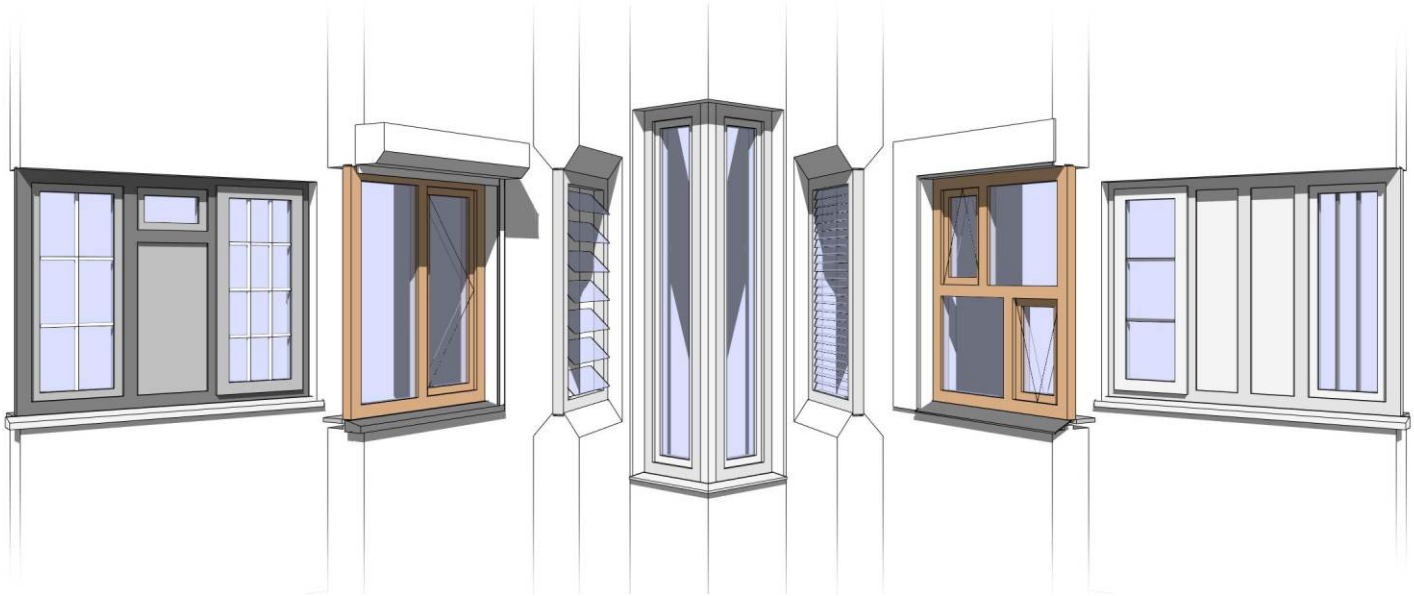
Revit® Content

Professional Revit Families

RC AIO WIndow 3

Manual



№	Parameters	Page	Type
	Constraints		
1	Bay Frame Visibility	9	Yes/No - Instance
2	Cavity Closer Bottom Visibility	1	Yes/No - Instance
3	Cavity Closer Left Visibility	1	Yes/No - Instance
4	Cavity Closer Right Visibility	1	Yes/No - Instance
5	Cavity Closer Top Visibility	1	Yes/No - Instance
6	Exterior Sill Visibility	10,11	Integer - Type
7	Frame Dimensions	2	Yes/No - Type
8	Glass Visibility	7	Integer - Type
9	Handle Visibility	4	Yes/No - Instance
10	Interior Sill Interior Or Exterior Side Visibility	10,11	Integer - Type
11	Opening Lines	15	Yes/No - Instance
12	Roller Shutter Visibility	12,13	Integer - Type
13	Symbol Lines Elevation 2D	6	Yes/No - Instance
14	Symbol Lines Elevation 3D	6	Yes/No - Instance
15	Symbol Lines Hinge Side	5	Yes/No - Type
16	Symbol Lines Plan 2D	6	Yes/No - Instance
17	Symbol Lines Plan 3D	6	Yes/No - Instance
18	Window Bottom Trim Visibility	2	Yes/No - Instance
19	Window Trim Visibility	2	Yes/No - Instance
20	Sill Height	10	Length - Instance
	Graphics		
21	W1-10 Visibility	3	Yes/No - Type
22	W1-10 Width %	3	Number - Type
23	W1-10 Height %	3	Number - Type
24	W1-10 Louver Angle	8	Angle - Instance
25	W1-10 Louver Count	8	Yes/No - Type
26	W1-10 Louver Visibility	7,8	Yes/No - Type
27	W1-10 Glazing Bar & Louver Horizontal Count	7,8	Integer - Type
28	W1-10 Glazing Bar Vertical Count	7	Integer - Type
29	W1-10 Offset Horizontal %	3	Number - Type
30	W1-10 Offset Vertical %	3	Number - Type
31	W1-10 Opening Swing	5	Integer - Type
32	W1-10 Plan Symbol Line Visibility	6	Yes/No - Type
33	W1-10 Position Horizontal	3	Integer - Type
34	W1-10 Position Vertical	3	Integer - Type
35	W1-10 Window Depth Postion	6	Length - Type
36	W1-10 Window OverLap	6	Length - Type
	Dimensions		
37	Width	2	Length - Type
38	Height	2	Length - Type
39	Bay Frame Width Interior Left	9	Length - Instance
40	Bay Frame Width Interior Right	9	Length - Instance
41	Bay Frame Miter Angle Left	9	Angle - Instance
42	Bay Frame Miter Angle Right	9	Angle - Instance
43	Bay Frame Miter Angle Right	9	Length - Instance
44	Cavity Closer Depth	1	Length - Instance
45	Cavity Closer Width	1	Length - Instance
46	Cavity Closer Position From Exterior	1	Length - Instance
47	Exterior Brick Sill Angle	10,11	Angle - Type
48	Exterior Sill Depth	10,11	Length - Type
49	Exterior Sill Drip Position	10,11	Length - Type
50	Exterior Sill Drip Radius	10,11	Length - Type
51	Exterior Sill Front Angle	10,11	Length - Type
52	Exterior Sill Height	10,11	Length - Type
53	Exterior Sill Side Offset	10,11	Length - Type
54	Exterior Sill Top Angle	10,11	Length - Type
55	Exterior Sill Vertical Offset	10,11	Length - Type
56	Interior Sill Height	10,11	Length - Type
57	Interior Sill Offset	10,11	Length - Type
58	Interior Sill Sides Offset	10,11	Length - Type
59	Interior Sill Vertical Offset	10,11	Length - Type
60	Exterior Taper Reveal Bottom	1	Length - Instance
61	Exterior Taper Reveal Left Side	1	Length - Instance
62	Exterior Taper Reveal Right Side	1	Length - Instance
63	Exterior Taper Reveal Top	1	Length - Instance
64	Interior Taper Reveal Bottom	1	Length - Instance
65	Interior Taper Reveal Left Side	1	Length - Instance
66	Interior Taper Reveal Right Side	1	Length - Instance
67	Interior Taper Reveal Top	1	Length - Instance
68	Exterior Void Offset	1	Length - Instance
69	Interior Void Offset	1	Length - Instance
70	Frame Depth	4	Length - Type
71	Frame Width	4	Length - Type
72	Frame Position	4	Length - Instance
73	Glass Position	7	Length - Type
74	Glass Space	7	Length - Type
75	Glass Thickness	7	Length - Type

