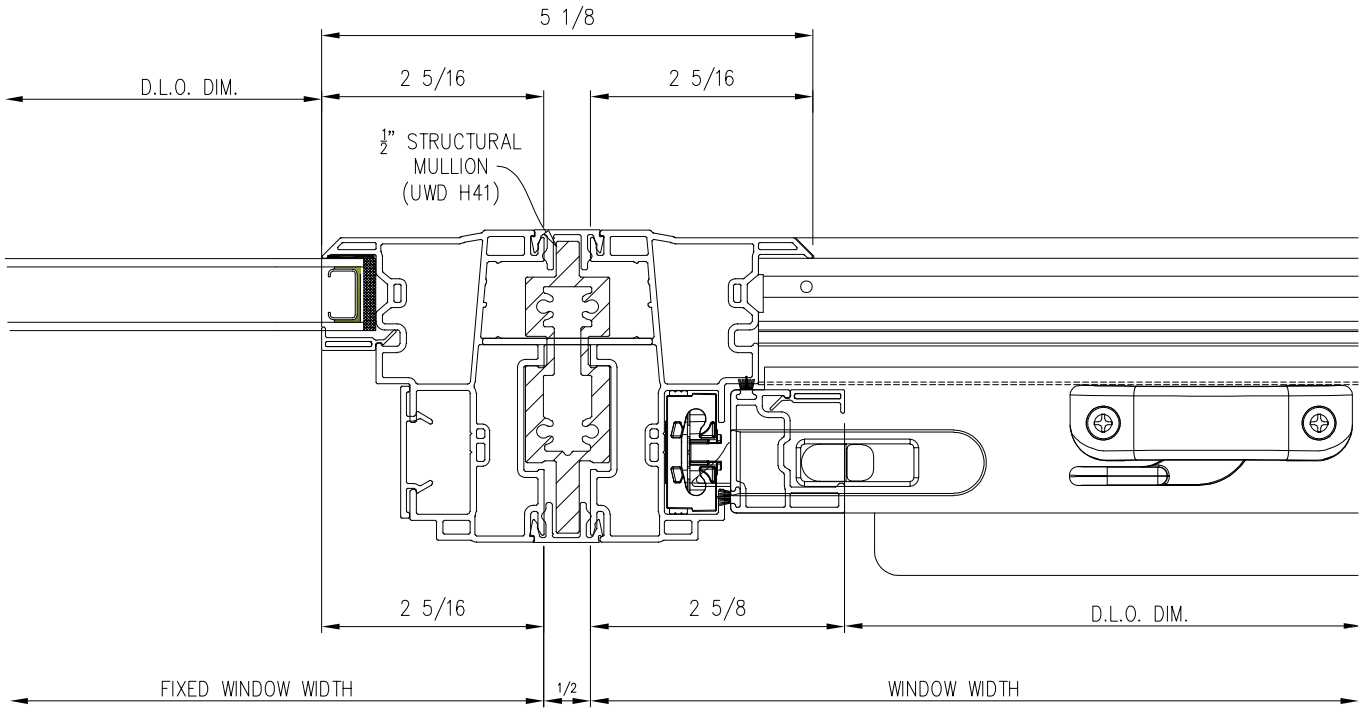
3 / 3900 SILL SECTION
Scale: N.T.S.



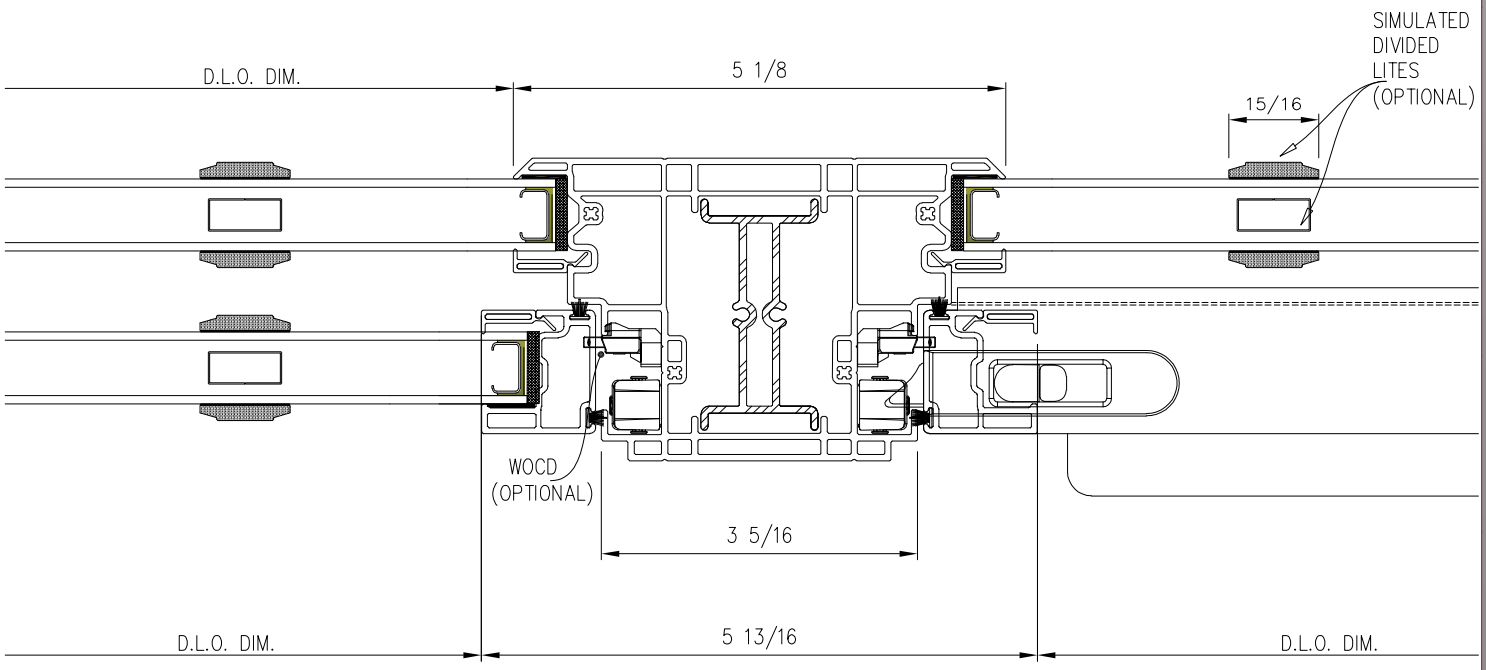
4 OPP / 3900 JAMB SECTION
Scale: N.T.S.



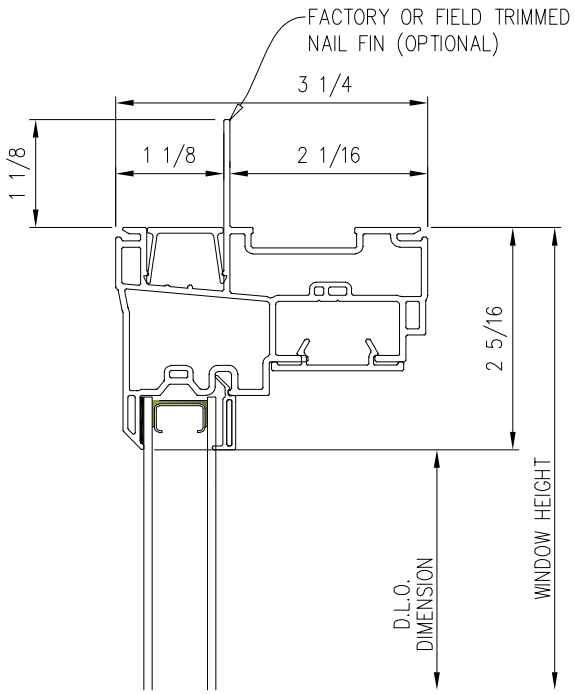
4 / 3900 JAMB SECTION
Scale: N.T.S.



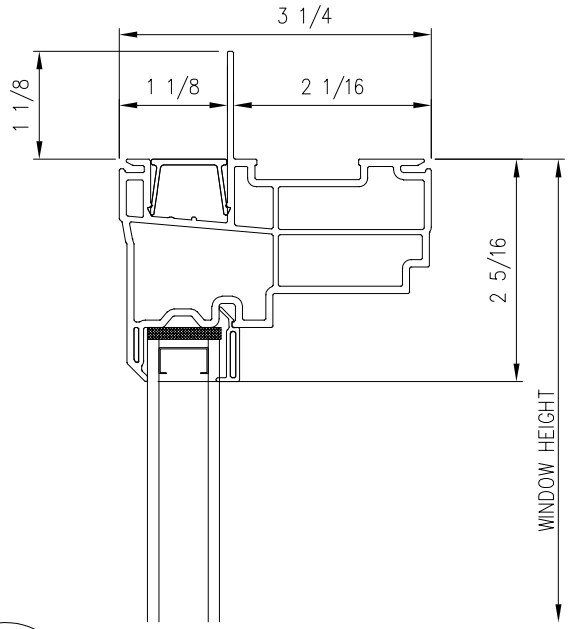
6 / 3900 MULLION V-SECTION
Scale: N.T.S.



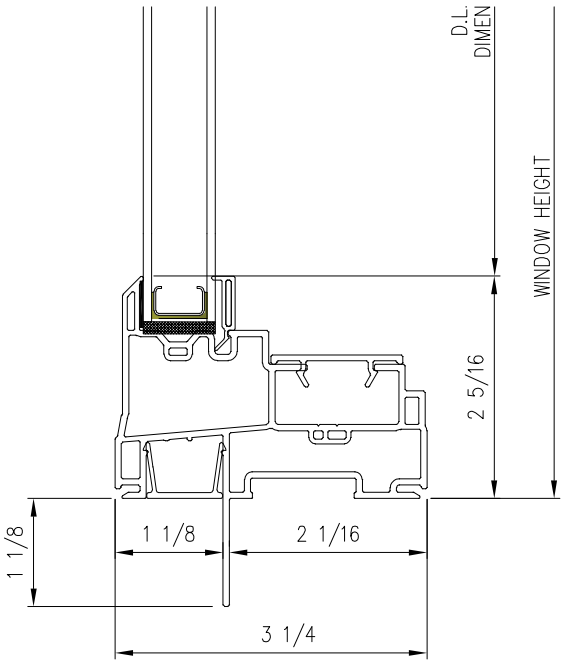
5 / 3900-2 SH COMMON-JAMB SECTION
Scale: N.T.S.



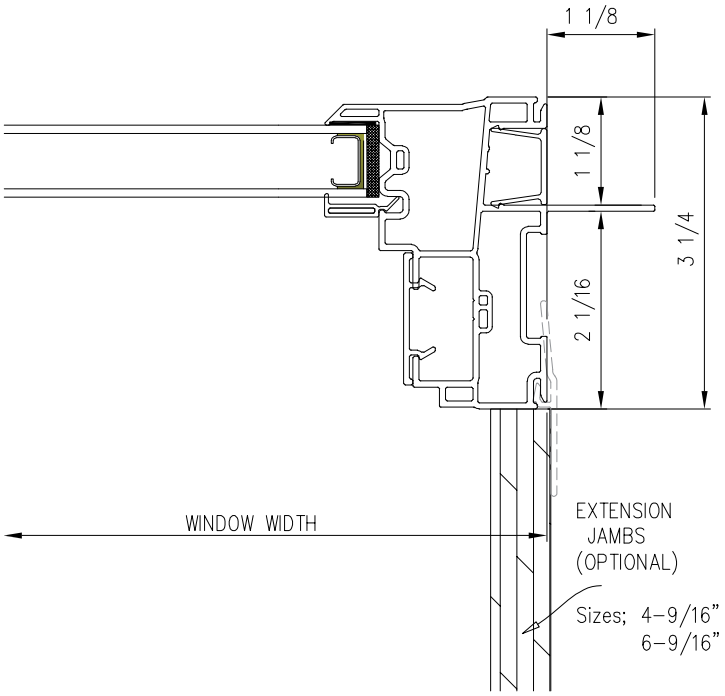
1A HEAD PW SECTION
3900 Scale: N.T.S.



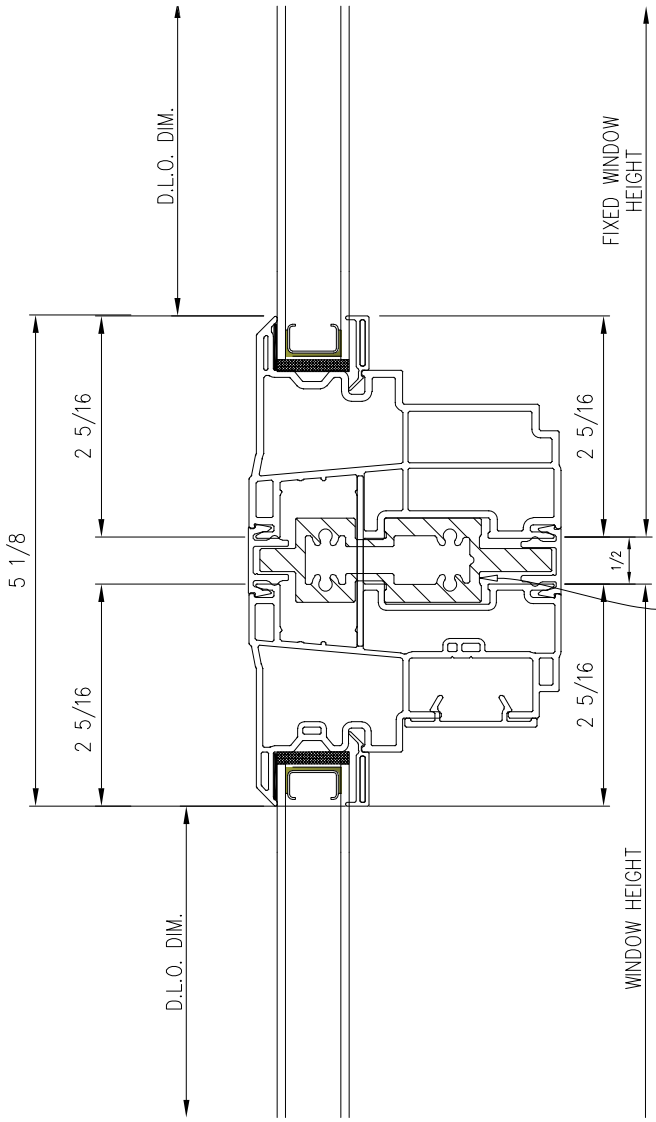
1SP HEAD CT SECTION
3900 Scale: N.T.S.



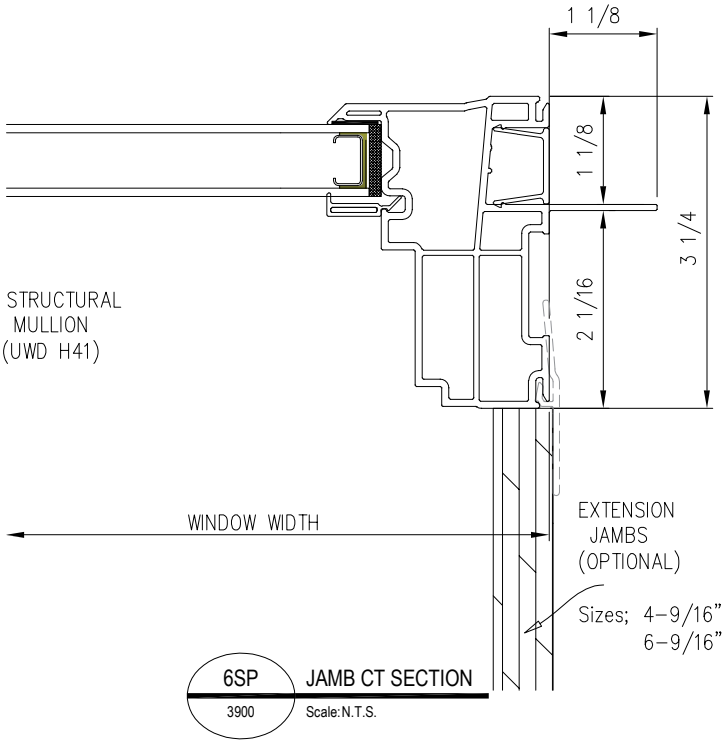
3A SILL PW SECTION
3900 Scale: N.T.S.



4A JAMB PW SECTION
3900 Scale: N.T.S.

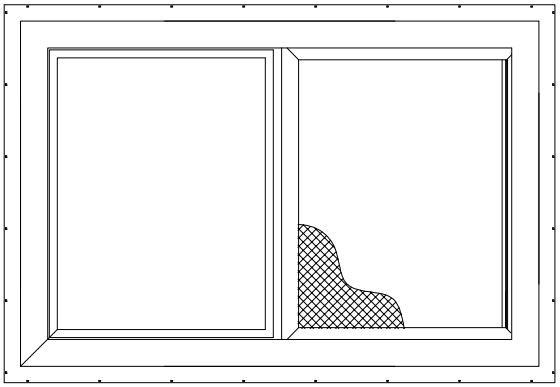


6A — 3900-1V — MULLIOM H- SECTION
Scale: N.T.S.



6SP — 3900 — JAMB CT SECTION
Scale: N.T.S.

Series 3900



INTERIOR VIEW

Features

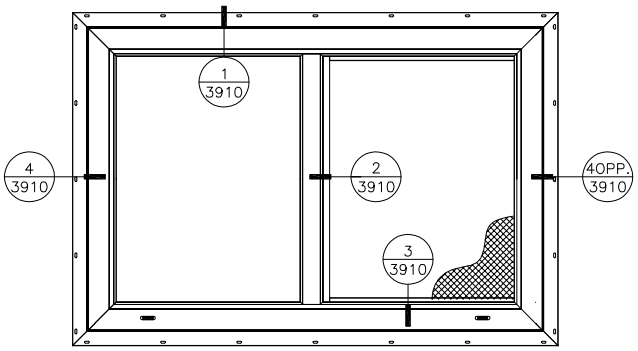
- Brickmould Frame Depth- 3 $\frac{1}{4}$"
- Glazing Pocket Depth - 3/4"
- New Construction Application
- Integral J-Channel

Options

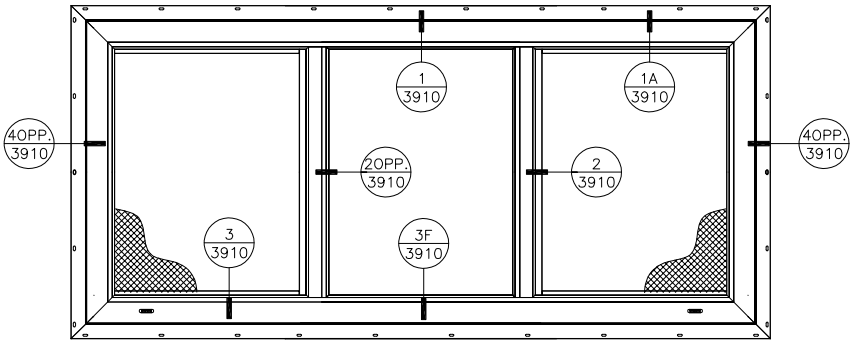
- Low-E and Argon filled glass units available
- Simulated Divided Lites
- Extension Jambs 4 $\frac{9}{16}$ - 6 $\frac{9}{16}$
- Sash Limiter
- Nail Fin factory removed
- Exterior Lamination Black & Bronze

PRODUCT SPECS

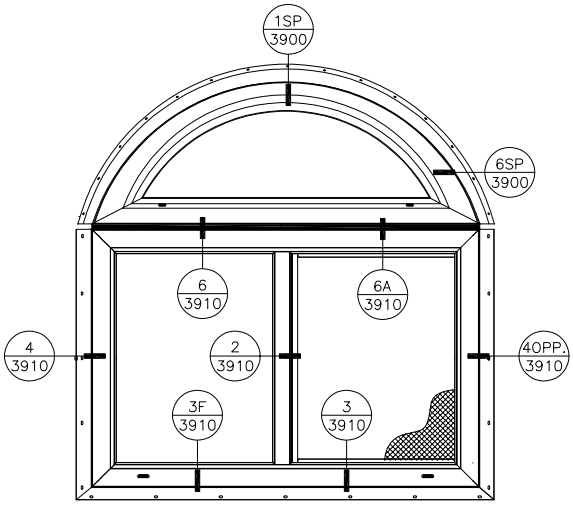
SERIES	PRODUCT TYPE	FRAME DEPTH	AAMA RATING	ENERGY STAR RATING
3900	HORIZONTAL SLIDER	3 1/4"	R-25	ENERGY STAR RATING