№	Parameters	Page	Type
	Dimensions		
76	Handle Depth	4	Length - Type
77	Handle Length	4	Length - Type
78	Handle Radius	4	Length - Type
79	Louver Length	8	Length - Type
80	Louver Overlap	8	Length - Type
81	Louver Thickness	8	Length - Type
82	Glazing Bar Depth	7	Length - Type
83	Glazing Bar Width	7	Length - Type
84	Render Offset Bottom Exterior	1	Length - Instance
85	Render Offset Bottom Interior	1	Length - Instance
86	Render Offset Sides Exterior	1	Length - Instance
87	Render Offset Sides Interior	1	Length - Instance
88	Render Offset Top Exterior	1	Length - Instance
89	Render Offset Top Interior	1	Length - Instance
90	Rough Distance Bottom	1	Length - Instance
91	Rough Distance Sides	1	Length - Instance
92	Rough Distance Top	1	Length - Instance
93	Roller Shutter Box Depth	12,13	Length - Type
94	Roller Shutter Box Height	12,13	Length - Type
95	Roller Shutter Box Sides Offset	12,13	Length - Type
96	Roller Shutter Guide Depth	12,13	Length - Type
97	Roller Shutter Guide Width	12,13	Length - Type
98	Roller Shutter Guide Steel Thickness	12,13	Length - Type
99	Roller Shutter Guide Exterior Offset	12,13	Length - Type
100	Roller Shutter End Slat Height	12,13	Length - Type
101	Casement Frame Depth	4	Length - Type
102	Casement Frame Width	4	Length - Type
103	Mullion & Transom Width	4	Length - Type
104	Window Trim Bottom Offset	2	Length - Instance
105	Window Trim Depth	2	Length - Instance
106	Window Trim Offset	2	Length - Instance
107	Window Trim Width	2	Length - Instance

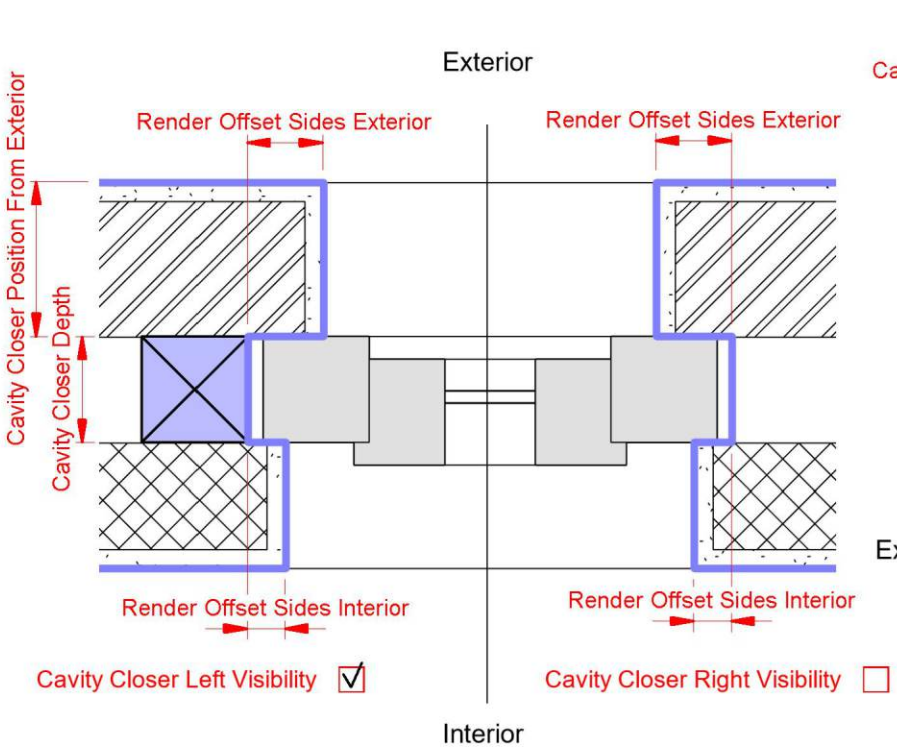
	Schedule		
108	.Bay Frame		Yes/No - Instance
109	.Casement Frame Width		Length - Type
110	.Casement Frame Depth		Length - Type
111	.Frame Depth		Length - Type
112	.Frame Width		Length - Type
113	.Glass Area With Glazing Bar (Calculated)	14	Area - Instance
114	.Glass Area Without Glazing Bar (Calculated)	14	Area - Instance
115	.Opening Area (Calculated)	14	Area - Instance
116	.Panel Double Glazing		Yes/No - Instance
117	.Roller Shutter		Yes/No - Instance
118	.Rough Height		Length - Instance
119	.Rough Width		Length - Instance