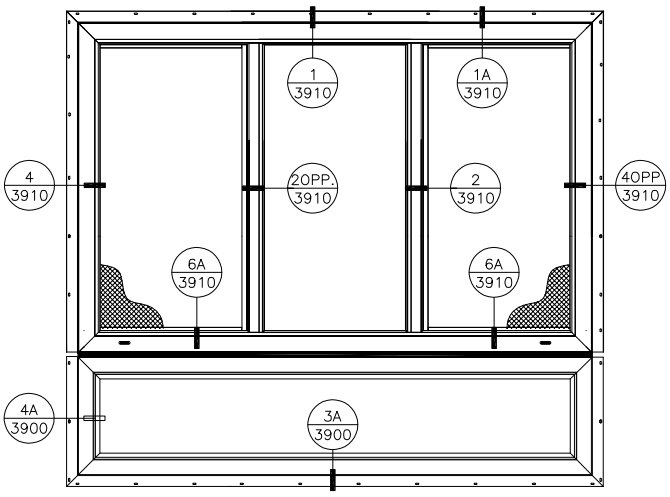
Series
3910 HS



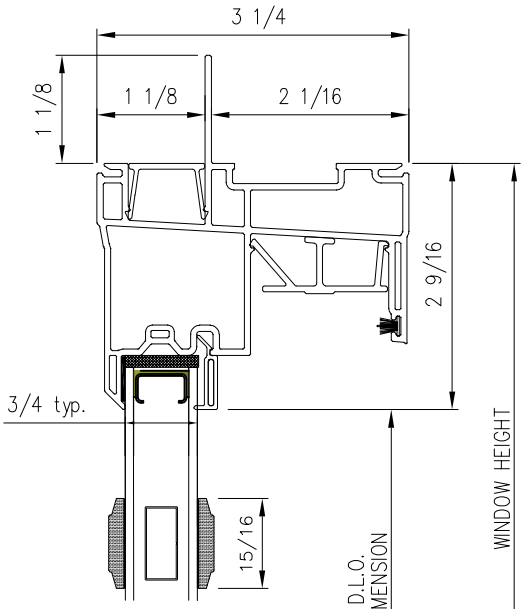
Series
3910-3 HS



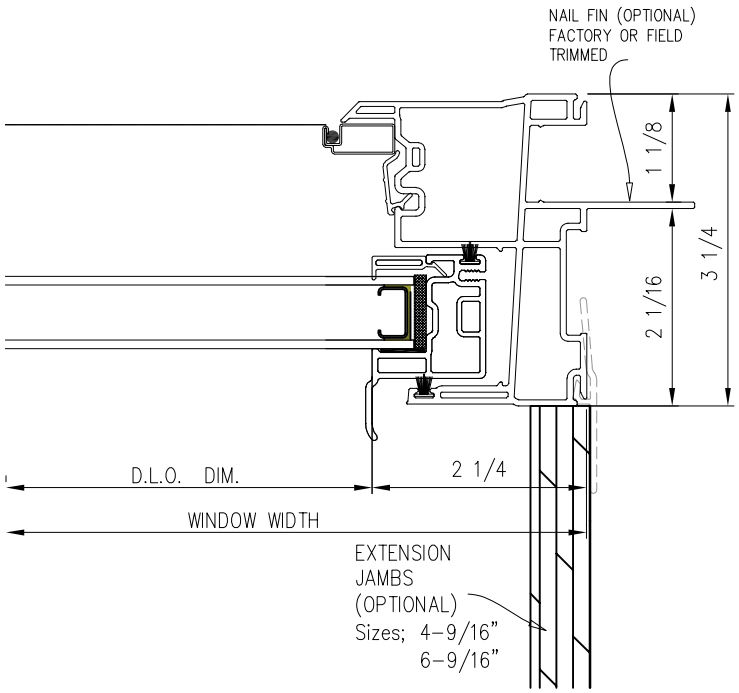
Series
3900 CT
3910 HS



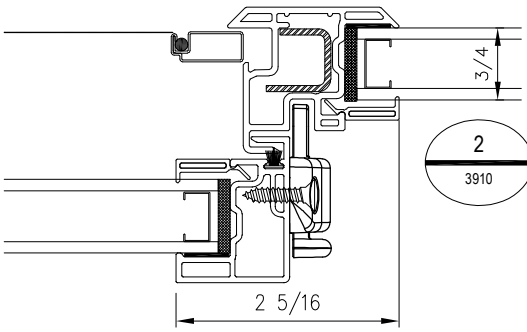
Series
3910 HS
3900 FW



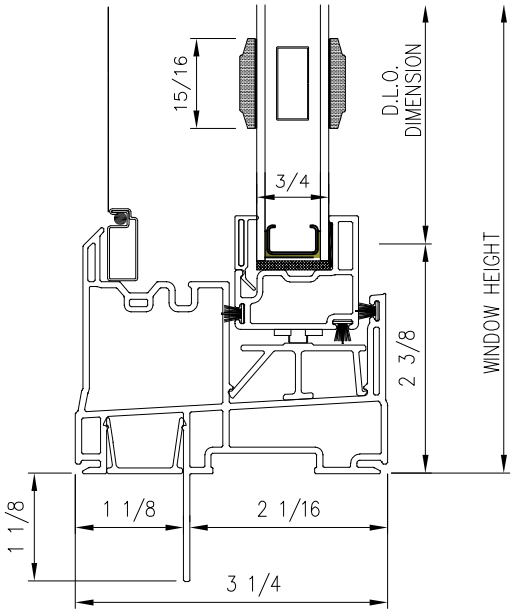
1 / 3910 HEAD SECTION
Scale: N.T.S.



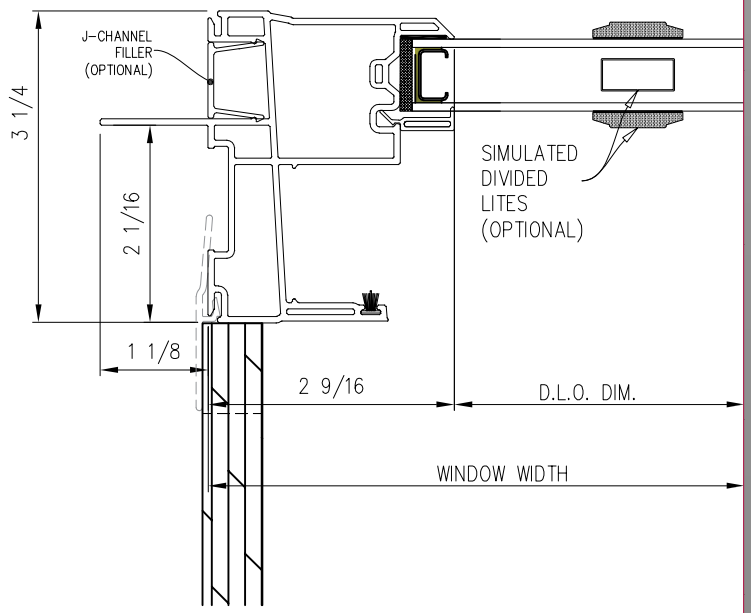
4 OPP / 3910 JAMB SECTION
Scale: N.T.S.



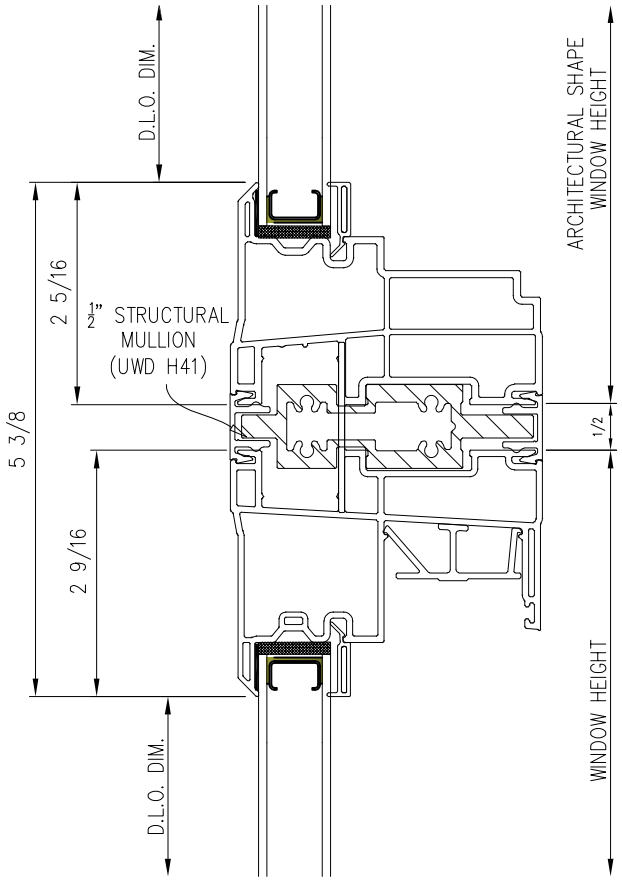
2 / 3910 MEETING RAIL SECTION
Scale: N.T.S.



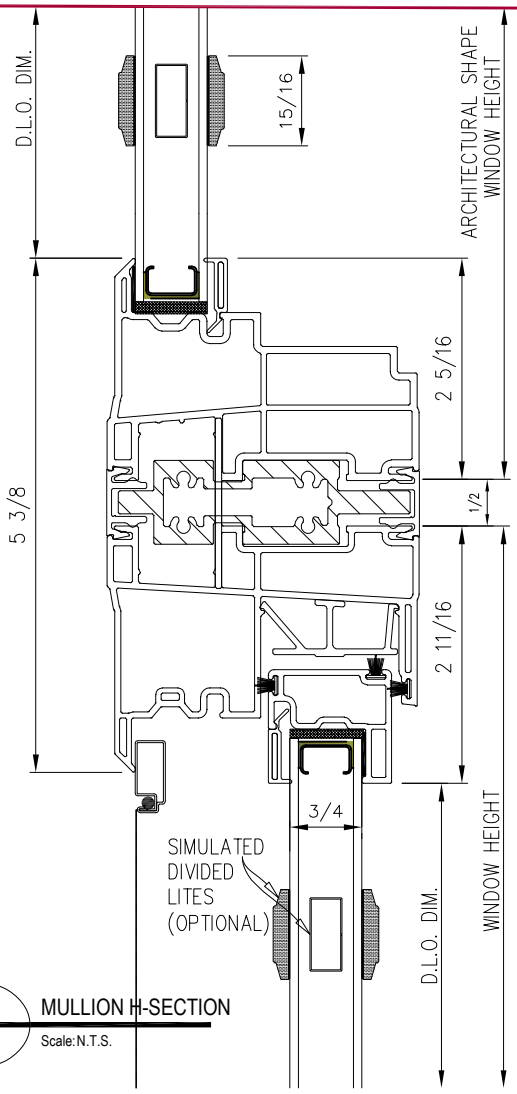
3 / 3910 SILL SECTION
Scale: N.T.S.



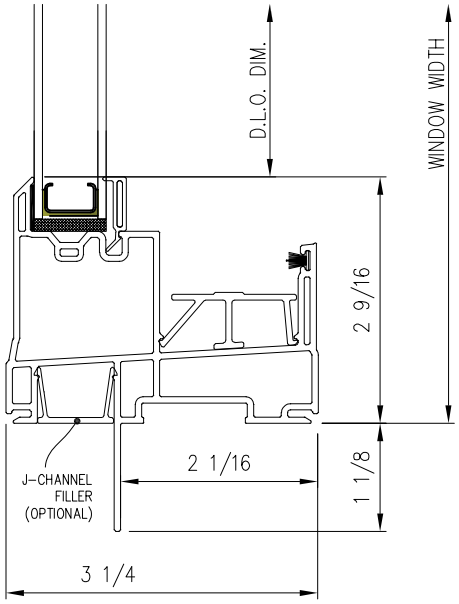
4 / 3910 JAMB SECTION
Scale: N.T.S.



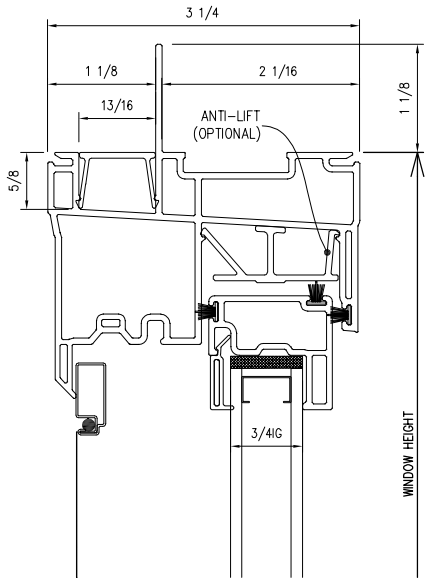
6 — 3910 — MULLION H-SECTION — Scale: N.T.S.



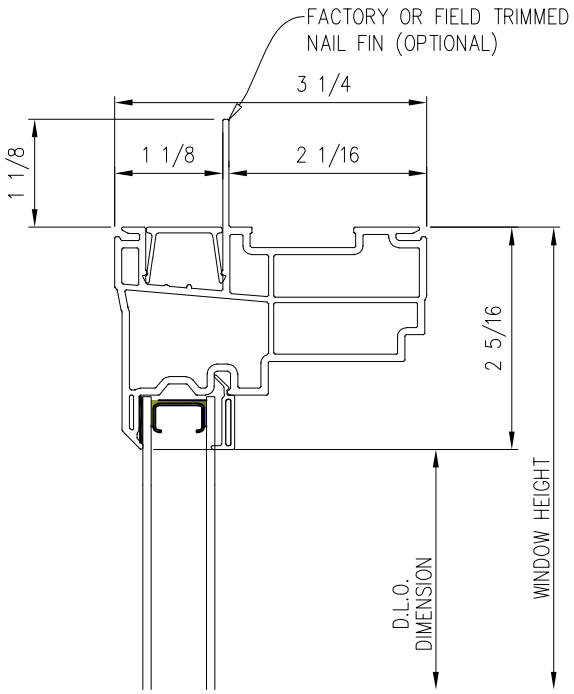
6A — 3910 — MULLION H-SECTION — Scale: N.T.S.



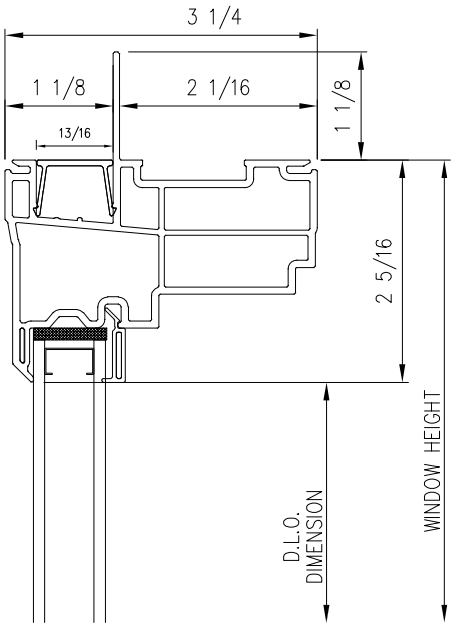
3F — 3910 — Fixed Slider-SILL SECTION — Scale: N.T.S.



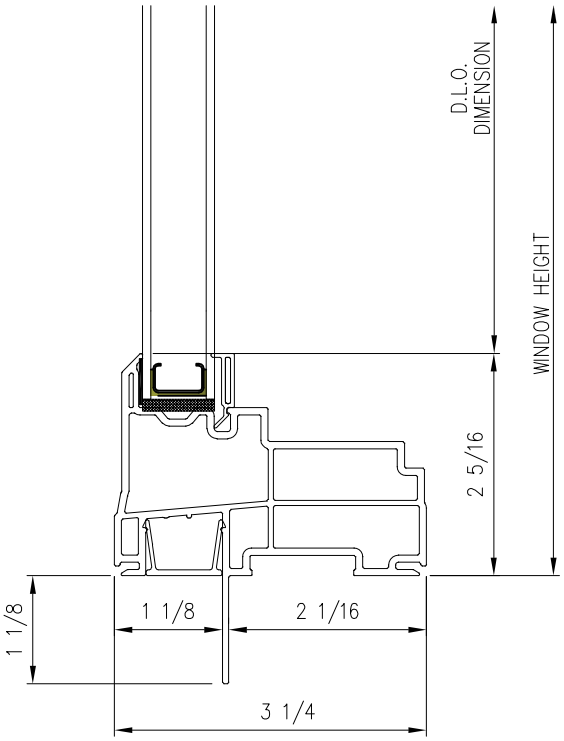
1A — 3910 — HEAD SECTION — Scale: N.T.S.



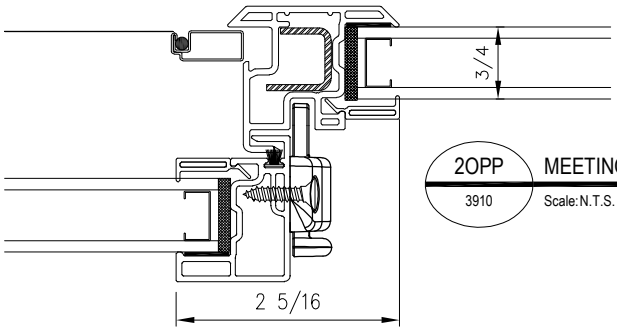
1A / 3900 HEAD PW SECTION
Scale: N.T.S.



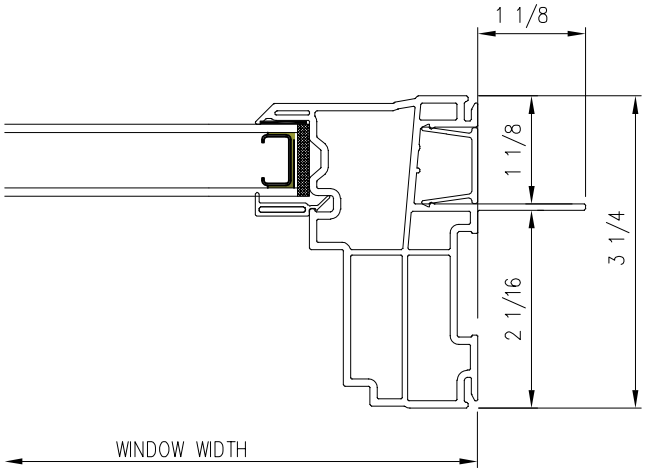
1SP / 3900 HEAD CT SECTION
Scale: N.T.S.



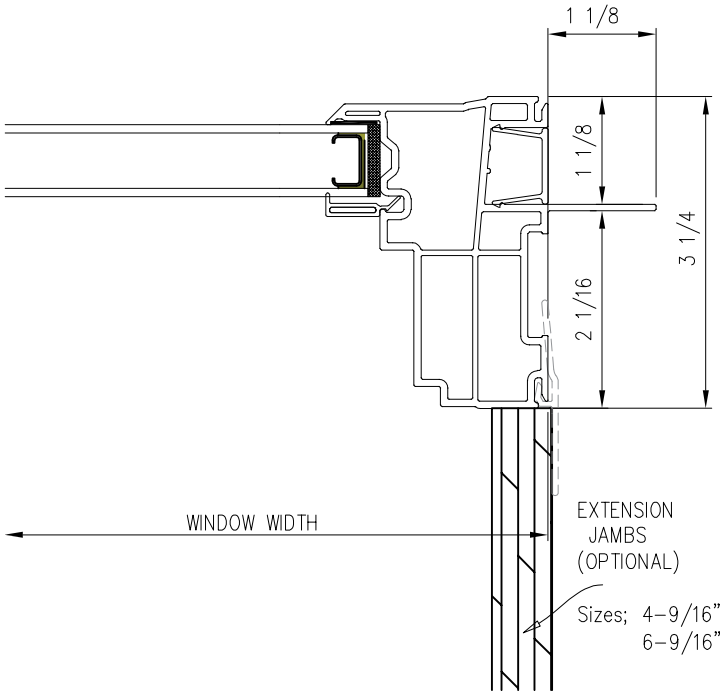
3A / 3900 SILL PW SECTION
Scale: N.T.S.