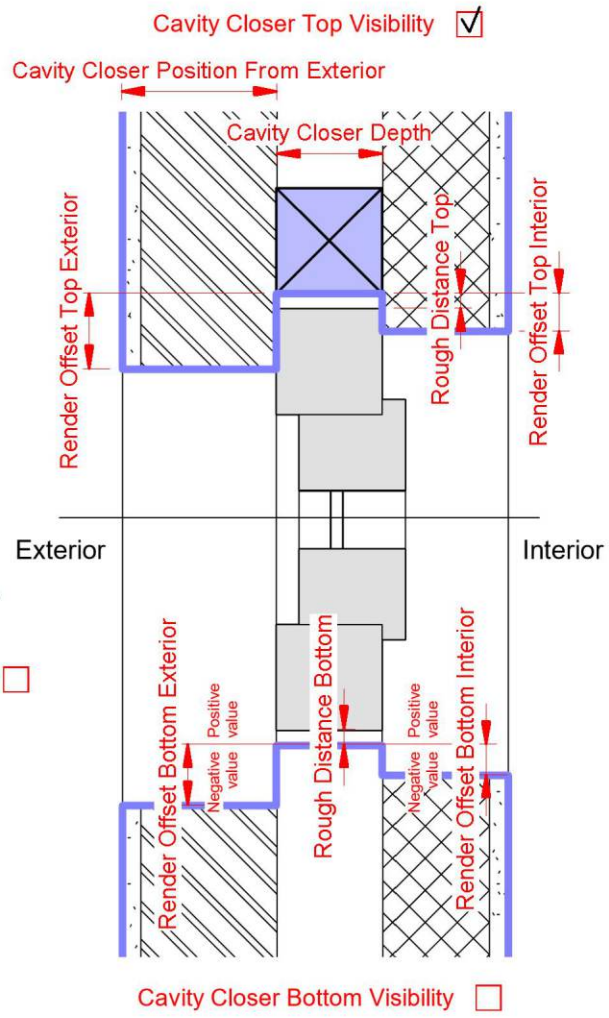
	Update		
	Steps to update	16	

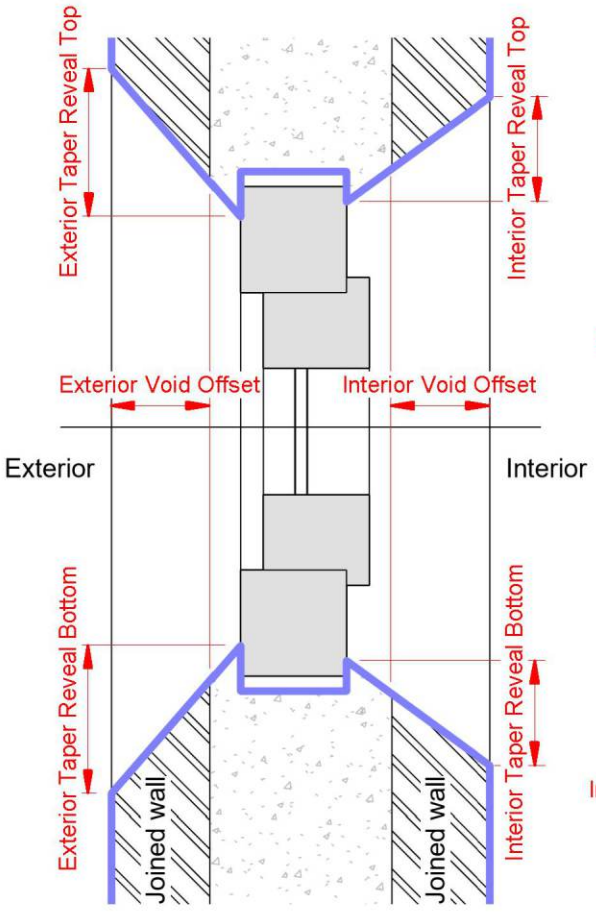
RC AIO WIndow 3

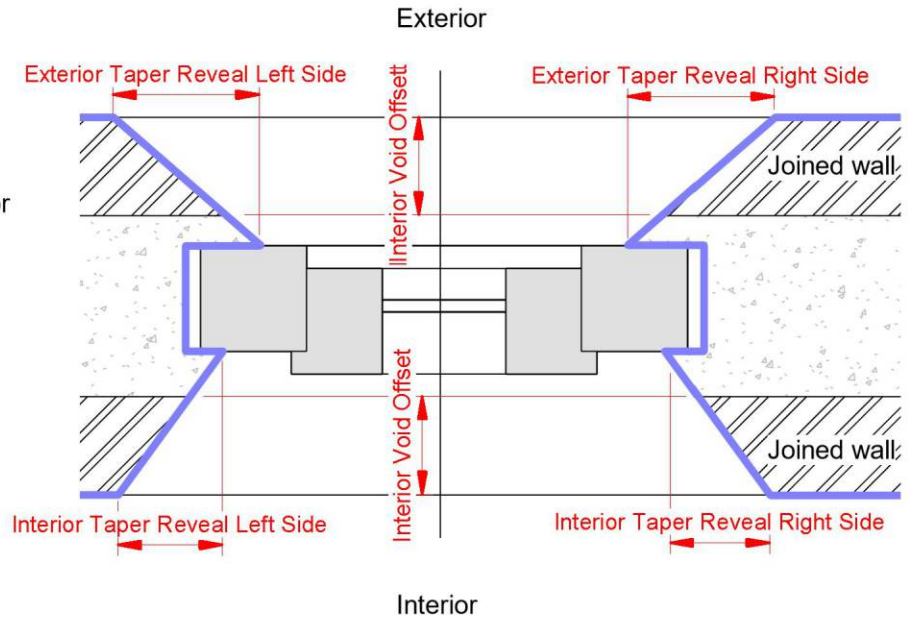
The Wall Opening

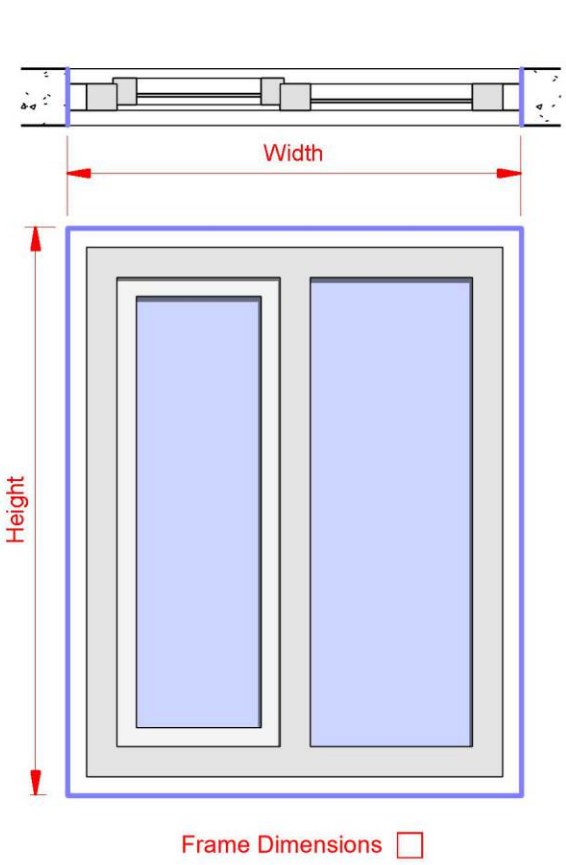
Rough Opening & Render Offset & Cavity Closer
Cut joined Wall & Tapered Reveal