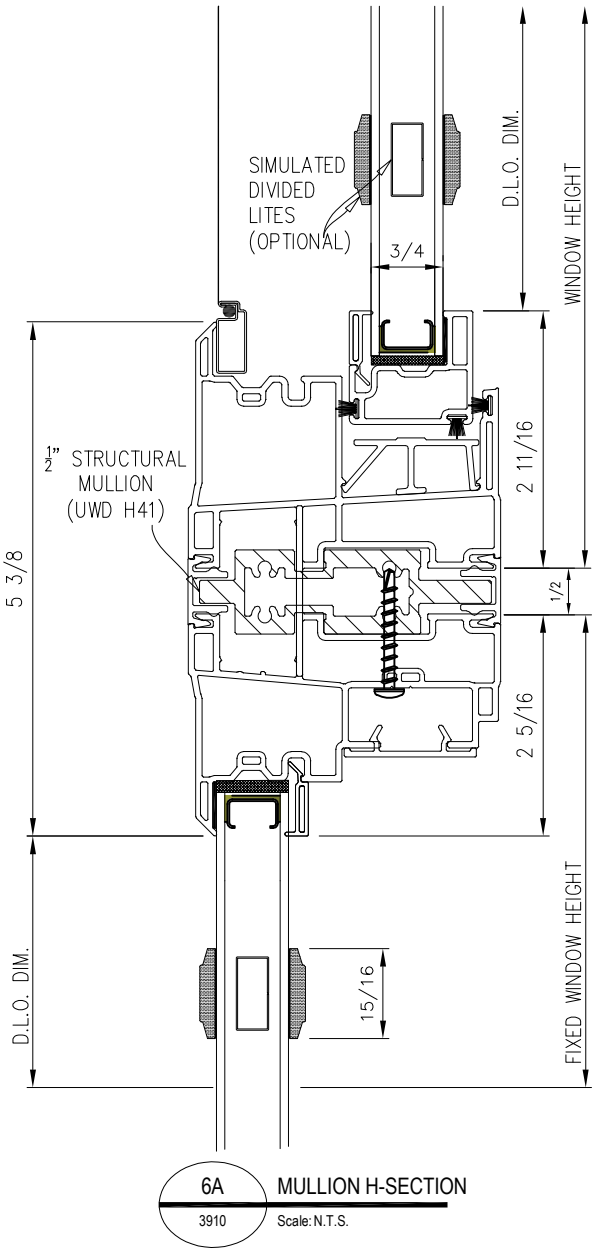
2OPP / 3910 MEETING RAIL SECTION
Scale: N.T.S.



6SP / 3900 JAMB CT SECTION
Scale: N.T.S.



4A / 3900 JAMB PW SECTION
Scale: N.T.S.



6A / 3910 MULLION H-SECTION
Scale: N.T.S.

United Window & Door – Series 3800/3900
New Construction Single Hung window Specification

Part 1 GENERAL

1.1 INCLUSIONS

1. All windows as called for in this specification will be furnished with all necessary hardware and parts as herein specified and shall be manufactured by United Window and Door Manufacturing, Inc.

1.2 RELATED SECTIONS

As required

1.02 QUALITY ASSURANCE

A. General.

1. Provide independent third party notice of product certification showing products to be in full compliance with AAMA/WDMA/CSA 101/I.S.2/A440-17:
   a. Vinyl single hung window to be United Series 3900 Class LC-PG50 36” x 74”.
   b. Optional vinyl single hung window United Series 3900 Class LC-PG40 40” x 84”.

B. Test Units.

1. Perform all tests listed in accordance with AAMA/WDMA/CSA 101/ I.S.2/A440-17 and others.

C. Test Procedures.

1. Air Infiltration Test- With the window in the closed and locked position test in accordance to ASTM E283 at a static pressure of 1.56 psf (25 mph). Air infiltration shall not exceed maximum of 0.26 cfm per square foot of frame area.
2. Water Resistance Test- With the window in the closed and locked position test in accordance with ASTM E547 at the static pressure of 7.52psf. There shall be no uncontrolled water leakage as defined in ASTM E547.
3. Uniform Load Test- with the window in a closed and locked position test in accordance to ASTM E330. When tested in positive and negative loads there shall be no glass breakage, permanent damage to fasteners, hardware, or any other parts that would render the window inoperable.

1.4 REFERENCES

A. American Society of Testing Materials (ASTM):

1. ASTM C 509-15 Specification for Elastomeric Cellular Preformed Gasket and Sealing Material.
2. ASTM B 633-15 Specification for Electrodeposited Coatings of Zinc on Iron or Steel.
3. ASTM C 1036-11 Specifications for Flat Glass.
4. ASTM E 283-12 Specifications for rate of Air leakage through exterior windows & doors.
5. ASTM E 331-16 Specification for water penetration of exterior windows & doors under static air pressure difference.

B. American Architectural Manufacturers Association (AAMA):

1. AAMA 701/702-11 Voluntary Specification for Pile Weather- Stripping.
2. AAMA 800-16 Voluntary Specification and Test methods for Sealants.
3. AAMA 902-11 Voluntary Specification for sash balances.

1.5 SUBMITTALS

A. Shop Drawings: Submit shop drawings as required.

B. Product Data: submit product data as required.

C. Product Samples: submit product samples as required.

1. Submit full window include glazing system, quality of construction and specified finish.

D. Quality Control:

1. Certification: submit performance test results reported by independent laboratory or manufacturer’s statement of qualification indicating compliance with specified performance and design requirements.

1.6 DELIVERY, STORAGE AND HANDLING

A. Comply with provisions of job specification.

B. Store units upright in a clean, well ventilated area free of dust and corrosive fumes. Windows must not be stored above 120 degrees F.

C. Windows may not be stored in direct sunlight or covered with plastic sheet.

D. Protect finish surfaces from lime, mortar run-off, weld splatter, acids, roofing tar, solvents or other items that could cause damage to the finish.

1.7 WARRANTY

A. The installer shall assume full responsibility that the installation is in accordance with the specifications, contract document and United window & Door specifications.

B. Manufacturer's Warranty: furnish United Window & Door Lifetime Limited Warranty.

Part 2 PRODUCTS

2.1 MATERIALS

1. The vinyl extrusions will be AAMA certified.
2. All vinyl extrusions will be free of defects impairing strength or durability.

2.2 COMPONENTS

A. Mainframe and sash:

1. Mainframe will have a nominal exterior wall thickness of .065".
2. Sashes will have a nominal exterior wall thickness of .060".

B. Weather Stripping:

1. Weather stripping and compression seals must be of high quality, proven to be capable of meeting or exceeding the environmental exposure and performance requirements of the application.
2. Woolpile and finseal weather stripping shall conform to AAMA 701/702-11.
3. Closed cell elastomeric compression seals shall conform to ASTM C509.

C. Fasteners:

1. All screws and other fastening devices incorporated shall be of aluminum, stainless steel, or other non corrosive material compatible with the vinyl extrusions. Cadmium or zinc plated steel shall be in accordance with ASTM B 766 or ASTM B 633-15. Nickel or chrome plated shall be in accordance with ASTM B 456-11 type SC.

D. Insect Screens:

1. Insect screen frames will be of aluminum extruded box shape, for strength and durability, and be manufactured in accordance to United Window and Door approved design. Insect screens will be color matched to the window color. The screens will incorporate fiberglass screen cloth of 18 x 16 mesh held in the frame by vinyl screen spline.

E. Glass and glazing materials

1. Insulated glass:
   a. The assembled insulated glass unit shall be ¾" thickness high performance. The assembly will conform to ASTM E2190-10.
   b. Tempered glass will conform to ASTM C 1048-12e1.
   c. Annealed glass will conform to ASTM C 1036-11e1.
2. Glazing Materials:
   a. The insulated glass unit will be secured to the vinyl sash or frame by a silicone ductile bedding compound.

F. Hardware

1. Hardware having component parts which are exposed will be aluminum, stainless steel or other non-corrosive material compatible with the vinyl extrusions. Cadmium or zinc plated steel shall be in accordance with ASTM B 766 or ASTM B 633-15. Nickel or chrome plated shall be in accordance with ASTM B456-11 type SC.

G. Sash Counter Balance Mechanism

1. Sash balances shall be of appropriate size and capacity to hold sash stationary in any open position. Operating force of the sash will be in accordance with ANSI/AAMA/WDMA/ 101/I.S.2/NAFS-02 and have operating force of 17 lbs or less.
2. Balances will be of the block and tackle type and easily accessible for repair or replacement in the field. Balances will be in accordance with AAMA 902-94

H. Window Locks

1. Sashes shall be capable of being locked by installed sweep type lock. Locks and mounting screws will be same as or similar to the window color.
2. When in locked position shall conform to ASTM F 588- 14 Resistance of Window Assemblies to Forced Entry Excluding Glazing.

Part 3 EXECUTION

3.1 EXAMINATION

A. Verification of conditions

1. Before installation verify all openings are plumb, square and of proper dimensions. Report frame defects or unsuitable conditions to the General contractor before proceeding.

B. Acceptance

1. Beginning of installation means acceptance of existing conditions.

3.2 Installation

A. The window will be secured to the rough opening in accordance with manufacturer's instructions and/or accepted industry practice.

1. All windows will be installed level and plumb.
2. A permanent weather tight seal must be applied between the window flange and the building exterior wall at the time of installation.
3. The windows are to be secured to the opening with 1 ½" or longer fasteners through every other pre-punched hole in the flange.

B. Install sealant and related backing materials at perimeter of assembly in accordance to Section 07900 Joint Sealers. Do not use foam sealant.

3.3 ADJUSTING AND CLEANING

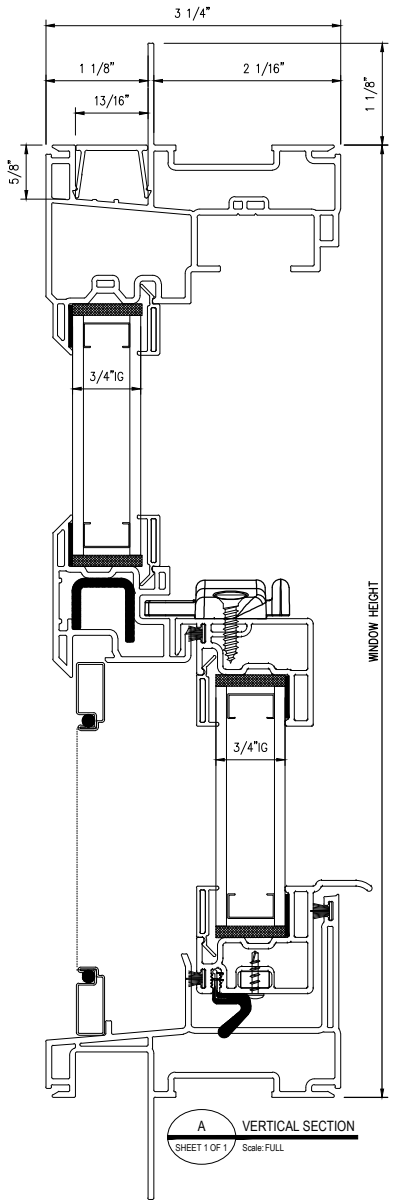
A. Adjust operable sash to work freely with all hardware functioning properly. Readjust at completion of project if directed to do so.

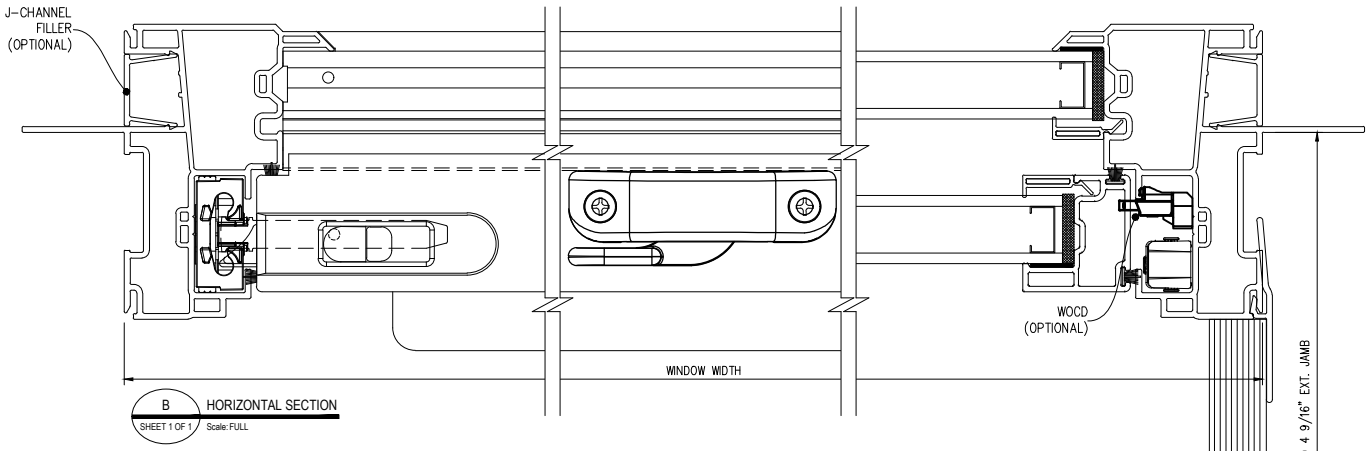
B. Remove all visible labels except permanent identification, warning, or instructional labels.

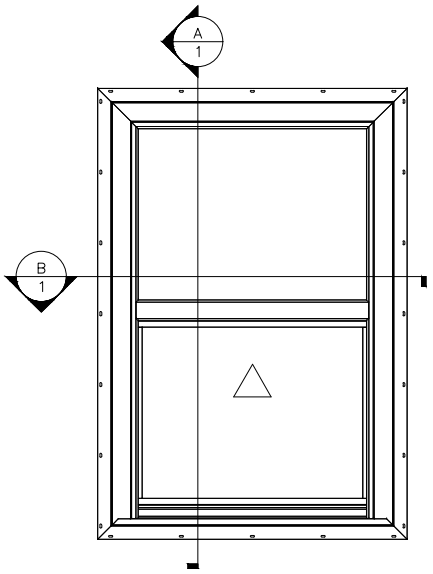
C. Leave windows in a wiped clean condition.

3.4 PROTECTION

A. Cover windows during spray painting or other construction operations that might cause damage.







ALL DIMENSIONS IN INCHES EXCEPT AS NOTED

.XXXX ± .0005	.XXX ± .005
.XX ± .010	.X/X ± 1/32

THREAD LENGTH DIMENSIONS SHOW USEABLE THREAD.

BREAK OUTSIDE AND INSIDE CORNERS .004 to .032 MAX EXCEPT AS NOTED

THIRD ANGLE PROJECTION

SIZE B

UNITED Window & Door Mfg, Inc.
24-36 Fadem Road
Springfield, NJ 07061
(973) 912-0600

Released

DGN BY	Martin Pezo	DATE 03/09/2018
DWN BY	Martin Pezo	DATE 03/09/2018
CHKD BY		DATE
APPR BY		DATE

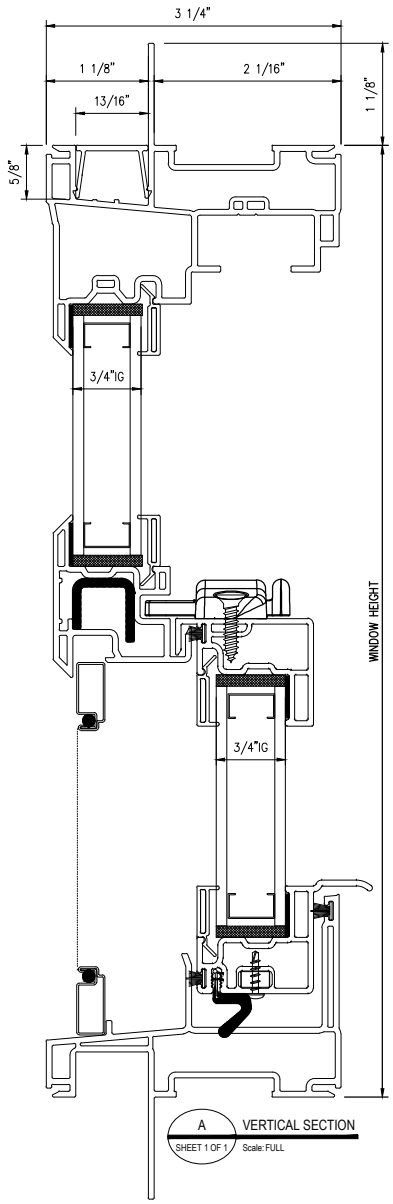
SERIES 3800 SH
Flat Frame New Construction

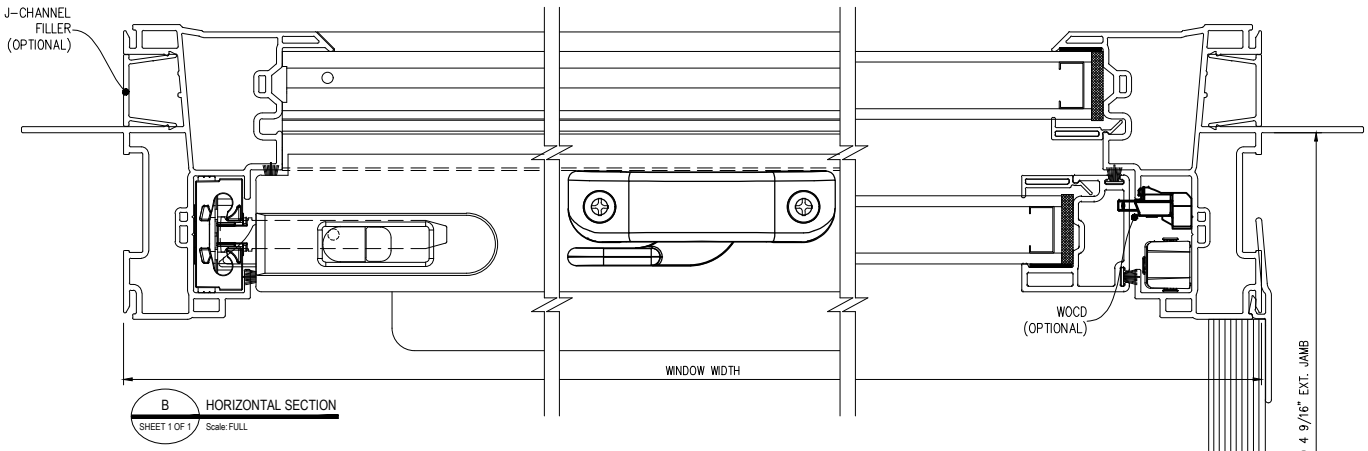
PROJECT NO	PART NO	REV
	3800SH-01NC	

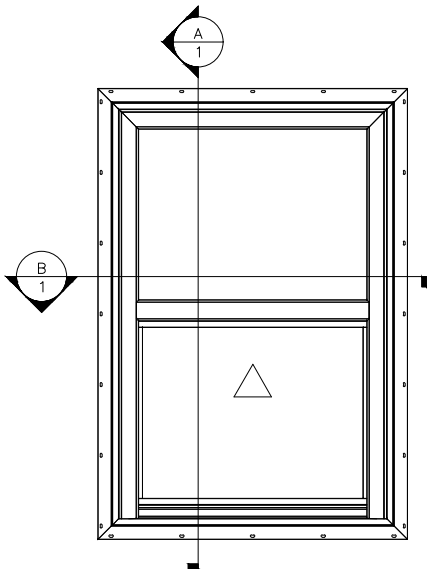
FILE NAME Engineering\Products\3900_SH\04 Assembly\01 dwg\3800SH-01NC

SCALE 3:4 | SHEET 1 OF 1

CONFIDENTIAL: THE INFORMATION CONTAINED IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO UNITED WINDOW & DOOR MFG., INC. AND MAY NOT BE DISCLOSED TO NON-EMPLOYEES OF THE COMPANY OR USED IN ANY WAY OR FOR ANY PURPOSE OUTSIDE OF THE COMPANY WITHOUT THE EXPRESS WRITEN CONSENT OF UNITED WINDOW & DOOR MFG., INC. UNAUTHORIZED USE, REPRODUCTION, DISCLOSURE OR RETENTION OF ANY INFORMATION CONTAINED HEREIN IS EXPRESSLY PROHIBITED.







ALL DIMENSIONS IN INCHES EXCEPT AS NOTED

.XXXX ± .0005	.XXX ± .005
.XX ± .010	.X/X ± 1/32

THREAD LENGTH DIMENSIONS SHOW USEABLE THREAD.

BREAK OUTSIDE AND INSIDE CORNERS .004 to .032 MAX EXCEPT AS NOTED

THIRD ANGLE PROJECTION

SIZE B

UNITED Window & Door Mfg, Inc.
24-36 Fadem Road
Springfield, NJ 07061
(973) 912-0600

Released

SERIES 3900 SH
New Construction

DGN BY	Martin Pezo	DATE 03/09/2018
DWN BY	Martin Pezo	DATE 03/09/2018
CHKD BY		DATE
APPR BY		DATE

PROJECT NO	PART NO	REV
	3900SH-01NC	

FILE NAME
Engineering\Products\3900_SH\04 Assembly\01 dwg\3900SH-01NC

SCALE 3:4

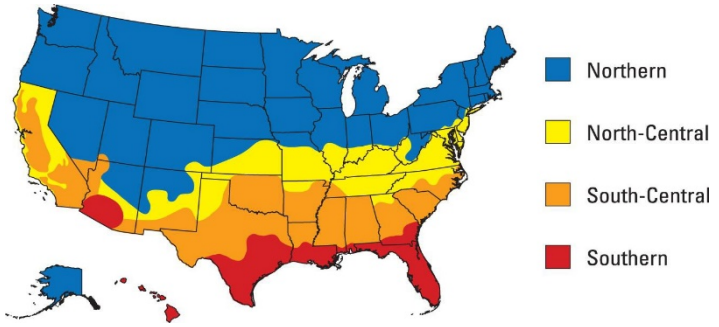
SHEET 1 OF 1

CONFIDENTIAL: THE INFORMATION CONTAINED IN THIS DOCUMENT IS CONFIDENTIAL AND PROPRIETARY TO UNITED WINDOW & DOOR MFG., INC. AND MAY NOT BE DISCLOSED TO NON-EMPLOYEES OF THE COMPANY OR USED IN ANY WAY OR FOR ANY PURPOSE OUTSIDE OF THE COMPANY WITHOUT THE EXPRESS WRITEN CONSENT OF UNITED WINDOW & DOOR MFG., INC. UNAUTHORIZED USE, REPRODUCTION, DISCLOSURE OR RETENTION OF ANY INFORMATION CONTAINED HEREIN IS EXPRESSLY PROHIBITED.