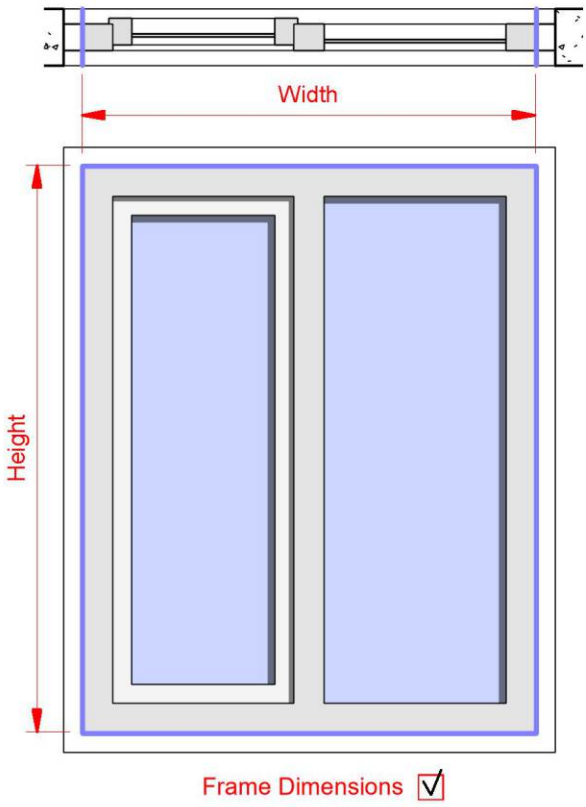


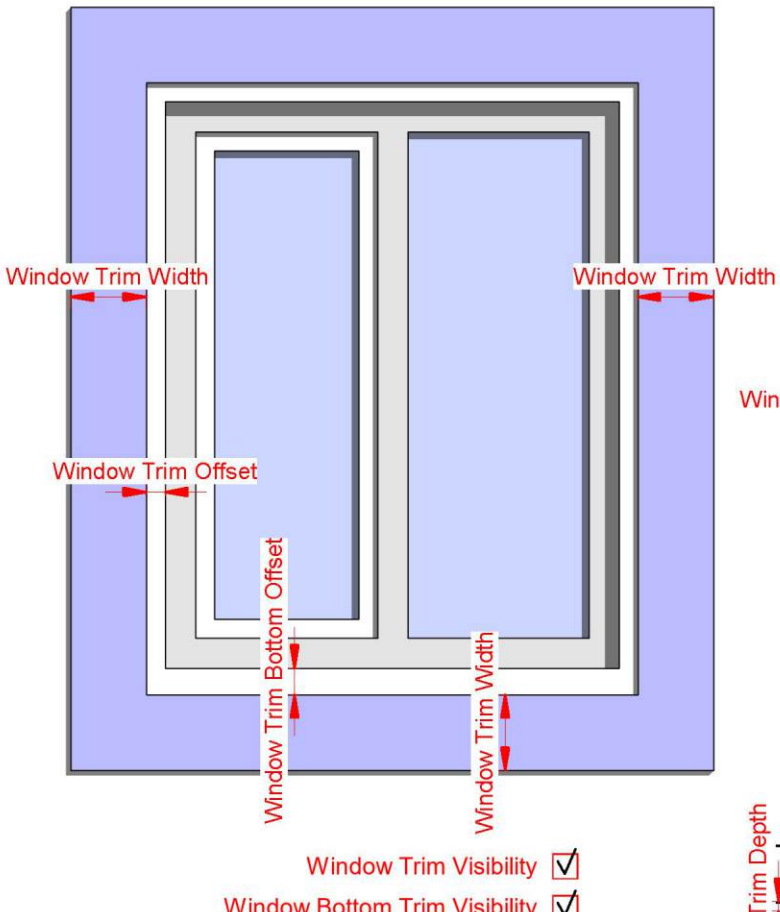


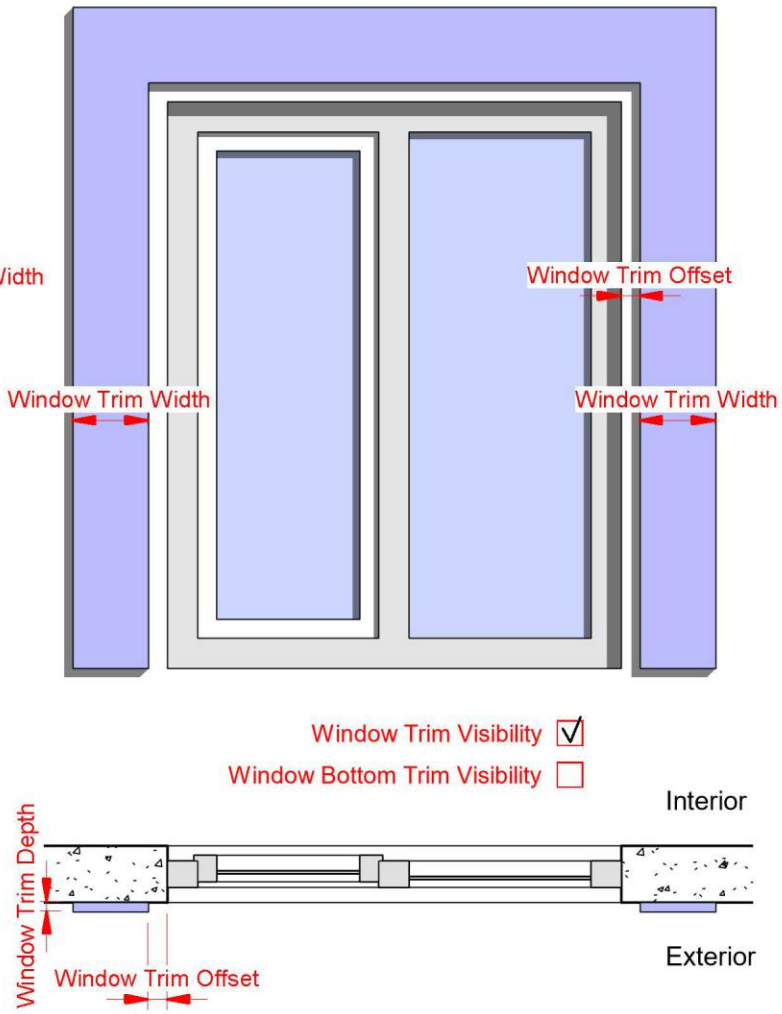




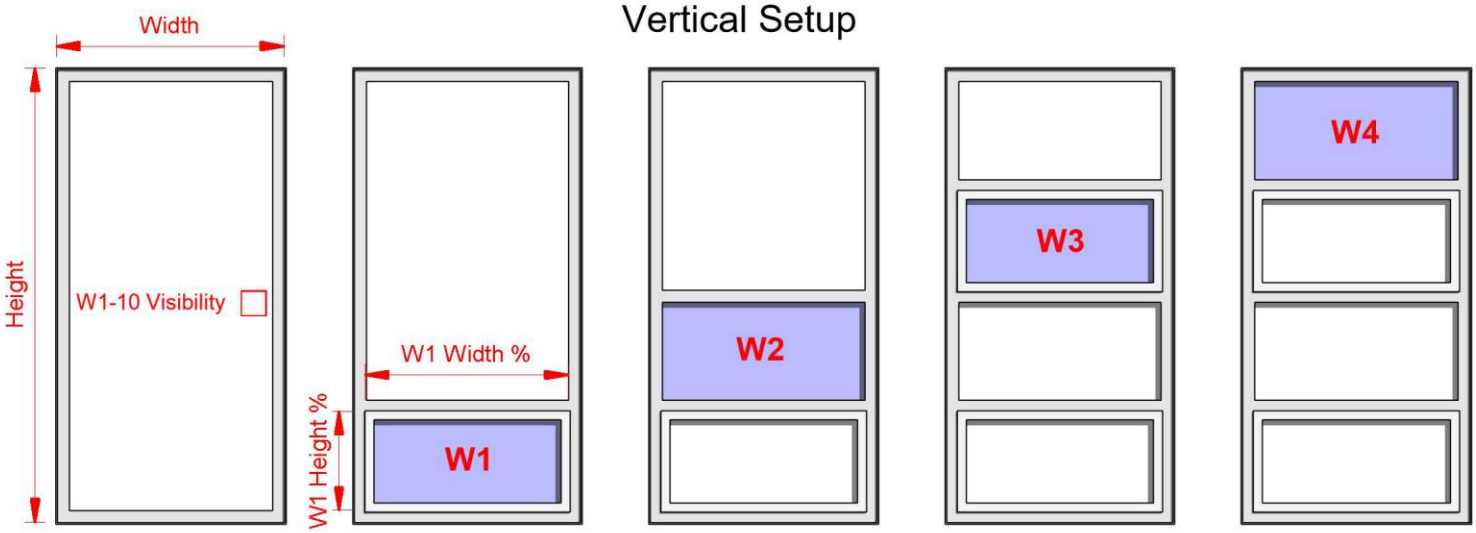






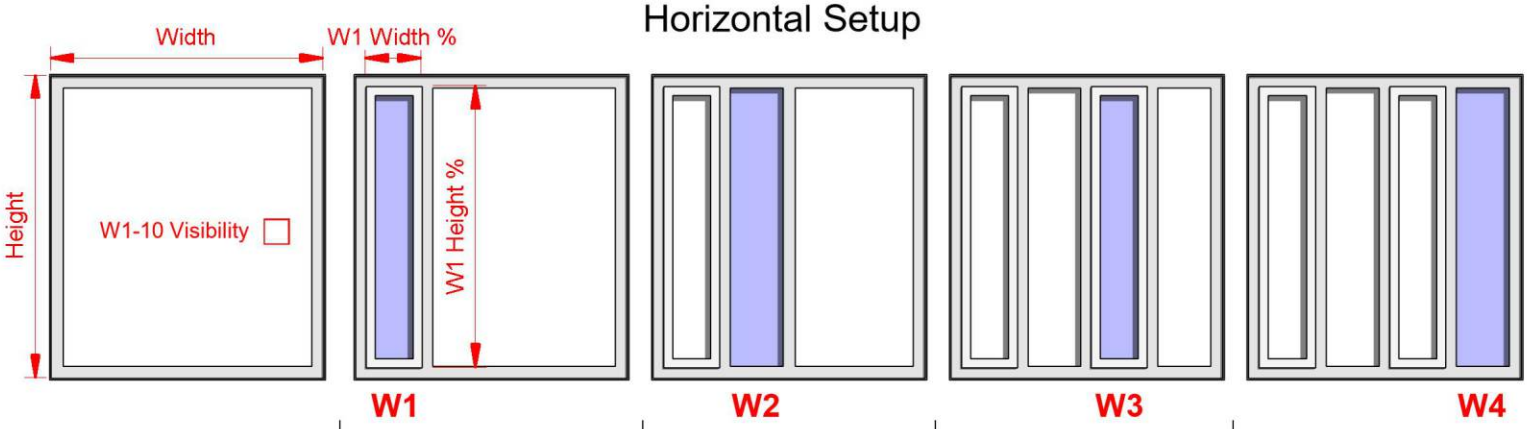


Vertical Setup

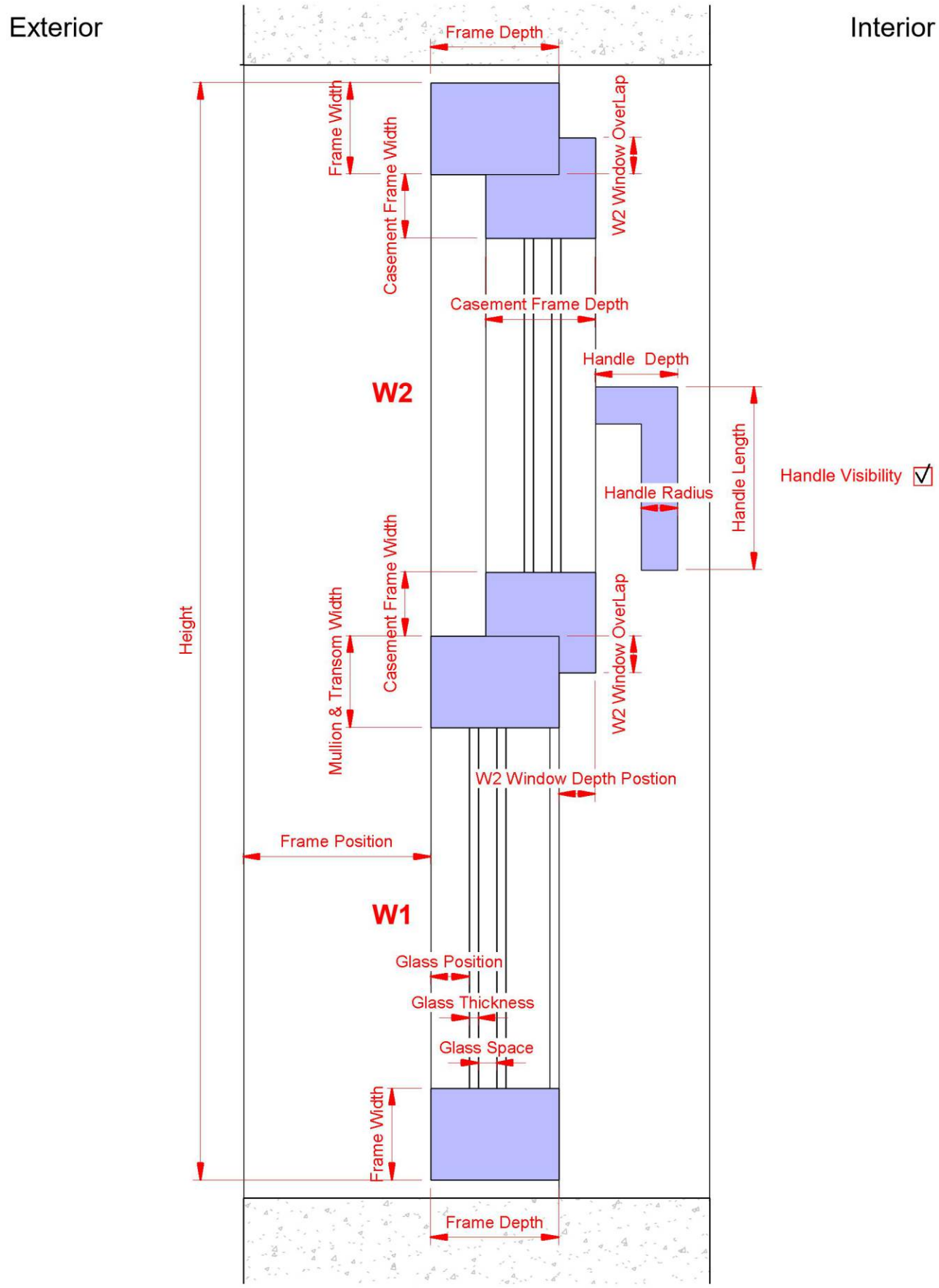


Parameters				
W1-10 Visibility	☑	☑	☑	☑
W1-10 Width %	100	100	100	100
W1-10 Height %	25	25	25	25
W1-10 Position Horizontal	0	0	0	0
W1-10 Position Vertical	0	0	1	1
W1-10 Offset Horizontal %	0	0	0	0
W1-10 Offset Vertical %	0	25	25	0