UNITED WINDOW & DOOR

3800-3900 Series

Glass Package	IG Thick	Interior Glass	Exterior Glass		No Grids U-Value	No Grids SHGC	No Grids VLT	Energy Star	Flat or Sculpted Grids U-Value	Flat or Sculpted Grids SHGC	Flat or Sculpted Grids VLT	Energy Star
3800 -3900 Single Hung												
Clear	3/4"	2.3mm Clear	2.3mm Clear		0.48	0.64	0.65		0.48	0.57	0.58	
LowE2	3/4"	2.3mm Clear	2.3mm 7036		0.34	0.31	0.56		0.34	0.28	0.50	
LowE2, Argon	3/4"	2.3mm Clear	2.3mm 7036		0.30	0.31	0.56	NC	0.30	0.28	0.50	NC
LowE3, Argon	3/4"	2.3mm 7257	2.3mm Clear		0.30	0.46	0.56	N	0.30	0.42	0.50	N
LowE2 Solar, Argon	3/4"	2.3mm Clear	2.3mm 5527		0.30	0.22	0.44	NC, SC, S	0.30	0.20	0.39	NC, SC, S
LowE4, Argon	3/4"	2.3mm IS20	2.3mm 7036		0.26	0.30	0.54	N, NC	0.26	0.27	0.48	N, NC
Clear	3/4"	3mm Clear	3mm Clear		0.48	0.63	0.65		0.49	0.56	0.58	
LowE2	3/4"	3mm Clear	3mm 7036		0.34	0.31	0.55		0.36	0.28	0.49	
LowE2, Argon	3/4"	3mm Clear	3mm 7036		0.30	0.31	0.55	NC	0.31	0.28	0.49	
LowE3, Argon	3/4"	3mm 7257	3mm Clear		0.30	0.46	0.56	N	0.31	0.41	0.50	
LowE2 Solar, Argon	3/4"	3mm Clear	3mm 5527		0.30	0.22	0.44	NC, SC, S	0.31	0.20	0.39	S
LowE4, Argon	3/4"	3mm IS20	3mm 7036		0.26	0.30	0.54	N, NC	0.27	0.27	0.48	N, NC
3810 -3910 Single Horizontial Slider												
Clear	3/4"	2.3mm Clear	2.3mm Clear		0.47	0.63	0.64		0.47	0.56	0.57	
LowE2	3/4"	2.3mm Clear	2.3mm 7036		0.33	0.31	0.55		0.33	0.28	0.49	
LowE2, Argon	3/4"	2.3mm Clear	2.3mm 7036		0.30	0.30	0.55	NC	0.30	0.27	0.49	NC
LowE3, Argon	3/4"	2.3mm 7257	2.3mm Clear		0.30	0.46	0.56	N	0.30	0.41	0.50	
LowE2 Solar, Argon	3/4"	2.3mm Clear	2.3mm 5527		0.29	0.22	0.43	NC, SC, S	0.30	0.20	0.39	NC, SC, S
LowE4, Argon	3/4"	2.3mm IS20	2.3mm 7036		0.26	0.30	0.53	N, NC	0.26	0.27	0.47	N, NC
Clear	3/4"	3mm Clear	3mm Clear		0.48	0.62	0.64		0.48	0.55	0.57	
LowE2	3/4"	3mm Clear	3mm 7036		0.34	0.31	0.55		0.35	0.28	0.49	
LowE2, Argon	3/4"	3mm Clear	3mm 7036		0.30	0.30	0.55	NC	0.31	0.27	0.49	
LowE3, Argon	3/4"	3mm 7257	3mm Clear		0.30	0.45	0.55	N	0.31	0.40	0.49	
LowE2 Solar, Argon	3/4"	3mm Clear	3mm 5527		0.29	0.22	0.43	NC, SC, S	0.31	0.20	0.38	S
LowE4, Argon	3/4"	3mm IS20	3mm 7036		0.26	0.30	0.53	N, NC	0.27	0.27	0.47	N, NC
3800 -3900 FIXED												
Clear	3/4"	3mm Clear	3mm Clear		0.47	0.66	0.68		0.48	0.59	0.61	
LowE2	3/4"	3mm Clear	3mm 7036		0.32	0.33	0.58		0.34	0.30	0.52	
LowE2, Argon	3/4"	3mm Clear	3mm 7036		0.28	0.32	0.58	N, NC	0.29	0.29	0.52	NC
LowE3, Argon	3/4"	3mm 7257	3mm Clear		0.28	0.48	0.59	N	0.29	0.43	0.53	N
LowE2 Solar, Argon	3/4"	3mm Clear	3mm 5527		0.28	0.24	0.46	NC, SC, S	0.29	0.22	0.41	NC, SC, S
LowE4, Argon	3/4"	3mm IS20	3mm 7036		0.24	0.32	0.57	N, NC	0.25	0.29	0.51	N, NC
Clear	3/4"	4mm Clear	3mm Clear									
LowE2	3/4"	4mm Clear	3mm 7036									
LowE2, Argon	3/4"	4mm Clear	3mm 7036		0.28	0.32	0.58	N, NC	0.30	0.29	0.52	NC
LowE3, Argon	3/4"	4mm 7257	3mm Clear									
LowE2 Solar, Argon	3/4"	4mm Clear	3mm 5527									
LowE4, Argon	3/4"	4mm IS20	3mm 7036									



ENERGY STAR Qualification Criteria for Residential Windows, Doors, and Skylights

Windows

Climate Zone	U-Factor[1]	SHGC[2]	
Northern*	≤ 0.27	Any	Prescriptive
	= 0.28	≥ 0.32	Equivalent Energy Performance
	= 0.29	≥ 0.37	
	= 0.30	≥ 0.42	
North-Central	≤ 0.30	≤ 0.40	
South-Central	≤ 0.30	≤ 0.25	
Southern	≤ 0.40	≤ 0.25	

Air Leakage ≤ 0.3 cfm/ft²

[1] Btu/h ft²·°F
[2] Solar Heat Gain Coefficient

* The effective date for the Northern Zone prescriptive and equivalent energy performance criteria for windows is January 1, 2016.

Doors

Glazing Level	U-Factor[1]	SHGC[2]	
> ½-Lite	≤ 0.30	Northern North-Central	≤ 0.40
		Southern South-Central	≤ 0.25

Air Leakage for Sliding Doors ≤ 0.3 cfm/ft²
Air Leakage for Swinging Doors ≤ 0.5 cfm/ft²

Smooth-Star®

Style No. S118 | Full Lite w/ Stile Lines | Glass Name: Clear 1 Lite No Grid

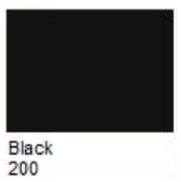
3.3 (16) Write a review



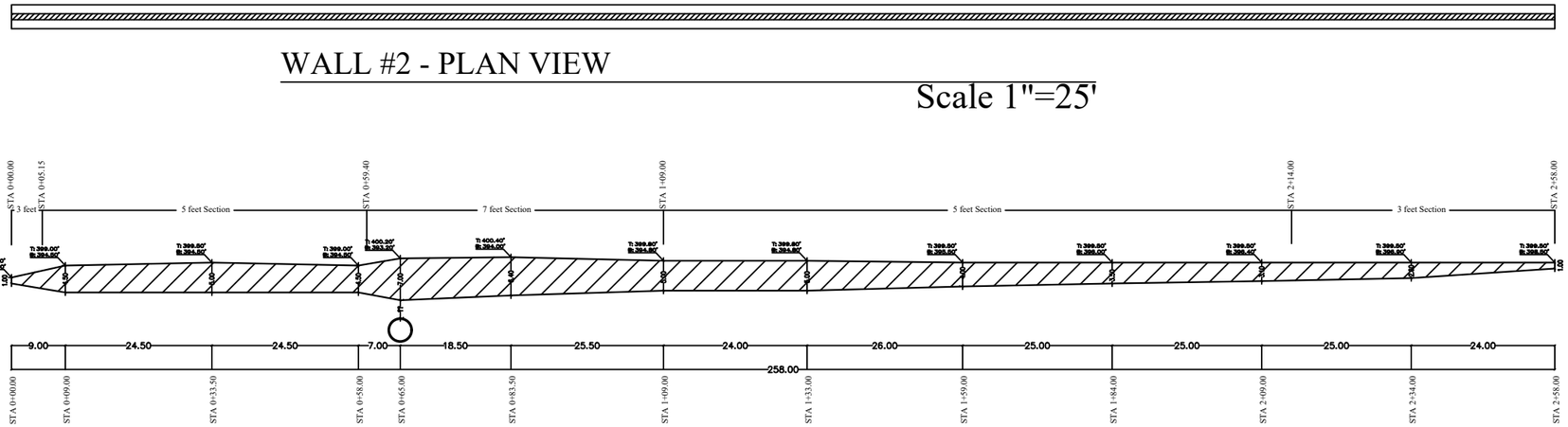




PARK PLACE

	SCHEME 1	SCHEME 2	SCHEME 3	SCHEME 4	SCHEME 5	SCHEME 6	SCHEME 7
BRICK COLOR	 COLONY POINTE	 OLD MILL	 BLUE RIDGE REGENT	 BLUE RIDGE REGENT	 COLONY POINTE	 OLD MILL	 SPALDING TUDOR
HORIZONTAL SIDING	 EVENING BLUE	 TIMBER BARK	 GRAY SLATE	 GRAY SLATE	 GRAY SLATE	 GRAY SLATE	 COBBLESTONE
PANEL COLOR	 COBBLESTONE	 COBBLESTONE	 COBBLESTONE	 PEARL GRAY	 PEARL GRAY	 LIGHT MIST	 IRON GRAY
BAY COLOR	 COBBLESTONE	 EVENING BLUE	 GRAY SLATE	 LIGHT MIST	 PEARL GRAY	 LIGHT MIST	 IRON GRAY
FRONT DOOR COLOR	 Williamsburg 227	 Mckinney Stone 475	 Black 200	 Black 200	 Williamsburg 227	 Mckinney Stone 475	 Williamsburg 227
FOR ALL BUILDING SCHEMES	WINDOW COLOR  DARK BRONZE	RAILING COLOR  DARK BRONZE	CORNICE COLOR  MUSKET BROWN	GUTTER & DOWNSPOUT COLOR  DARK BRONZE	CANOPY COLOR  DARK BRONZE	BRICK MORTAR COLOR  ROANOKE GRAY	

THE ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CIVIL ENGINEER PRIOR TO CONSTRUCTION

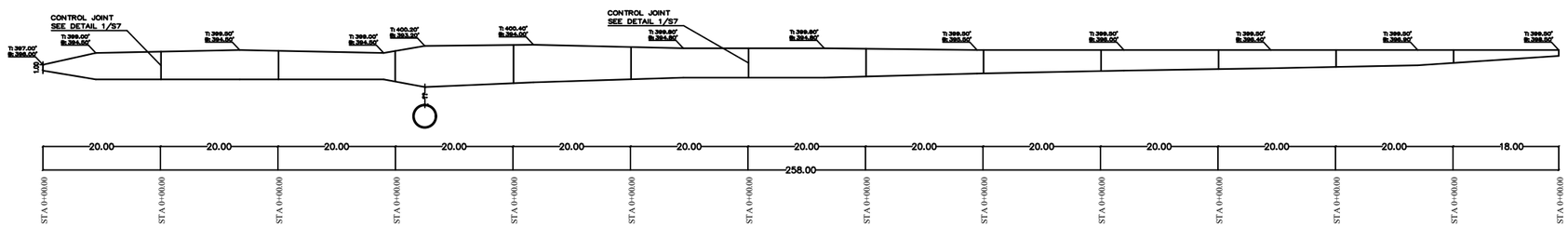


WALL #2 - PLAN VIEW

Scale 1"=25'

WALL #2 -PROFILE - ELEVATIONS

Scale 1"=25'



WALL #2 - PROFILE - CONTROL JOINTS

Scale 1"=25'

REVISIONS	DATE
	6/22/2023

COMMONWEALTH OF VIRGINIA
SAEED ALLAH BALLANI
Lic. No. 051710
6/22/2023
PROFESSIONAL ENGINEER

Geotechnical Solutions, Inc.

GEOTECHNICAL SOLUTION, INC.

3859 Centerview Dr, SUITE 160, CHANTILLY, VA 20151

PHONE: (703)-657-0014

FAX: (703)-657-0666

DESIGNER:	S.F.B
DRAWN:	S.F.B
SCALE:	1"=25'
DATE:	JUNE 2023

Park Place -Retaining Wall Design

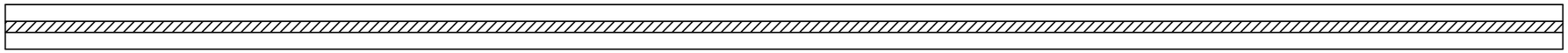
Town of Herndon, Virginia

WALL #2 - PLAN & PROFILE

JOB NUMBER: GSI WP-233575

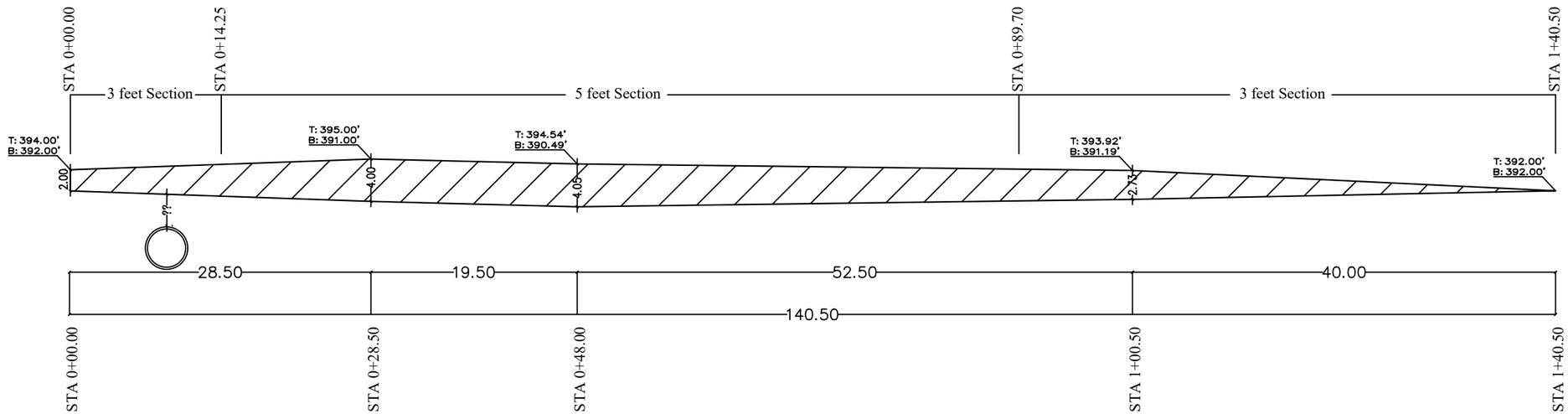
SHEET: S4

THE ELEVATIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CIVIL ENGINEER PRIOR TO CONSTRUCTION



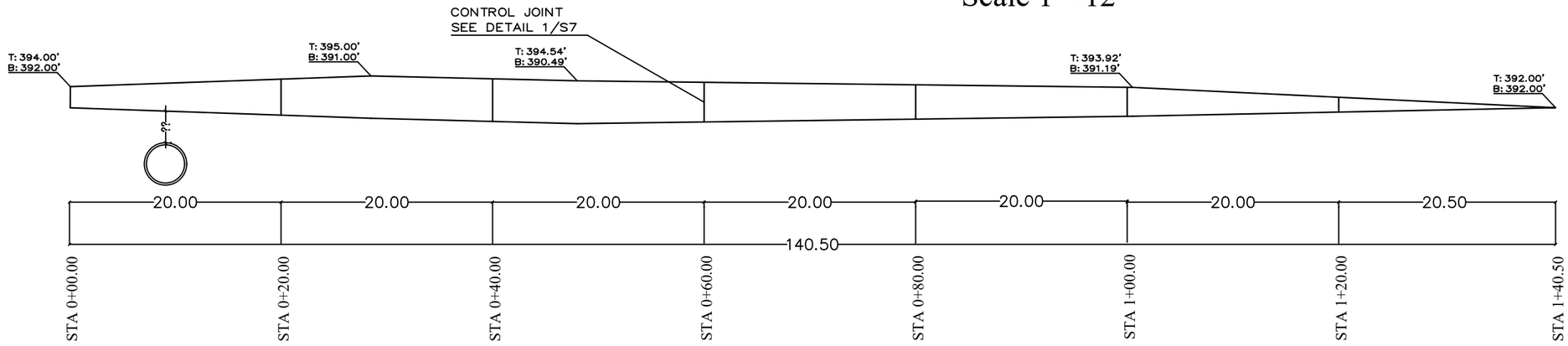
WALL #3 - PLAN VIEW

Scale 1"=12'



WALL #3 - PROFILE - ELEVATIONS

Scale 1"=12'



WALL #3 - CONTROL JOINTS

Scale 1"=12'

12' 0 6' 12'

REVISIONS	DATE
	6/22/2023

COMMONWEALTH OF VIRGINIA
SAEED FALLAH BALLANI
Lic. No. 051710
6/22/2023
PROFESSIONAL ENGINEER

Geotechnical Solutions,Inc.

GEOTECHNICAL SOLUTION, INC.
3859 Centerview Dr, SUITE 160, CHANTILLY, VA 20151
PHONE: (703)-657-0014
FAX: (703)-657-0666

DESIGNER:	S.F.B
DRAWN:	S.F.B
SCALE:	1"=12'
DATE:	JUNE 2023

Park Place -Retaining Wall Design

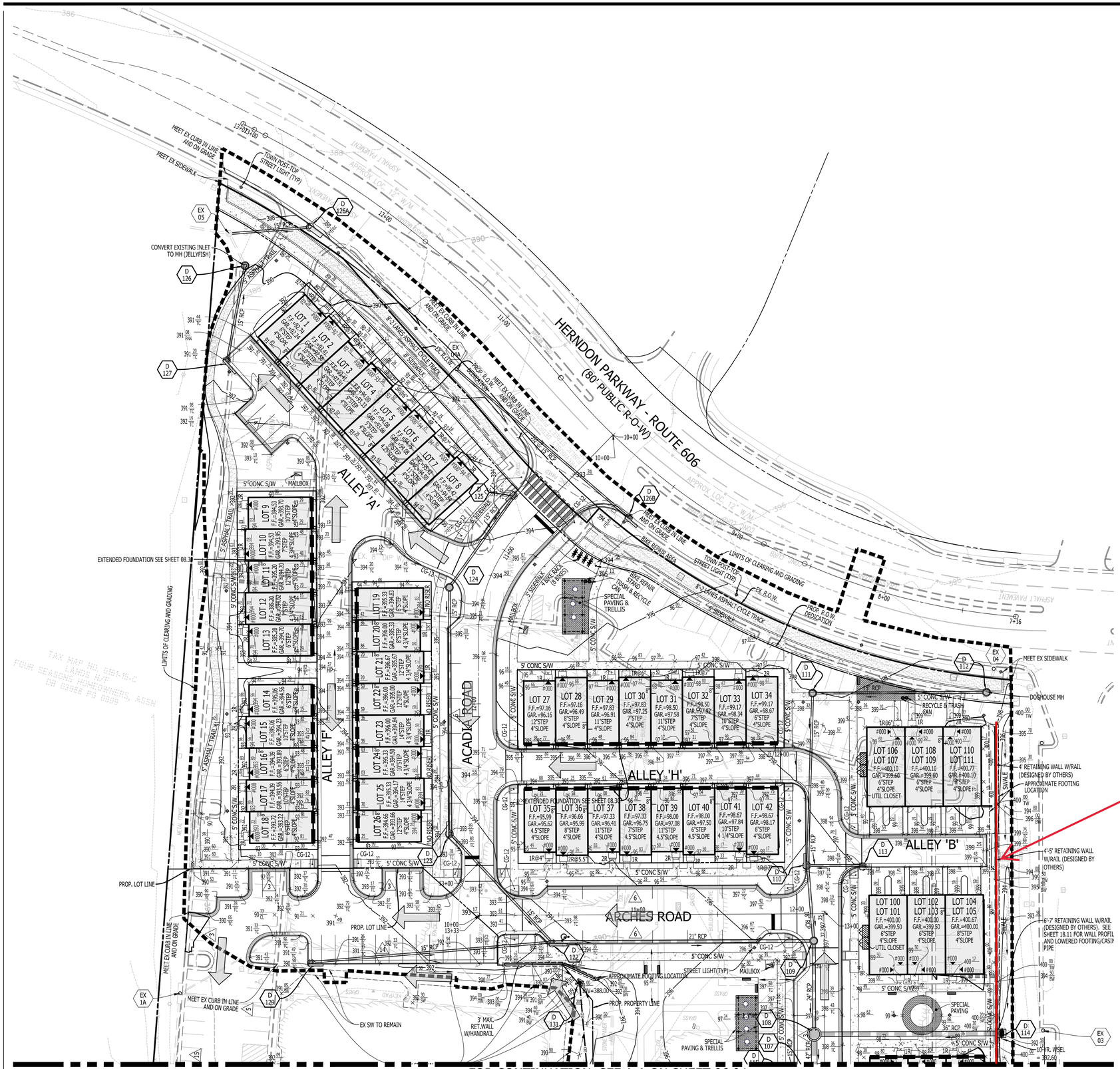
Town of Herndon, Virginia

WALL #3 - PLAN & PROFILE

JOB NUMBER: GSI WP-233575

SHEET: S7


CVS pharmacy
Advance Auto Parts
Sonic Drive-In



OVERLAND RELIEF NARRATIVE:

THERE ARE TWO RELIEF POINTS THAT SERVE THIS SITE. ONE POINT IS AT THE WESTERN PORTION OF THE SITE AND THE OTHER IS AT THE NORTHERN PORTION OF THE SITE, DISCHARGING OFFSITE.

THIS SITE HAS BEEN DESIGNED SUCH THAT IN THE EVENT OF THE 100 YEAR STORM OCCURRING AT A TIME WHEN THE STORM DRAIN INLET SYSTEM WAS INOPERABLE, NO HABITABLE STRUCTURE WOULD BE FLOODED, AND NO IMPACT ON ADJOINING PROPERTIES WOULD OCCUR. ALL AREAS OF THE SITE HAVE POSITIVE DRAINAGE AWAY FROM THE HABITABLE STRUCTURES TO THE ADJACENT ROADWAYS. IN THE EVENT OF THE 100 YEAR STORM, OVERLAND FLOW WILL FOLLOW THE PRIVATE ROADWAYS AND FLOW TOWARDS EITHER STRUCTURE EX-01 OR STRUCTURE D-127.

WATER WILL POND AT A STRUCTURE EX-01 UNTIL IT REACHES AN ELEVATION OF 388.07, AT WHICH POINT IT WILL SPILL OVER THE CURB AND FLOW OFFSITE. AT ELEVATION 388.07 THERE IS 4.85 FEET OF FREEBOARD BETWEEN THE LOWEST STRUCTURE ELEVATION AND THE LOWEST FIRST FLOOR ELEVATION.

AT STRUCTURE D-127, WATER WILL POND UNTIL IT REACHES AN ELEVATION OF 391.20, AT WHICH POINT IT WILL SPILL OVER THE CURB AND FLOW OFFSITE. AT ELEVATION 391.20 THERE IS 1.04 FEET OF FREEBOARD BETWEEN THE LOWEST STRUCTURE ELEVATION AND THE LOWEST FIRST FLOOR ELEVATION.

BASED ON THE PROVIDED FREEBOARD OF 4.85 AND 1.04 FEET AT STRUCTURES EX-01 AND D-127, IT IS THE OPINION OF THE SIGNING ENGINEER THAT NO FLOODING OF HABITABLE STRUCTURES OR ADVERSE IMPACT ON ADJOINING PROPERTIES WILL OCCUR IN THE EVENT OF THE 100 YEAR STORM.

R E V I S I O N S	△ #	DESCRIPTION	BY	APPROVED

VIKA VIRGINIA, LLC
8180 Greensboro Dr., Suite 200
Tysons, VA 22102
703.442.7800 | vika.com

Our Site Set on the Future.

THE INFORMATION, DESIGN, AND CONTENT OF THESE DRAWINGS AND/OR DOCUMENTS HERETO ARE PROPRIETARY TO VIKA VIRGINIA, L.L.C. AND CONSTITUTE ITS PROPRIETARY INTELLECTUAL PROPERTY. THESE DRAWINGS AND/OR DOCUMENTS MUST NOT BE DIGITALLY FORWARDED, SHARED OR COPIED, DIGITALLY CONVERTED, MODIFIED, OR USED FOR ANY DESIGN PURPOSE, IN ANY FORMAT, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM VIKA VIRGINIA, L.L.C. VIOLATIONS MAY RESULT IN PROSECUTION. ONLY APPROVED, SIGNED AND SEALED PLANS OR DRAWINGS MAY BE UTILIZED FOR RECORDING AND/OR CONSTRUCTION PURPOSES.

© 2021 VIKA VIRGINIA, L.L.C.

V 12.00

PLAN STATUS	DATE
1st. Sub.	02/17/2021
2ND SUBMISSION	06/11/2021
3RD SUBMISSION	11/24/2021
4TH SUBMISSION	04/22/2022
5TH SUBMISSION	09/20/2022
6TH SUBMISSION	01/25/2023

POST-APPROVAL SHEET STATUS	DATE

PROFESSIONAL SEAL

COMMONWEALTH OF VIRGINIA
JOSEPH D. AMATETTI
LIC. NO. 148573
PROFESSIONAL ENGINEER
01/25/2023

PARK PLACE

TOWN OF HERNDON
TP #2103

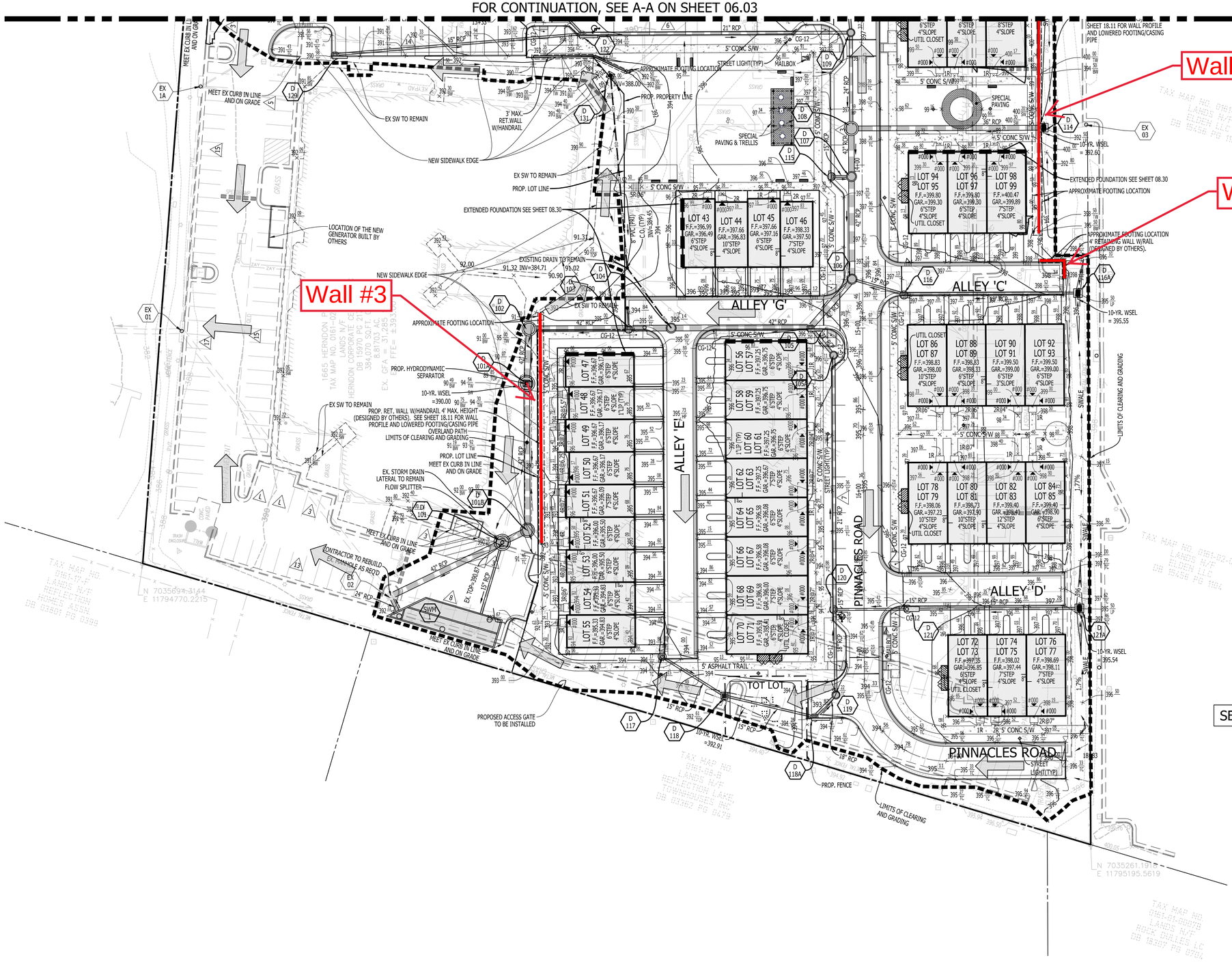
GRADING PLAN

DRAWN BY:	KY
DESIGNED BY:	JDA
DATE ISSUED:	06/15/2021
DWG. SCALE:	1"=30'
VIKA NO.	VV8011E
SHEET NO.	06.03

FILE: C:\Projects\8011\8011E\CADD\ENGINEERING\CONSTRUCTION DRAWINGS\8011E 06.03 - GRADING.dwg USER: koomson DATE: January 24, 2023 TIME: 2:06:35 PM LAYOUT: 06.03 GRADING PLAN

LAYOUT: 06.03 GRADING PLAN, Plotted By: Koomson

FOR CONTINUATION, SEE A-A ON SHEET 06.03



OVERLAND RELIEF NARRATIVE:

THERE ARE TWO RELIEF POINTS THAT SERVE THIS SITE. ONE POINT IS AT THE WESTERN PORTION OF THE SITE AND THE OTHER IS AT THE NORTHERN PORTION OF THE SITE, DISCHARGING OFFSITE.

THIS SITE HAS BEEN DESIGNED SUCH THAT IN THE EVENT OF THE 100 YEAR STORM OCCURRING AT A TIME WHEN THE STORM DRAIN INLET SYSTEM WAS INOPERABLE, NO HABITABLE STRUCTURE WOULD BE FLOODED, AND NO IMPACT ON ADJOINING PROPERTIES WOULD OCCUR. ALL AREAS OF THE SITE HAVE POSITIVE DRAINAGE AWAY FROM THE HABITABLE STRUCTURES TO THE ADJACENT ROADWAYS. IN THE EVENT OF THE 100 YEAR STORM, OVERLAND FLOW WILL FOLLOW THE PRIVATE ROADWAYS AND FLOW TOWARDS EITHER STRUCTURE EX-01 OR STRUCTURE D-127.

WATER WILL POND AT A STRUCTURE EX-01 UNTIL IT REACHES AN ELEVATION OF 388.07, AT WHICH POINT IT WILL SPILL OVER THE CURB AND FLOW OFFSITE. AT ELEVATION 388.07 THERE IS 4.85 FEET OF FREEBOARD BETWEEN THE LOWEST STRUCTURE ELEVATION AND THE LOWEST FIRST FLOOR ELEVATION.

AT STRUCTURE D-127, WATER WILL POND UNTIL IT REACHES AN ELEVATION OF 391.20, AT WHICH POINT IT WILL SPILL OVER THE CURB AND FLOW OFFSITE. AT ELEVATION 391.20 THERE IS 1.04 FEET OF FREEBOARD BETWEEN THE LOWEST STRUCTURE ELEVATION AND THE LOWEST FIRST FLOOR ELEVATION.

BASED ON THE PROVIDED FREEBOARD OF 4.85 AND 1.04 FEET AT STRUCTURES EX-01 AND D-127, IT IS THE OPINION OF THE SIGNING ENGINEER THAT NO FLOODING OF HABITABLE STRUCTURES OR ADVERSE IMPACT ON ADJOINING PROPERTIES WILL OCCUR IN THE EVENT OF THE 100 YEAR STORM.

OVERLAND RELIEF POINTS

SEE SHEET 06.07 FOR SITE NOTES

SEE SHEET 06.09 FOR EASEMENT EXHIBIT

- SPECIALTY PAVERS
SEE SHEETS 17.01 THRU 17.02A FOR DETAILS

VA STATE GRID NORTH (VSC 83)

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

REVISIONS	#	DESCRIPTION	BY	APPROVED

VIKA VIRGINIA, LLC
8180 Greensboro Dr., Suite 200
Tysons, VA 22102
703.442.7800 | vika.com

Our Site Set on the Future.

THE INFORMATION, DESIGN, AND CONTENT OF THESE DRAWINGS AND/OR DOCUMENTS HERETO ARE PROPRIETARY TO VIKA VIRGINIA, L.L.C. AND CONSTITUTE ITS PROPRIETARY INTELLECTUAL PROPERTY. THESE DRAWINGS AND/OR DOCUMENTS MUST NOT BE DIGITALLY FORWARDED, SHARED OR COPIED, DIGITALLY CONVERTED, MODIFIED, OR USED FOR ANY DESIGN PURPOSE, IN ANY FORMAT, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM VIKA VIRGINIA, L.L.C. VIOLATIONS MAY RESULT IN PROSECUTION. ONLY APPROVED, SIGNED AND SEALED PLANS OR DRAWINGS MAY BE UTILIZED FOR RECORDING AND/OR CONSTRUCTION PURPOSES.

© 2021 VIKA VIRGINIA, L.L.C.

V 12.00

PLAN STATUS	DATE
1st. Sub.	02/17/2021
2ND SUBMISSION	06/11/2021
3RD SUBMISSION	11/24/2021
4TH SUBMISSION	04/22/2022
5TH SUBMISSION	09/20/2022
6TH SUBMISSION	01/25/2023

POST-APPROVAL SHEET STATUS	DATE

PROFESSIONAL SEAL

COMMONWEALTH OF VIRGINIA
JOSEPH D. AMATEIS
Lic. No. 048573
01/25/2023
PROFESSIONAL ENGINEER

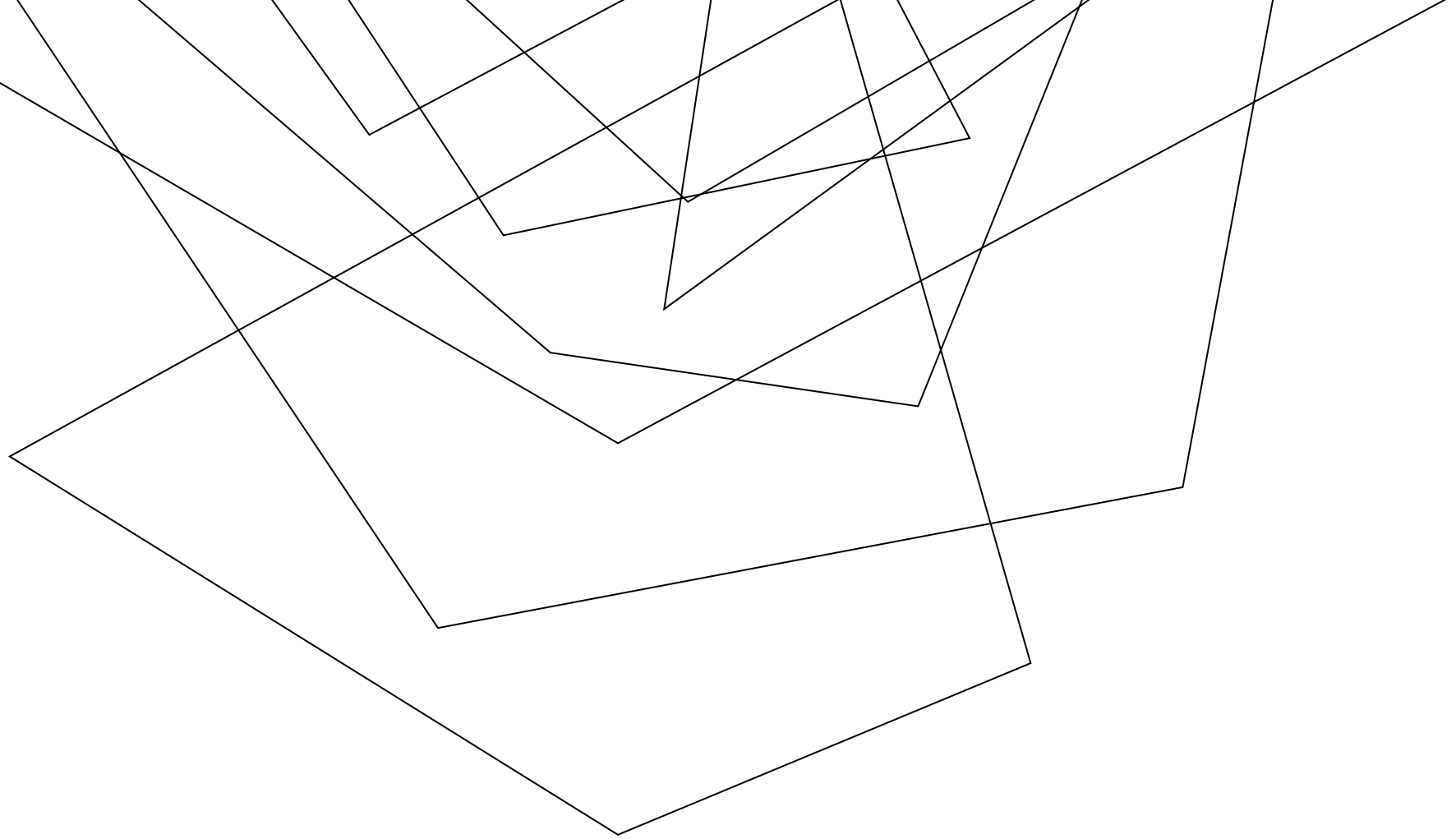
PARK PLACE

TOWN OF HERNDON
TP #2103

GRADING PLAN

DRAWN BY:	KY
DESIGNED BY:	JDA
DATE ISSUED:	06/15/2021
DWG. SCALE:	1"=30'
VIKA NO.	VV8011E
SHEET NO.	06.04

FILE: Q:\Projects\80111\80111E\CADD\ENGINEERING\CONSTRUCTION DRAWINGS\80111E 06.03 - GRADING.dwg USER: Koomson DATE: January 24, 2023 TIME: 2:06:52 PM LAYOUT: 06.04 GRADING PLAN



PARK PLACE

Architectural Review Board

October 18, 2023

SITE LOCATION

Attachment #1

1155 Herndon Parkway, Herndon, VA 20170



PLAN DETAILS

- Rezoned from C-O to PD-UR
- 55 townhouses & 56 two-over-two condo units
- Site plan approved 6/23/2023

56 TWO-OVER-TWO UNITS



ORIGINAL TWO-OVER-TWO UNITS



PREVIOUS TWO-OVER-TWO UNITS



CURRENT TWO-OVER-TWO UNITS



TWO-OVER-TWO UNITS: FRONT FACADES



TWO-OVER-TWO UNITS: REAR & SIDE FACADES

Attachment #1





TYPICAL SIDE ELEVATION
(HIGH VISIBILITY SIDE ELEVATION)