Horizontal Setup



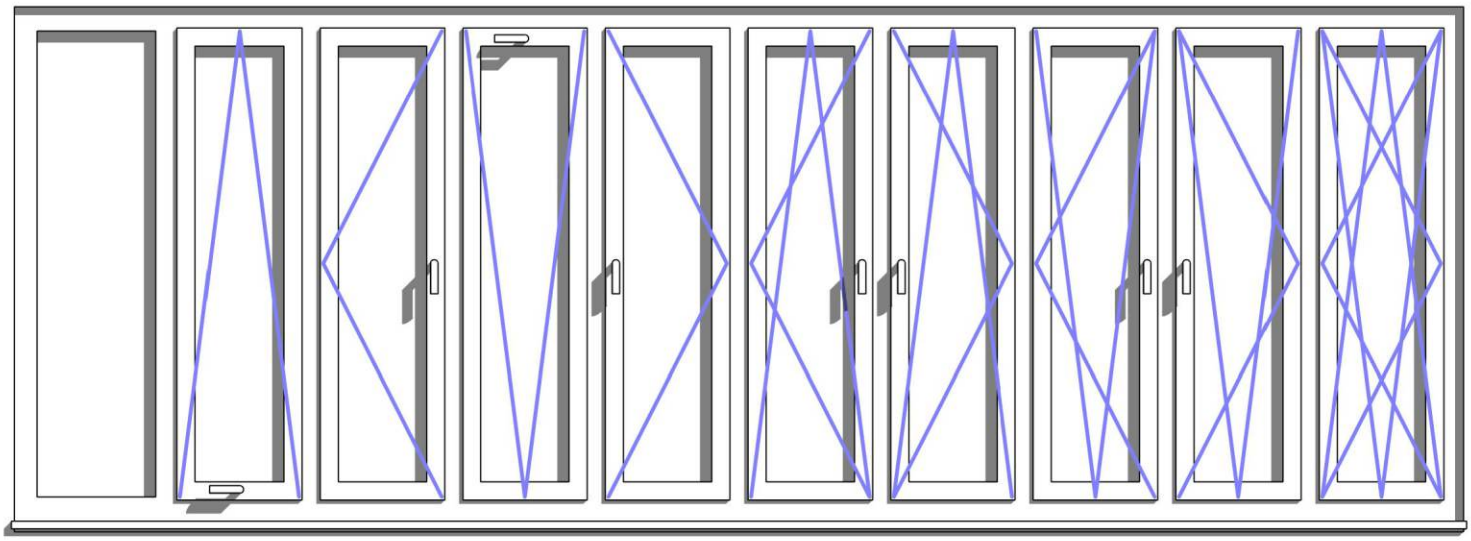
Parameters				
W1-10 Visibility	☑	☑	☑	☑
W1-10 Width %	25	25	25	25
W1-10 Height %	100	100	100	100
W1-10 Position Horizontal	0	0	1	1
W1-10 Position Vertical	0	0	0	0
W1-10 Offset Horizontal %	0	25	25	0
W1-10 Offset Vertical %	0	0	0	0



Sumbol Lines Hinge Side ☑
W1-10 Opening Swing

Interior

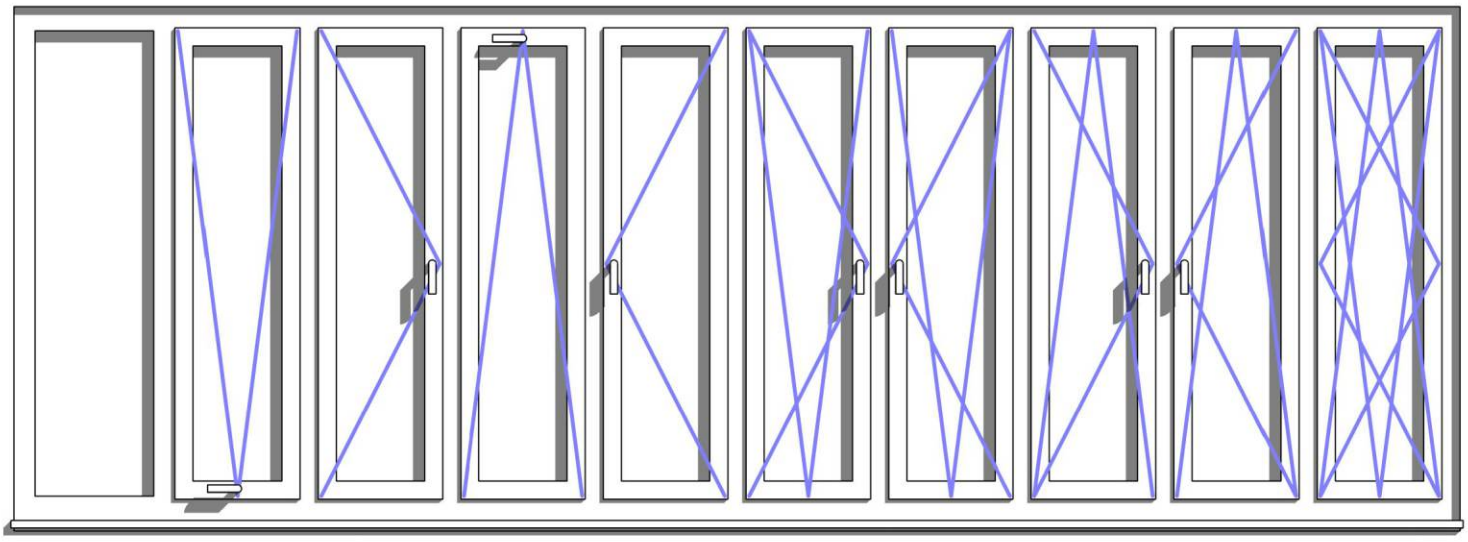
0	1	2	3	4	12	14	32	34	100
Fix	Top	Left	Bottom	Right	Left Top	Right Top	Left Bottom	Right Bottom	All Sides



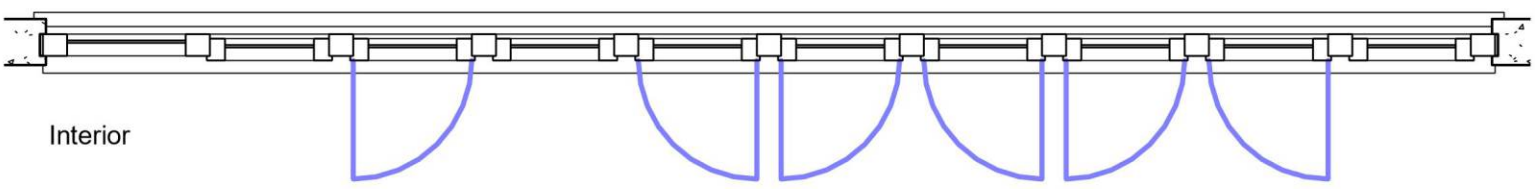
Sumbol Lines Hinge Side ☐
W1-10 Opening Swing

Interior

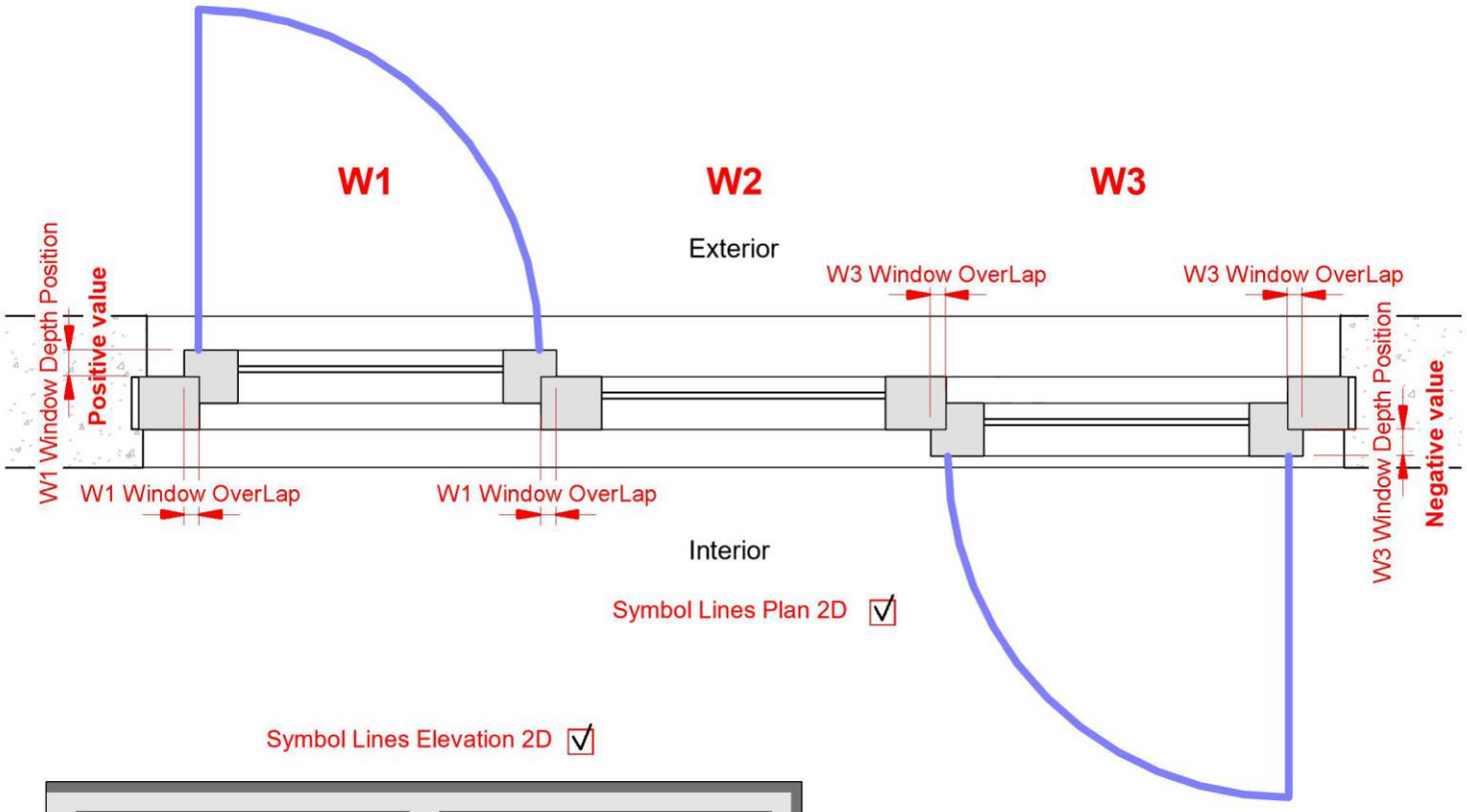
0	1	2	3	4	12	14	32	34	100
Fix	Top	Left	Bottom	Right	Left Top	Right Top	Left Bottom	Right Bottom	All Sides