TYPICAL SIDE ELEVATION WITH
OPT. ROOFTOP TERRACE & UTILITY SHED

VIEWSHED: TOT LOT & TWO-OVER-TWO UNITS

Attachment #1



55 TOWNHOUSE UNITS



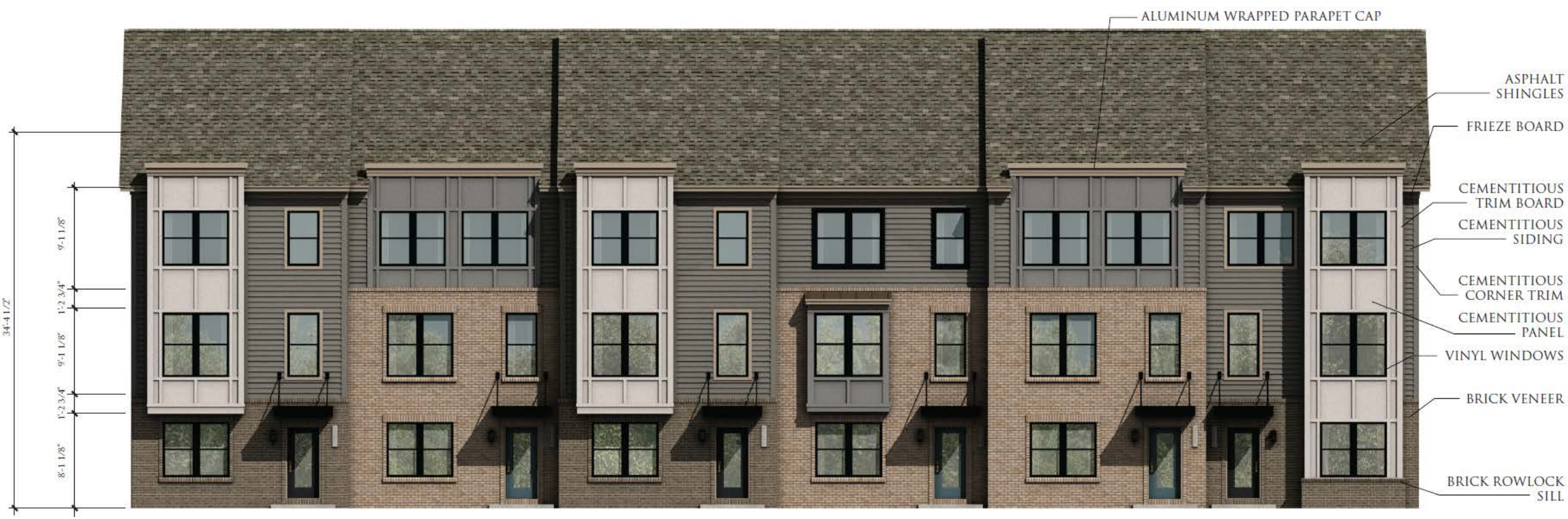
ORIGINAL TOWNHOUSES



CURRENT TOWNHOUSES



TOWNHOUSES: FRONT FACADES



TOWNHOUSES: REAR & SIDE FACADES

Attachment #1



LEFT ELEVATION - HIGH VISIBILITY
W/ BRICK WATERTABLE



LEFT ELEVATION
W/ SIDING



REAR ELEVATION



RIGHT ELEVATION - HIGH VISIBILITY
W/ BRICK WATERTABLE



RIGHT ELEVATION
W/ SIDING

Attachment #1



TWO-OVER-TWO UNITS



TOWNHOUSES

PARK PLACE

	SCHEME 1	SCHEME 2	SCHEME 3	SCHEME 4	SCHEME 5	SCHEME 6	SCHEME 7
BRICK COLOR	 COLONY POINTE	 OLD MILL	 BLUE RIDGE REGENT	 BLUE RIDGE REGENT	 COLONY POINTE	 OLD MILL	 SPALDING TUDOR
HORIZONTAL SIDING	 EVENING BLUE	 TIMBER BARK	 GRAY SLATE	 GRAY SLATE	 GRAY SLATE	 GRAY SLATE	 COBBLESTONE
PANEL COLOR	 COBBLESTONE	 COBBLESTONE	 COBBLESTONE	 PEARL GRAY	 PEARL GRAY	 LIGHT MIST	 IRON GRAY
BAY COLOR	 COBBLESTONE	 EVENING BLUE	 GRAY SLATE	 LIGHT MIST	 PEARL GRAY	 LIGHT MIST	 IRON GRAY
FRONT DOOR COLOR	 Williamsburg 227	 Mckinney Stone 475	 Black 200	 Black 200	 Williamsburg 227	 Mckinney Stone 475	 Williamsburg 227
FOR ALL BUILDING SCHEMES	WINDOW COLOR  DARK BRONZE	RAILING COLOR  DARK BRONZE	CORNICE COLOR  MUSKET BROWN	GUTTER & DOWNSPOUT COLOR  DARK BRONZE	CANOPY COLOR  DARK BRONZE	BRICK MORTAR COLOR  ROANOKE GRAY	

TWO-OVER-TWO UNIT SCHEME EXAMPLES

Attachment #1



ELEVATION A1
SCHEME 5 EXAMPLE



ELEVATION B1
SCHEME 6 EXAMPLE



ELEVATION C1
SCHEME 7 EXAMPLE

TOWNHOUSE SCHEME EXAMPLES

Attachment #1



ELEVATION T
SCHEME 1 EXAMPLE



ELEVATION U
SCHEME 2 EXAMPLE



ELEVATION W
SCHEME 3 EXAMPLE



ELEVATION X
SCHEME 4 EXAMPLE

HIGH-VISIBILITY SIDES



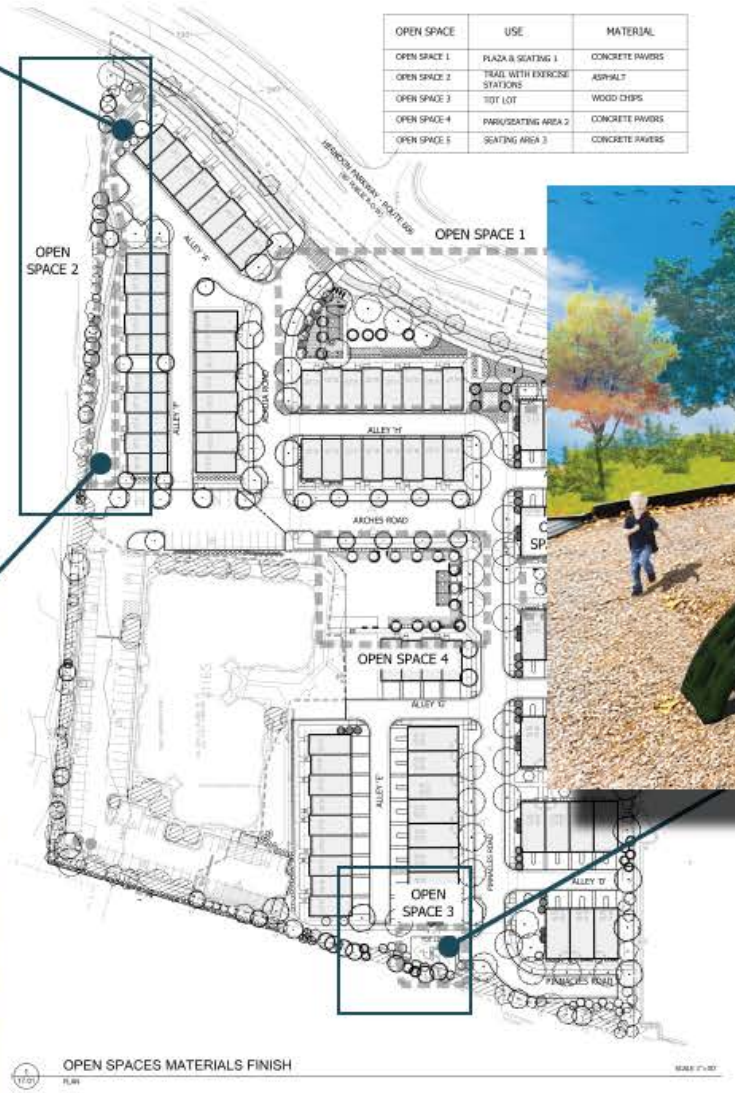
AMENITIES & FEATURES

Attachment #1



DOUBLE STATION STRETCHING POST

OPEN SPACE	USE	MATERIAL
OPEN SPACE 1	PLAZA & SEATING 1	CONCRETE PAVERS
OPEN SPACE 2	TRAIL WITH EXERCISE STATIONS	ASPHALT
OPEN SPACE 3	TOT LOT	WOOD CHIPS
OPEN SPACE 4	PARK/SEATING AREA 2	CONCRETE PAVERS
OPEN SPACE 5	SEATING AREA 3	CONCRETE PAVERS



OPEN SPACES MATERIALS FINISH



PLAYGROUND



PULL UP & DIP STATION

AMENITIES & FEATURES

Attachment #1













TOWN OF Herndon VIRGINIA

MEMORANDUM

To: Chair Blaker-Glass & Members of the Architectural Review Board

From: Tamsin Himes, Lead Planner/Design and Development 

Date: November 1, 2023

Subject: Pre-application ARB case, 13100 & 13150 Worldgate Drive, Herndon Virginia

---

Background:

This staff memo provides staff comments for the conceptual design for the proposed redevelopment of the properties at 13100 and 13150 Worldgate Drive. This project would demolish the existing office building and construct a multi-family residential building, stacked two-over-two residential units, and residential townhouses. The applicant has submitted a rezoning application for a zoning map amendment, ZMA #22-002. Architectural and landscape architectural designs, associated with zoning map amendment application, are required to go before the ARB for preliminary review prior to Planning Commission consideration of the zoning map amendment.

This project was the subject of a previous ARB discussion item which the Board reviewed on July 5th, 2023. The representatives for the project were requested to come before the Board as a discussion item in that early stage of the project to receive initial feedback. The project is now more developed and is again before the Board prior to going before the Planning Commission. Following this review the Board's official feedback will be provided in a memo to the Planning Commission Chair. It is possible the Planning Commission would incorporate comments from the ARB review and/or seek additional information from the ARB regarding the comments provided.

<u>The board is tasked with considering, evaluating, and discussing staff's comments individually and present and discuss additional comments originating from any board member. It is important for any comments or guidance back to the applicant to be clear and direct. Following the rezoning process, the project would go through a site plan process and then return to the Board as a formal case.</u>

Completeness of Discussion Items. Though this project is much farther along in the design process now than when previously reviewed by the Board, it is still a discussion item and as such is not expected to contain the level of detail that an official ARB application would be expected to include. This memo addresses some of the elements

contained in the submission materials and matters staff believes should be addressed prior to this project coming before the Board as an official application.

Case Materials. The submitted materials for this discussion item are limited to a presentation slide deck. The formal ARB application should include all drawing sheets and materials included as a part of the GDP. Not only will this help with a comprehensive review of the project, but the ARB record needs to show that the Board reviewed the same materials that were a part of the GDP application.

Multi-Family Building Staff Comments:

Division of Facades and Massing. As mentioned in the previous analysis of this project, in similar projects reviewed in the past, the Board has identified an issue with long facades abutting public right of ways, that lack variety and visual delineation, giving the appearance of a continuous and monotonous facade. While the renderings provided at this stage tend to read flatter than the conceptual drawings provided at the earlier stage, the same design strategies are used and seem to be generally successful. The facades are visually broken up with the use of fenestration, façade angle, recessed areas, and exterior materials. Materials turning corners and parapets extending back into the structure also help with a visual separation of sections of the façade. All of these elements help to give the appearance of several individual buildings instead of a long continuous façade.

Cladding Materials and Façade Design. This project proposes a combination of brick, fiber cement paneling, and fiber cement lap siding, each cladding type including a few color variations. More traditional materials like brick add a level of variety, scale, and texture to the facades and tend to soften and balance out the stark lines of modern designs like those in this project. Cement fiber paneling flattens facades. This flattening effect can be seen on the south façade of the multi-family building where nearly the entire stretch of the facade along Worldgate Drive features paneling (attachment #1, p12). The strict use of paneling along with the simple and modern forms and lines of the building may create an unwelcome starkness at a highly visible gateway into Herndon. Especially on long facades, overreliance on cement paneling should be avoided and used only as secondary field material, after brick or a similar masonry unit. When this project is submitted as an official ARB application, applicants should include images of existing buildings where this paneling is used in a similar way to what is proposed.

Window Articulation. Given the simple and contemporary lines and forms of this architecture, window articulation becomes a vital component of how well the singularity of the wall plane is balanced with the fenestration in a manner that avoids overtly flay

facades. Details on how the window articulation is handled should be provided and clearly understood with the formal ARB case.

Color Pallet. The color pallet, which generally includes brown and light and dark gray brick, paneling and siding, seems to be used effectively and cohesively throughout the development, tying together the three different types of structures. The renderings and materials swatches vary somewhat, but staff would suggest that the lighter gray colors should tend to be on the warmer side. Although not visible from the street, consideration should be given to adding some color changes to the rear elevations might be appropriate given that future residents will already be looking out of the greyness of the garage and that combined with the fully grey façade could create a harsh and monotonous appearance, mass, and scale.

Corner Form. While staff agrees with the idea of having a somewhat visually distinct form at the highly visible corner of Worldgate Drive and Elden Street, there's uncertainty with the roof form as conceptually designed and how well the slight slope works with the rest of the building. This might be a specific element the applicant may wish to workshop more on before returning to the Board as a formal case.

Townhouse and Stacked Unit Staff Comments:

Anchored or Bookend Design. Both townhouses and the stacked units employ a design element that highlights the corners of the buildings by using red/brown cladding material while all the structures in between use a combination of light and dark gray. This results in a "bookend" effect that ties each stick of units together and creates a singular architectural expression and image similar to that of an apartment building (attachment #1, page 20). The "bookend" effect is a strong aesthetic decision that if used on some stacked or townhouse sticks, should be used consistently throughout.

Side Elevation Brick Walls. At the termination of each townhome or stacked structure row, the end façade includes a large, blank area of brick between the side windows of the front and the side windows of the back of the building. This can be seen in pages 22, 25, 30, 31, of attachment #1. Especially along alley 4 (page 30), this design approach, its repetition, and prominence could contribute to a form that lacks the appropriate scale and treatment for this project and the rest of its architecture. This could be addressed with the introduction of another material on this facade or the addition of some design variety using the same material such as a "blind window" feature.

Top Floor Façade and Parapet Design. Elevation drawings for the stacked structures that face Worldgate Drive and Wiltshire Court (attachment #1, page 24, 29) show a stepped parapet along the middle portion of the façade between the anchoring corner "bookends". While the windows and lower dark gray portions of the stacked houses create vertical divisions, the long façade with a prominent light brick parapet area above the windows contradicts the verticality of the design and draws attention to the upper stepped parapets. Light brick used on this upper parapet area further draws attention to the element. The parapet steps appear to coincide with the grade so that each step is a different height, further contradicting the regularity of the rest of the facade. The overall impression seems awkward and incongruent with the rest of the design narrative and should be addressed with some revisions and refinement to this area handles the façade treatment and/or wall planes somewhat differently. One option might be to employ an alternating pattern of pulling forward and stepping back stacked structure, even as little as 4 inches, this would create a division and shadow line that would further emphasize the vertical design and help the stepping of the parapet appear more intentional.

Window Articulation. Refer to the same comment for the multi-family building.

Attachments:

1) Design Packet (provided by applicant)

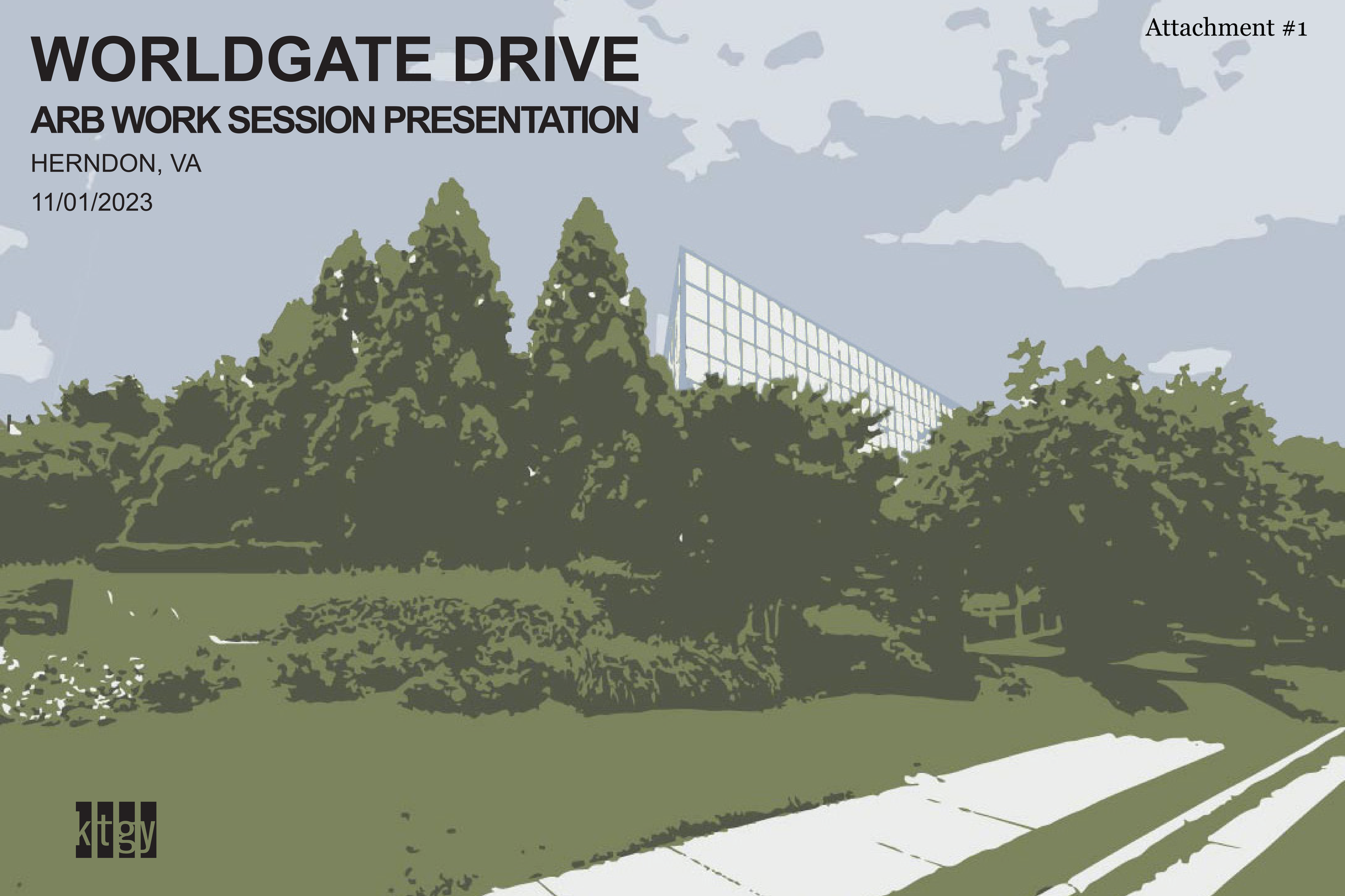
Attachment #1

WORLDGATE DRIVE

ARB WORK SESSION PRESENTATION

HERNDON, VA

11/01/2023



kt gy

Attachment #1

THE SITE

The project site sits at the strategic intersection of Worldgate Drive and Elden Street (Centreville Road) one of the main accesses to downtown Herndon. It is located about a mile away in between two Silver Line Stations and served by public bus on Worldgate Drive. The 10.42 acres site currently hosts two vacant office buildings and a precast garage along the entirety of the north border. Its limits are a buffer/trail with a neighborhood park and single-family homes to the north, commercial and retail center to the west and south, and a multi-family residential complex to the east.

After studying several options, the team opted for a concept which bisects the site to proportion the multi-family and single-family components, partially demolishes the garage, and improves the area connectivity by adding a new street grid.





Attachment #1

PROPOSED SITE PLAN

The proposed multi-family building will use half of the garage structure, wrapping around it to create internal courtyards and build an urban edge towards Elden Street and Worldgate Drive. The new Road A South access will announce the multi-family amenity from Worldgate Drive, while the new Road B will connect the townhouse neighborhood directly to the building's entry.

The single-family component is proposed as a series of urban blocks with townhouses and stacked flats; a grid of landscaped streets, pedestrian mews and service alleys will integrate with the multi-family building and adjacent residential complex.

SITE AREA	10.42 ACRES 453,958 SF
MULTIFAMILY (MF) BUILDING	
5 FLOORS+ BASEMENT	
360 UNITS	
STACKED BUILDINGS	
4 FLOORS	
52 UNITS	
TOWNHOUSE (TH) BUILDINGS	
4 FLOORS	
49 UNITS	
PARKING PROVIDED	
MF GARAGE	487 SPACES
SURFACE PARKING	39 SPACES
STACKED PRIVATE GARAGES	104 SPACES
TH PRIVATE GARAGES	98 SPACES
TOTAL	728 SPACES

20230003 ktgy

WORLDGATE DRIVE

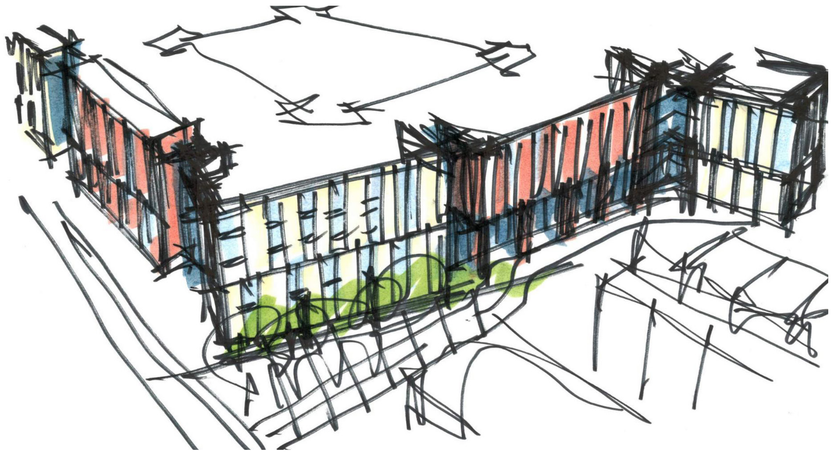
HERNDON, VA

0 60 90 180

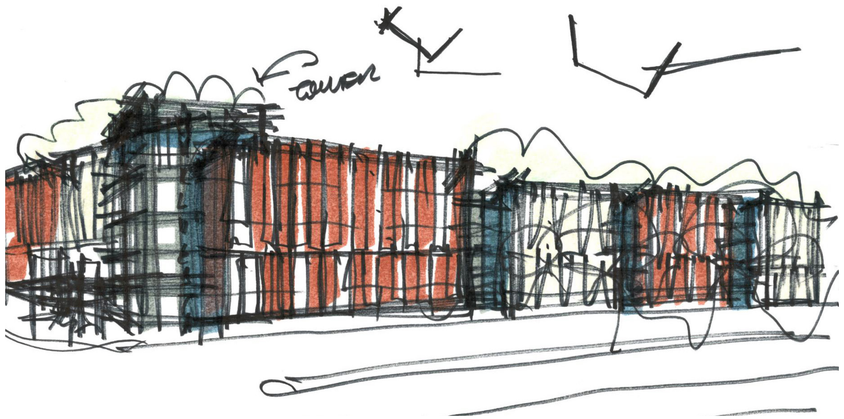
SITE PLAN

04

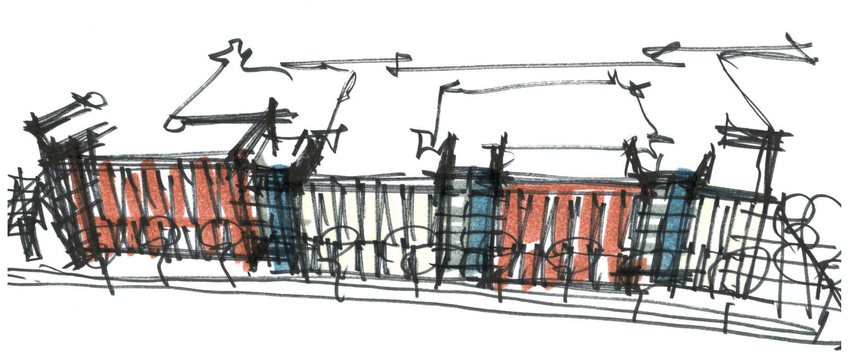
11/01/2023



MULTIFAMILY- CREATING PUBLIC SPACE



MULTIFAMILY- ANCHORING THE CORNER



MULTIFAMILY- BREAKING UP THE BLOCK



TOWNHOUSES- FORWARD LOOKING YET ROOTED IN TRADITION

MULTIFAMILY BUILDING

The proposal aims to create a building that belongs to its time and place; forward looking but rooted in Herndon's Heritage. The massing evokes the architectural principles that make historic buildings stand the test of time such as: tectonic massing, verticality, gravitas. The block massing evokes the principles that define urban character: urban notches, massing definition, vertical corner markers, variety with honesty.

The proposal articulates a series of building components in alternating brick and fiber cement cladding with deep recesses that create vertical breaks along the facades.

The new proposed road A is enhanced as an arrival space where the building chamfers in to create a public plaza for trees, landscape, and hardscape. The chamfer opens the view to the multifamily building's main amenity and entrance.

The building façade composition emphasizes verticality, base and top, tenets of traditional architecture, combined with a more playful treatment of windows in a staggered arrangement.

The different building components are treated with deep recessed balconies at the corners to carve out the massing.

At the corner of Elden and Worldgate Drive the design proposes a rotated vertical tower that acts as an urban marker for the main entry corridor to the downtown area of Herndon. The corner volume rotation aligns with and existing easement, but also helps to accentuate the building and signage by aligning it with the drivers sight line.

TOWNHOUSES + STACKED BUILDINGS

Like the multifamily design, the townhouses and stacked products proposed design evokes traditional architectural principles like tectonic massing, verticality, gravitas. Traditional materials that have been adapted to a contemporary lifestyle: large openings, simple geometries.

The use of color and massing variation on each stack will visually create the necessary variation and breaks for an aesthetically pleasing streetscape, as well as complement the multifamily building's expression to create a holistic identity for this neighborhood.

20230003 ktgy

WORLDGATE DRIVE
HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

ARCHITECTURAL CONCEPTS

05

11/01/2023



MULTIFAMILY
WORLDGATE DR. + ELDEN ST.



MULTIFAMILY ENTRANCE + TOWNHOUSES
WORLDGATE DR. + ROAD A



STACKED BUILDINGS
WORLDGATE DR. + WILTSHIRE LANE.



CONVENTIONAL TOWNHOUSES
ROAD B - LOOKING EASTWARDS

ARCHITECTURE SKETCHES

20230003 ktgy

WORLDGATE DRIVE
HERNDON, VA

06

11/01/2023

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



KEY PLAN

PERSPECTIVE

07

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



20230003 kt gy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

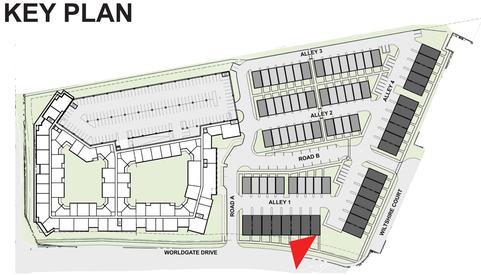
PERSPECTIVE

08

11/01/2023



KEY PLAN



PERSPECTIVE

09

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

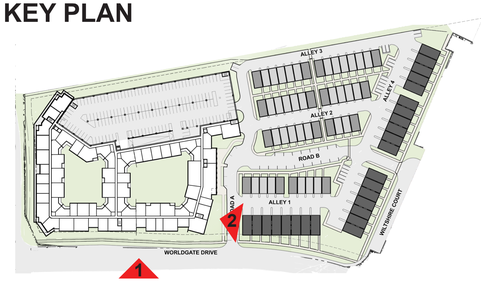


1 - SOUTH ELEVATION



2 - EAST ELEVATION

KEY PLAN



ELEVATIONS

10

11/01/2023

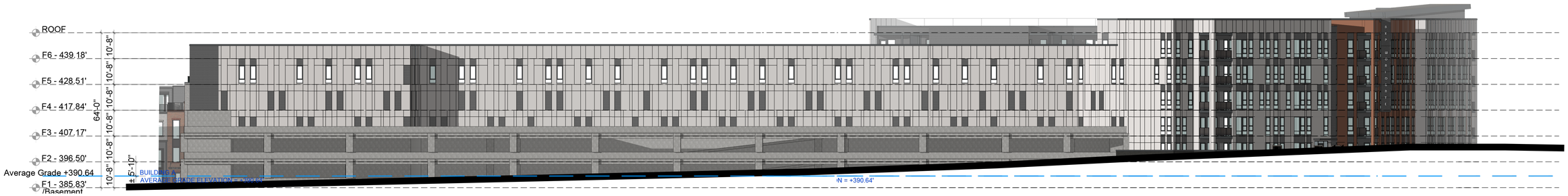
20230003 ktgy

WORLDGATE DRIVE

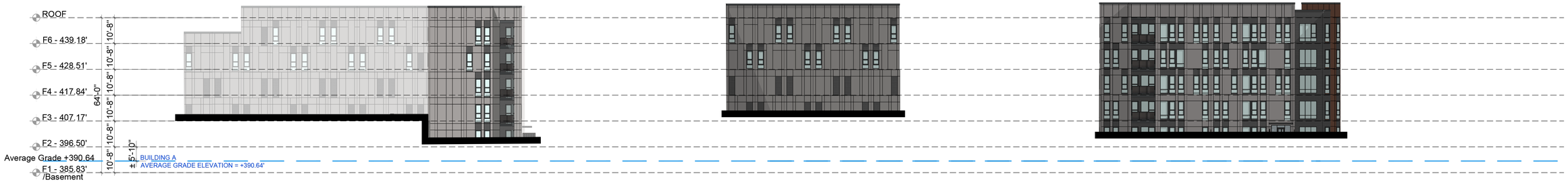
HERNDON, VA

0 10 20 40

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



1 - NORTH ELEVATION



2 - NORTHEAST PARTIAL ELEVATION

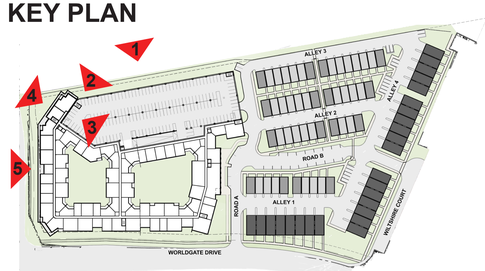
3 - SOUTHEAST PARTIAL ELEVATION

4 - NORTHWEST PARTIAL ELEVATION



5 - WEST ELEVATION

KEY PLAN



ELEVATIONS

11

11/01/2023

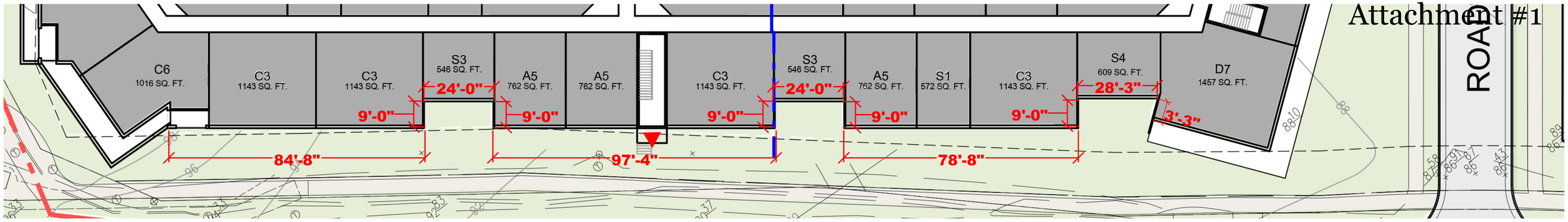
20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

0 10 20 40

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



1 - FLOOR PLAN



2 - SOUTH ELEVATION

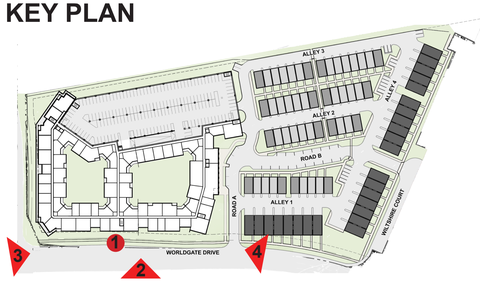


3 - PERSPECTIVE



4 - PERSPECTIVE

KEY PLAN



FACADE ARTICULATION

20230003 ktgy

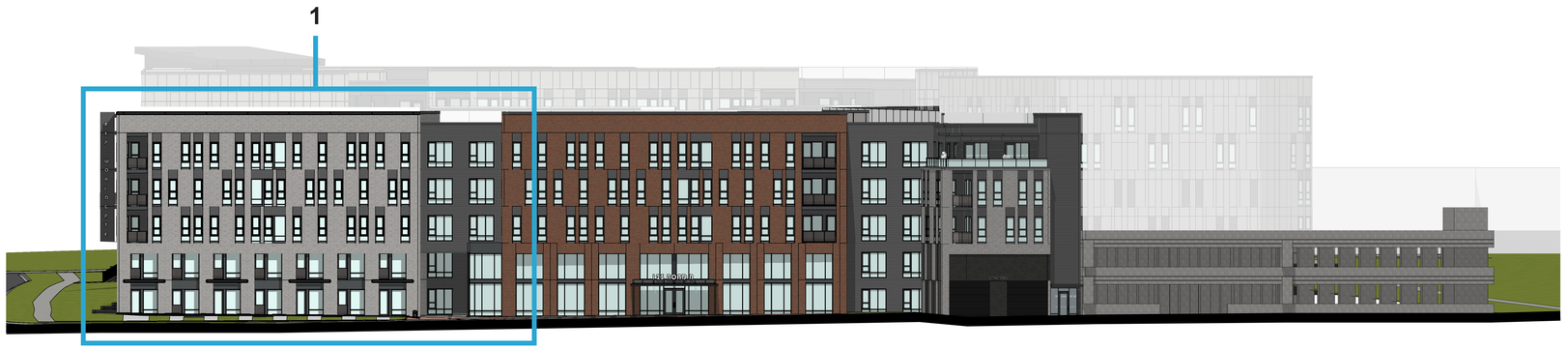
WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

Attachment #1

https://ceracladcoatings.com/ceramic-coated-panels





DETAIL 1 - FRONT ELEVATION



CERACLAD RAIN SCREEN EXTERIOR SYSTEM

1.1 RAINSCREEN THIN BRICK - LIGHT



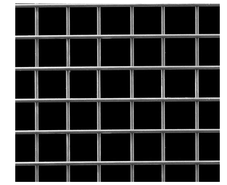
1.2 RAINSCREEN THIN BRICK - RED



1.3 RAINSCREEN SIDING - BLACK



3.1 FIBER CEMENT LAP SIDING

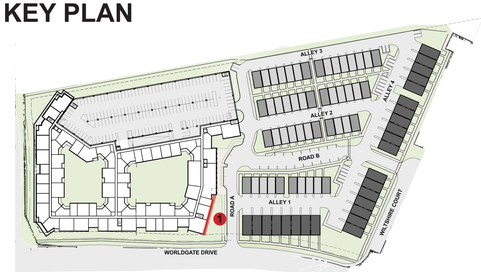


4.1 WIRE MECH RAILING

MATERIAL LIST:

1.1 RAINSCREEN THIN BRICK - LIGHT
1.2 RAINSCREEN THIN BRICK - RED
1.3 RAINSCREEN SIDING - BLACK
2.1 BRICK - BLACK
2.2 BRICK - RED
3.1 FIBER CEMENT LAP SIDING
3.2 FIBER CEMENT PANEL - RED
3.3 FIBER CEMENT PANEL - LIGHT
4.1 WIRE MESH RAILING
4.2 METAL CANOPY
4.3 METAL SUNSCREEN
4.4 METAL STOREFRONT SYSTEM
5.1 VINYL WINDOW & DOOR SYSTEM

KEY PLAN



DETAILED ELEVATIONS

20230003 kt gy

WORLDGATE DRIVE
HERNDON, VA

0 4 8 12

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

13

11/01/2023

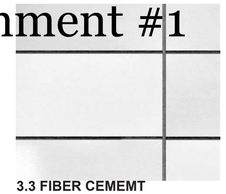




DETAIL 1 - FRONT ELEVATION



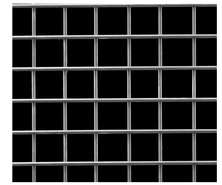
3.2 FIBER CEMEMT PANEL - RED



3.3 FIBER CEMEMT PANEL - LIGHT



3.1 FIBER CEMEMT LAP SIDING

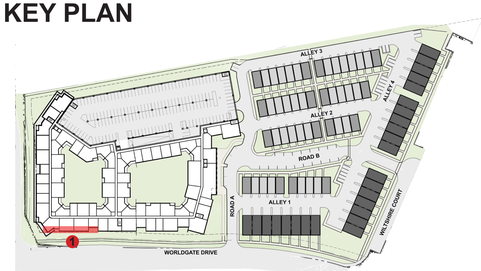


4.1 WIRE MESH

MATERIAL LIST:

1.1 RAINSCREEN THIN BRICK - LIGHT
1.2 RAINSCREEN THIN BRICK - RED
1.3 RAINSCREEN SIDING - BLACK
2.1 BRICK - BLACK
2.2 BRICK - RED
3.1 FIBER CEMENT LAP SIDING
3.2 FIBER CEMENT PANEL - RED
3.3 FIBER CEMENT PANEL - LIGHT
4.1 WIRE MESH RAILING
4.2 METAL CANOPY
4.3 METAL SUNSCREEN
4.4 METAL STOREFRONT SYSTEM
5.1 VINYL WINDOW & DOOR SYSTEM

KEY PLAN



DETAILED ELEVATIONS

14

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

0 4 8 12

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



KEY PLAN

PERSPECTIVE

15

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

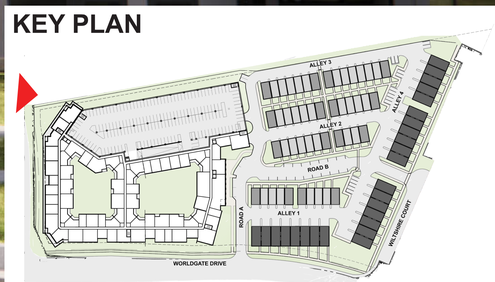
These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

PERSPECTIVE

16

11/01/2023





20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

PERSPECTIVE

17

11/01/2023

Attachment #1



KEY PLAN

PERSPECTIVE

18

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



KEY PLAN

PERSPECTIVE

19

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



1 - FRONT ELEVATION - TOWNHOUSE BUILDING 1 & 2



2 - FRONT ELEVATION - TOWNHOUSE BUILDING 3 & 4

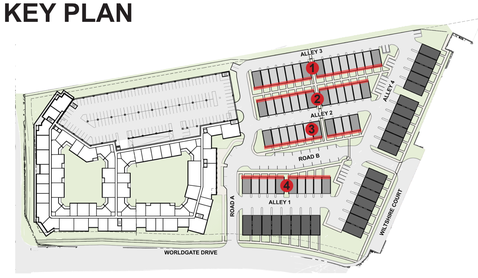


3 - FRONT ELEVATION - TOWNHOUSE BUILDING 5 & 6



4 - FRONT ELEVATION - TOWNHOUSE BUILDING 7 & 8

KEY PLAN



20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

0 8 16 32

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

ELEVATIONS

20

11/01/2023



1 - REAR ELEVATION - TOWNHOUSE BUILDING 1 & 2



2 - REAR ELEVATION - TOWNHOUSE BUILDING 3 & 4



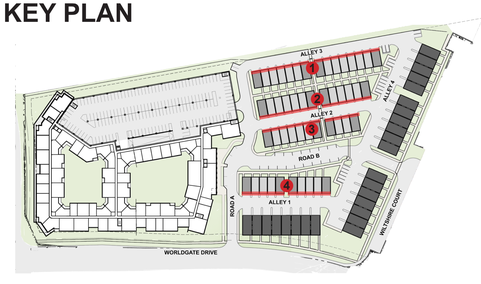
3 - REAR ELEVATION - TOWNHOUSE BUILDING 5 & 6



4 - REAR ELEVATION - TOWNHOUSE BUILDING 7 & 8

BALCONIES SHOWN ARE OPTIONAL.

KEY PLAN



20230003 kt gy

WORLDGATE DRIVE

HERNDON, VA

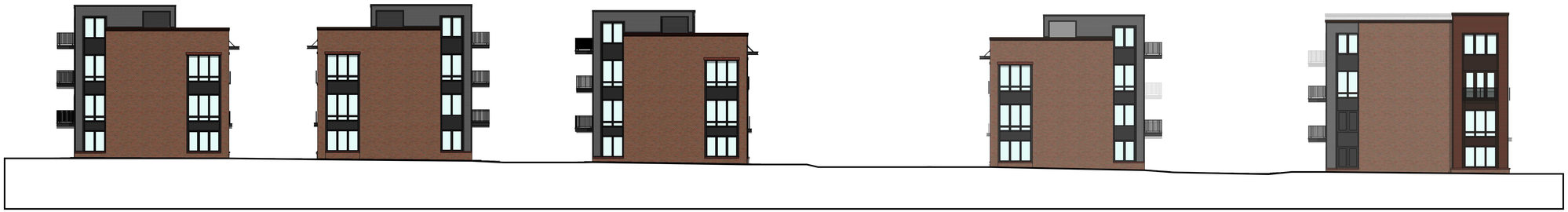
0 8 16 32

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

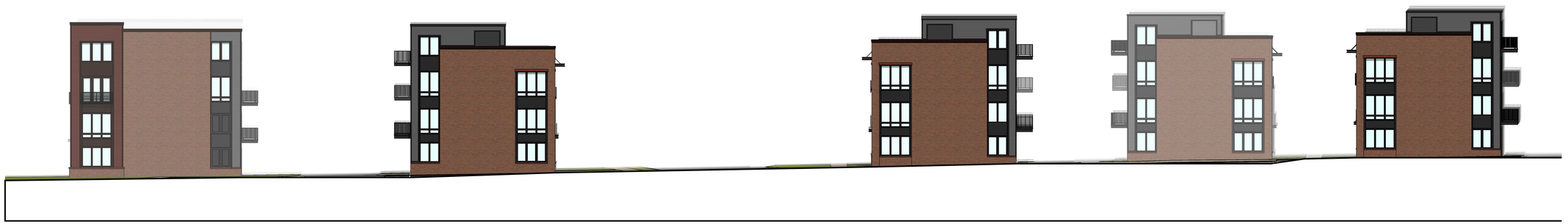
ELEVATIONS

21

11/01/2023



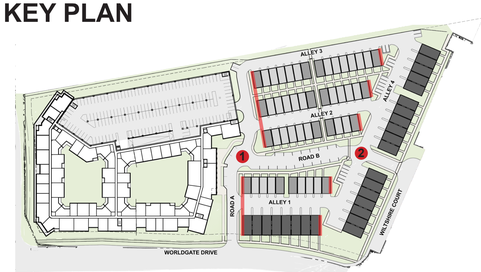
1 - SIDE ELEVATION - TOWNHOUSE BUILDING 1, 3, 5, 7 & 9



2 - SIDE ELEVATION - TOWNHOUSE BUILDING 9, 8, 6, 4 & 2

BALCONIES SHOWN ARE OPTIONAL.

KEY PLAN



20230003

WORLDGATE DRIVE

HERNDON, VA

0 8 16 32

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

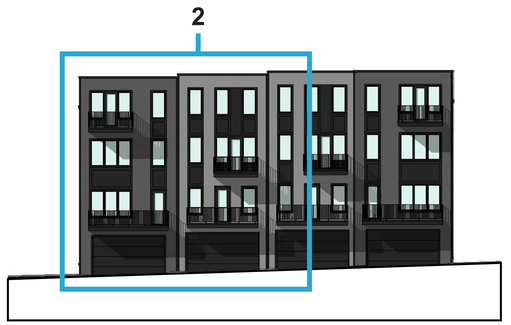
ELEVATIONS

22

11/01/2023

Attachment #1







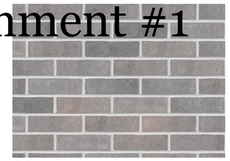
DETAIL 1 - FRONT ELEVATION



DETAIL 2 - REAR ELEVATION



1.1
BRICK - RED



1.2
BRICK - LIGHT



1.3
BRICK - DARK



2.1
FIBER CEMENT PANEL 1



2.2
FIBER CEMENT PANEL 2

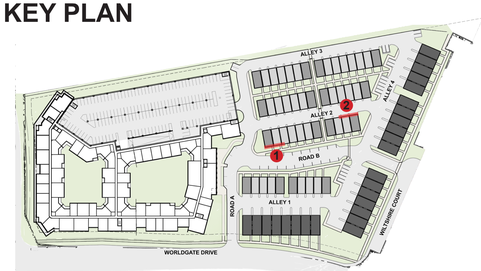


2.1
FIBER CEMENT LAP SIDING

MATERIAL LIST: 20’ & 22’ TH

1.1 BRICK 1
1.2 BRICK 2
1.3 BRICK 3
2.1 FIBER CEMENT PANEL 1
2.2 FIBER CEMENT PANEL 2
2.3 FIBER CEMENT LAP SIDING 1
2.4 FIBER CEMENT LAP SIDING 2
2.5 FIBER CEMENT LAP SIDING 3
3.1 METAL RAILING
3.2 METAL CANOPY
3.3 METAL COPING 1
3.4 METAL COPING 2
3.5 SEGMENTED GARAGE DOOR
4.1 VINYL WINDOW & DOOR SYSTEM

KEY PLAN



DETAILED ELEVATIONS

20230003 ktgy

WORLDGATE DRIVE
HERNDON, VA

0 2 4 8

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

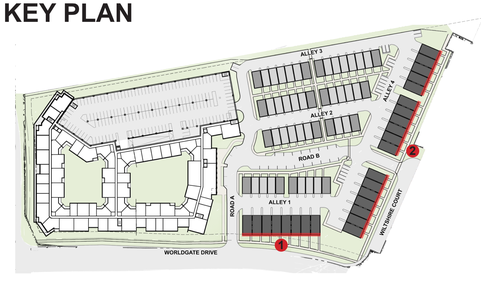


1 - FRONT ELEVATION - STACKED BUILDING 9



2 - FRONT ELEVATION - STACKED BUILDING 10, 11 & 12

KEY PLAN



20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

0 8 16 32

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

ELEVATIONS

24

11/01/2023

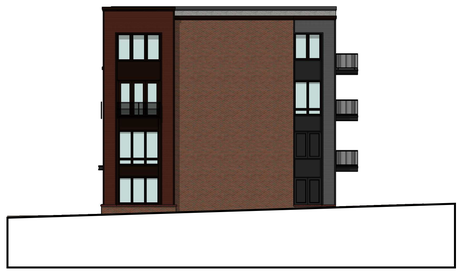
Attachment #1



1 - REAR ELEVATION - STACKED BUILDING 9



2 - REAR ELEVATION - STACKED BUILDING 12, 11 & 10



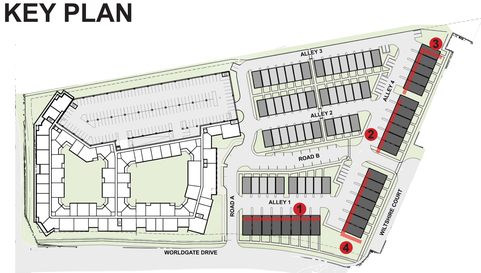
3 - RIGHT SIDE ELEVATION - STACKED BUILDING 10, 11 & 12



4 - LEFT SIDE ELEVATION - STACKED BUILDING 10, 11 & 12

BALCONIES SHOWN ARE OPTIONAL.

KEY PLAN



ELEVATIONS

25

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

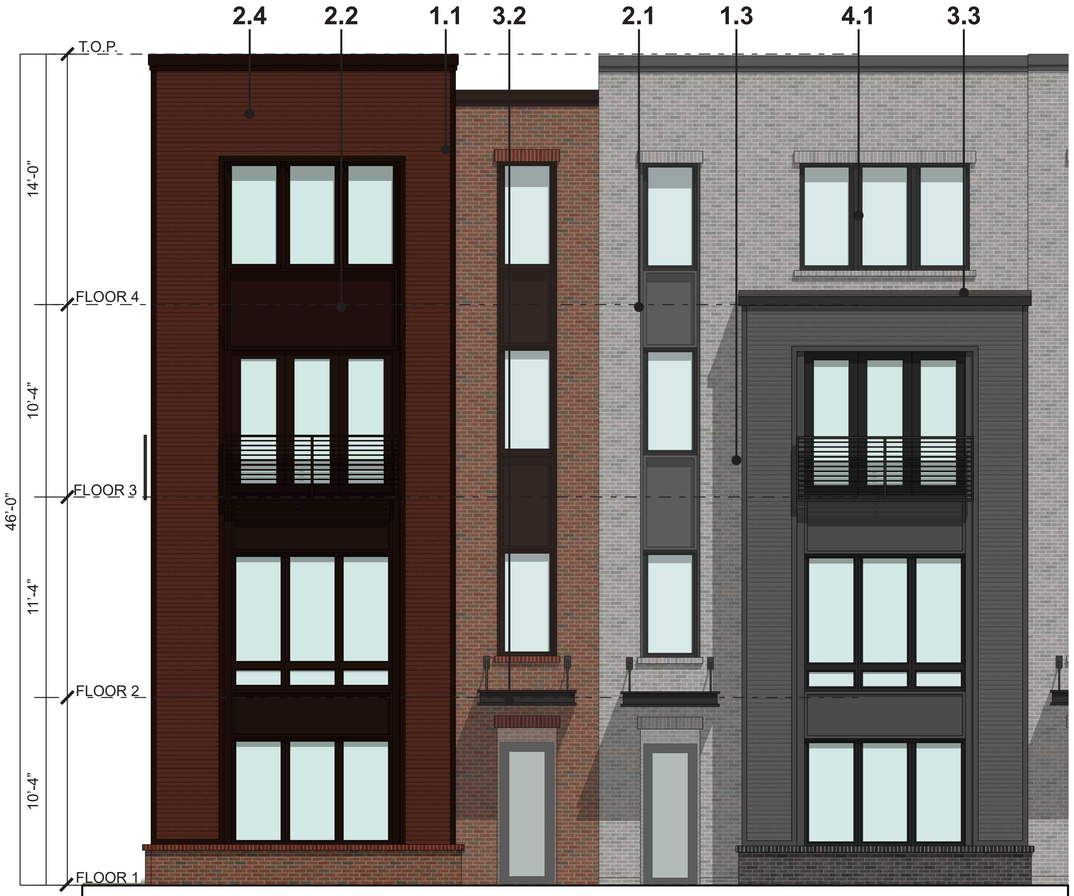
HERNDON, VA

0 8 16 32

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.







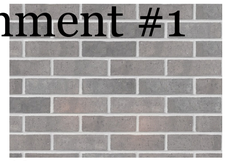
DETAIL 1 - FRONT ELEVATION



DETAIL 2 - REAR ELEVATION



1.1
BRICK - RED



1.2
BRICK - LIGHT



1.3
BRICK - DARK



2.1
FIBER CEMENT PANEL 1



2.2
FIBER CEMENT PANEL 2

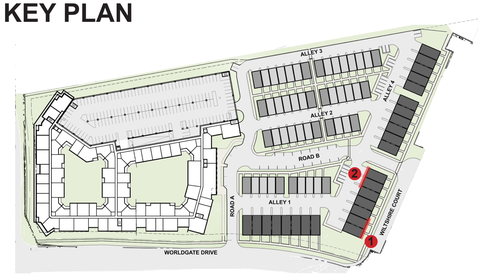


2.1
FIBER CEMENT LAP SIDING

MATERIAL LIST: STACKED TH

1.1 BRICK 1
1.2 BRICK 2
1.3 BRICK 3
2.1 FIBER CEMENT PANEL 1
2.2 FIBER CEMENT PANEL 2
2.3 FIBER CEMENT LAP SIDING 1
2.4 FIBER CEMENT LAP SIDING 2
2.5 FIBER CEMENT LAP SIDING 3
3.1 METAL RAILING
3.2 METAL CANOPY
3.3 METAL COPING 1
3.4 METAL COPING 2
3.5 SEGMENTED GARAGE DOOR
4.1 VINYL WINDOW & DOOR SYSTEM

KEY PLAN



DETAILED ELEVATIONS

20230003 ktgy

WORLDGATE DRIVE
HERNDON, VA

0 2 4 8

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



KEY PLAN

PERSPECTIVE

27

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



KEY PLAN

PERSPECTIVE

28

11/01/2023

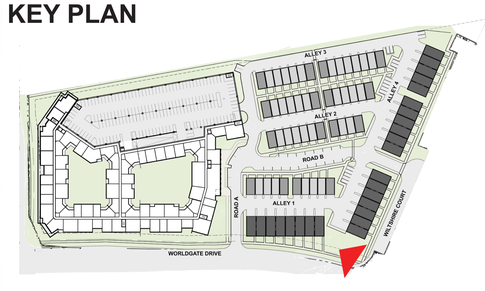
20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.





KEY PLAN

PERSPECTIVE

29

11/01/2023

20230003 ktgy

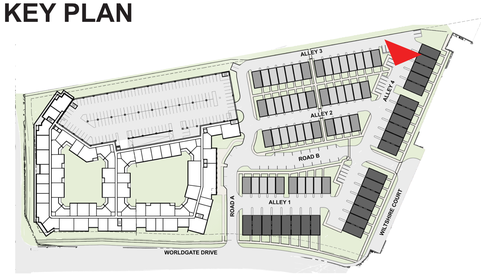
WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

BALCONIES SHOWN ARE OPTIONAL.

KEY PLAN



PERSPECTIVE

30

11/01/2023

20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.



20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

PERSPECTIVE

31

11/01/2023



KEY PLAN

PERSPECTIVE

32

11/01/2023

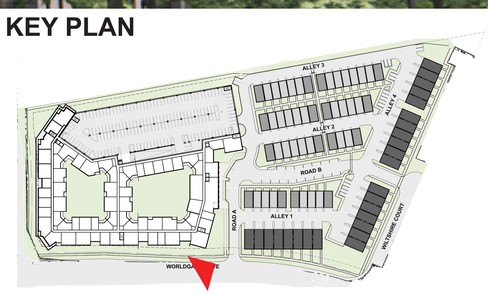
20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.





20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

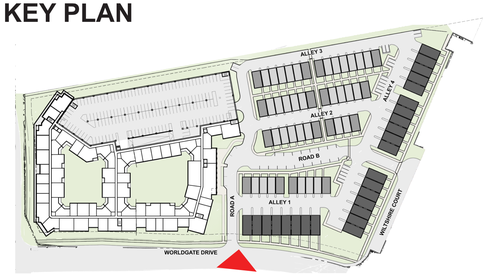
PERSPECTIVE

33

11/01/2023

Attachment #1

KEY PLAN



PERSPECTIVE

34

11/01/2023

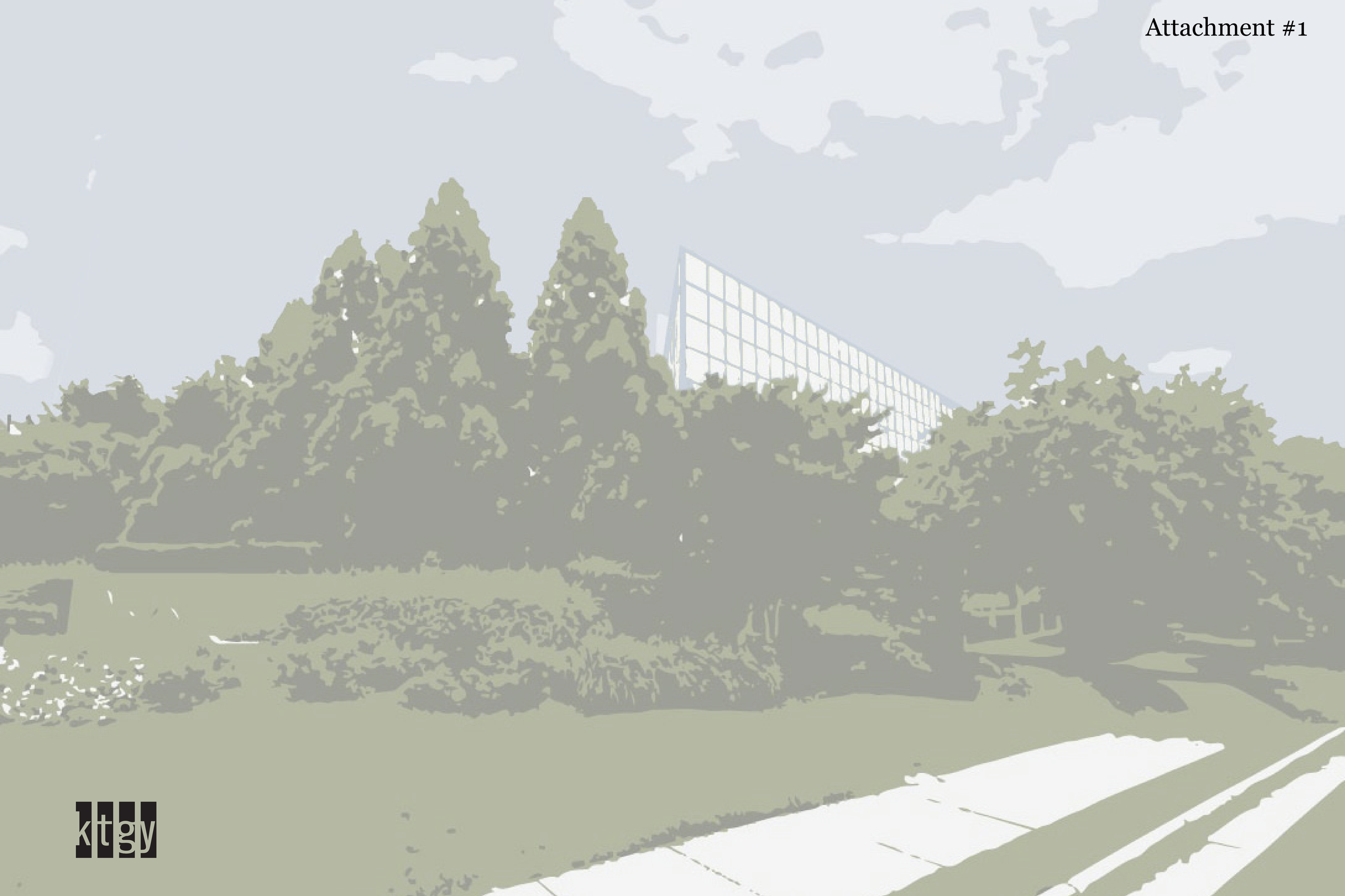
20230003 ktgy

WORLDGATE DRIVE

HERNDON, VA

These images are conceptual and are subject to change in accordance with the approved development plans and proffers. Building materials and colors are subject to change, in accordance with final ARB approval.

Attachment #1



TOWN OF Herndon VIRGINIA

STAFF REPORT

Architectural Review Board
November 1, 2023

Title:

Resolution to establish the Architectural Review Board (ARB) meeting schedule for January 1, 2024, to December 31, 2024.

Staff Contact:

Tamsin Himes
Lead Planner – Development and Design
Telephone: 571-612-0537
E-mail: tamsin.himes@herndon-va.gov

Description:

The meeting schedule of ARB is prescribed by the ARB bylaws.

In keeping with consistency, the Department of Community Development in coordination with the Town Clerk's Office would like to propose for consideration a resolution to set the next year's meeting schedule (Calendar Year 2024). The meeting schedule is generally modified to accommodate holidays and occasions of conflicts with other Town meetings and events. The adopted meeting schedule is included in the printed annual town calendar, which is currently under development.

Staff has prepared the attached proposed ARB meeting schedule for Calendar Year 2024 based on the following guidelines:

- ARB regular meetings (public hearings) are scheduled for the third Wednesday of the month. In the event that a regular meeting falls on a holiday, the bylaws allow for the meeting to be shifted to the fourth Wednesday of the month;
- ARB work sessions are scheduled on the first Wednesday of the month. In the event such date falls on a legal holiday, the meeting shall be held on the second Wednesday of the month;
- Meeting dates may be changed by resolution of the board;
- July meetings are affected by the 4th of July holiday. As such the board's work session will be shifted to July 10th, with the regular meeting date being unaltered on July 17th.

Fiscal Impact:

N/A

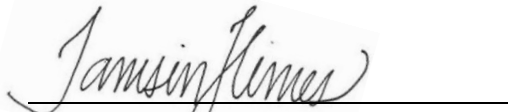
Staff Recommendation:

Recommend adoption of the proposed resolution as presented.

Attached Documents:

1. Draft Resolution
2. Proposed CY2024 Architectural Review Board Meeting Schedule

Prepared and Approved by:



Tamsin Himes
Lead Planner - Design and Development

TOWN OF HERNDON, VIRGINIA

DRAFT RESOLUTION

NOVEMBER 15, 2023

Resolution- to establish the Architectural Review Board meeting schedule for January 1, 2024, to December 31, 2024.

BE IT RESOLVED by the Architectural Review Board of the Town of Herndon, Virginia, that:

1. In accordance with the meeting schedule set out in the Architectural Review Board bylaws, the meeting schedule for calendar year (CY) 2024, as described in Attachment A Architectural Review Board CY 2024 Meeting Calendar, is hereby adopted.

2. The Architectural Review Board directs staff to include the meeting schedule in the 2024 annual town calendar.

Attachment A

ARCHITECTURAL REVIEW BOARD CY 2024 MEETING SCHEDULE

Date	Meeting Type
January 3, 2024	Work Session
January 17, 2024	Regular Meeting (Public Hearing)
February 7, 2024	Work Session
February 21, 2024	Regular Meeting (Public Hearing)
March 6, 2024	Work Session
March 20, 2024	Regular Meeting (Public Hearing)
April 3, 2024	Work Session
April 17, 2024	Regular Meeting (Public Hearing)
May 1, 2024	Work Session
May 15, 2024	Regular Meeting (Public Hearing)
June 12, 2024	Work Session
June 26, 2024	Regular Meeting (Public Hearing)
July 10, 2024	Work Session
July 17, 2024	Regular Meeting (Public Hearing)
August 7, 2024	Work Session
August 21, 2024	Regular Meeting (Public Hearing)
September 4, 2024	Work Session
September 18, 2024	Regular Meeting (Public Hearing)
October 2, 2024	Work Session
October 16, 2024	Regular Meeting (Public Hearing)
November 6, 2024	Work Session
November 20, 2024	Regular Meeting (Public Hearing)
December 4, 2024	Work Session
December 18, 2024	Regular Meeting (Public Hearing)