Exterior

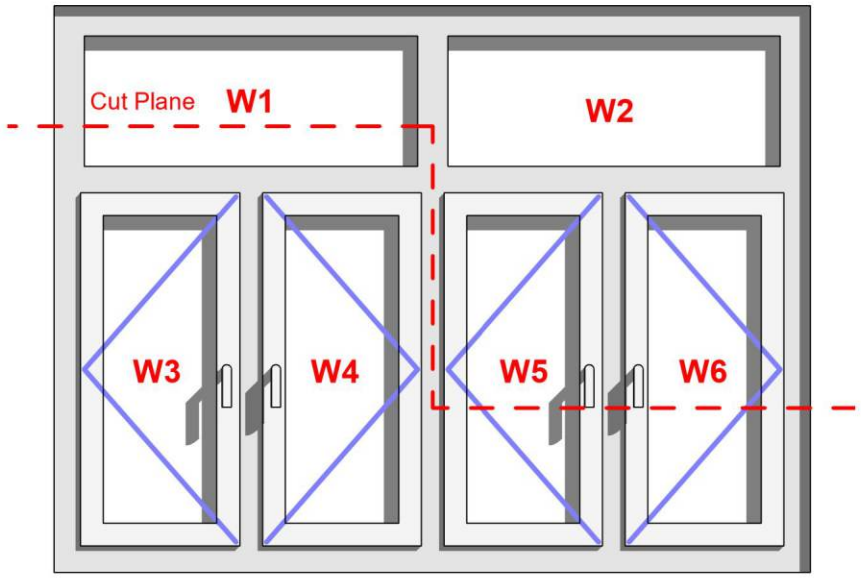


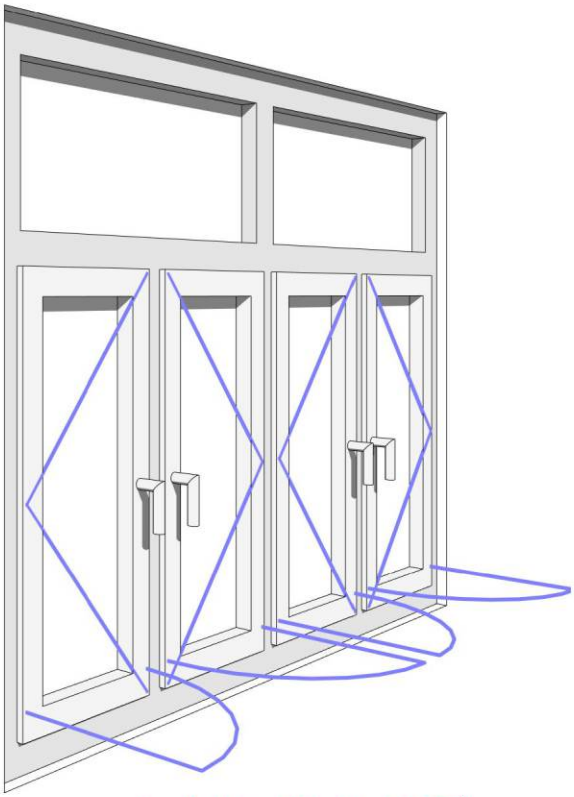
Interior



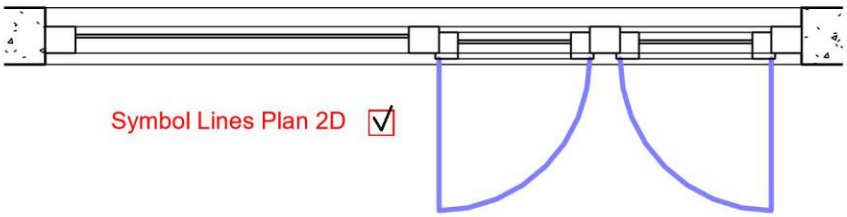
Symbol Lines Plan 2D ☑

Symbol Lines Elevation 2D ☑





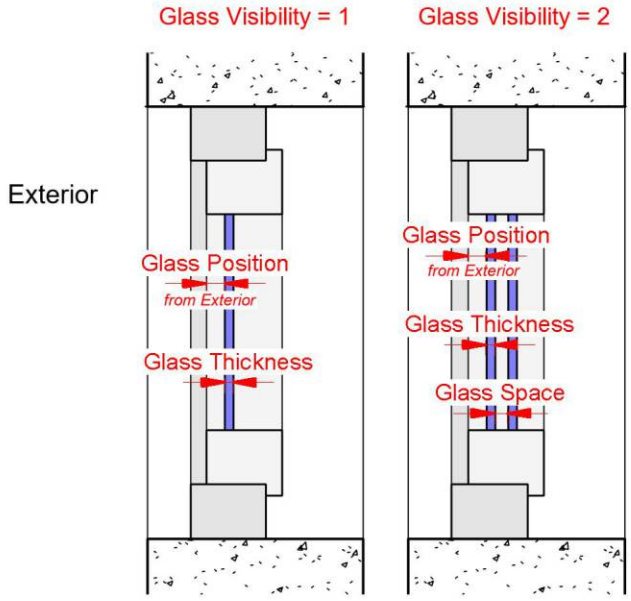
W1 Plan Symbol Line Visibility ☑
W2 Plan Symbol Line Visibility ☐
W3 Plan Symbol Line Visibility ☐
W4 Plan Symbol Line Visibility ☐
W5 Plan Symbol Line Visibility ☑
W6 Plan Symbol Line Visibility ☑

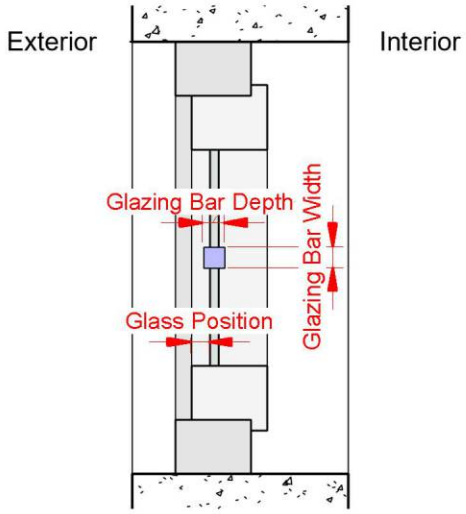


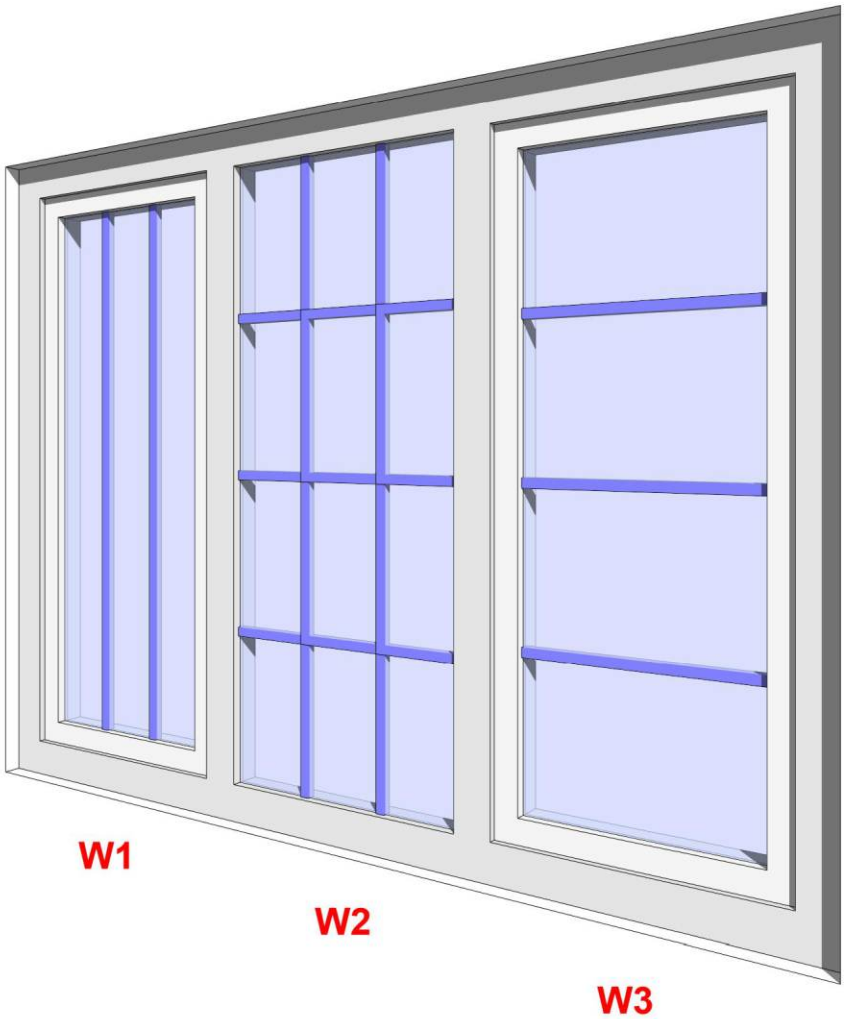
Symbol Lines Plan 2D ☑

Symbol Lines Elevation 3D ☑
Symbol Lines Plan 3D ☑

Glass material for each pane







W1 Louver Visibility ☐
W1 Glazing Bar & Louver Horizontal Count = 0
W1 Glazing Bar Vertical Count = 2

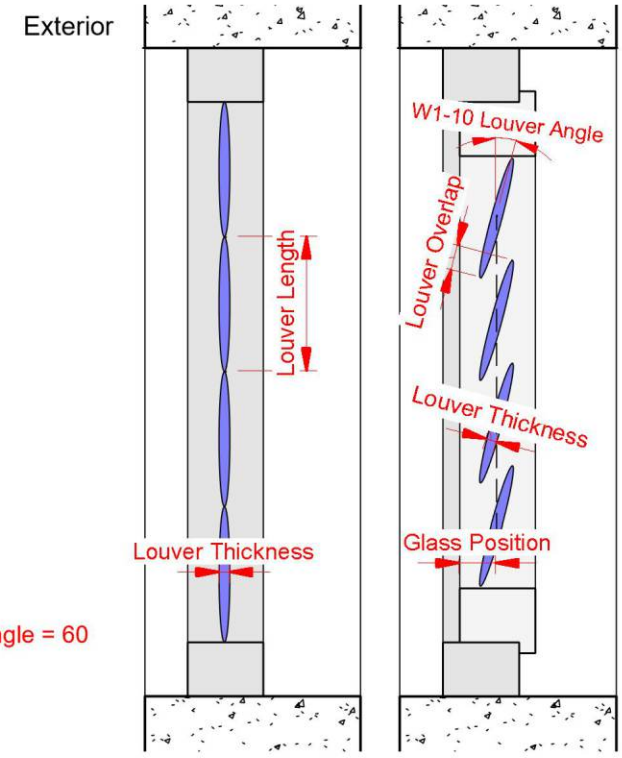
W2 Louver Visibility ☐
W2 Glazing Bar & Louver Horizontal Count = 3
W2 Glazing Bar Vertical Count = 2

W3 Louver Visibility ☐
W3 Glazing Bar & Louver Horizontal Count = 3
W3 Glazing Bar Vertical Count = 0

W3 Louver Angle = 60

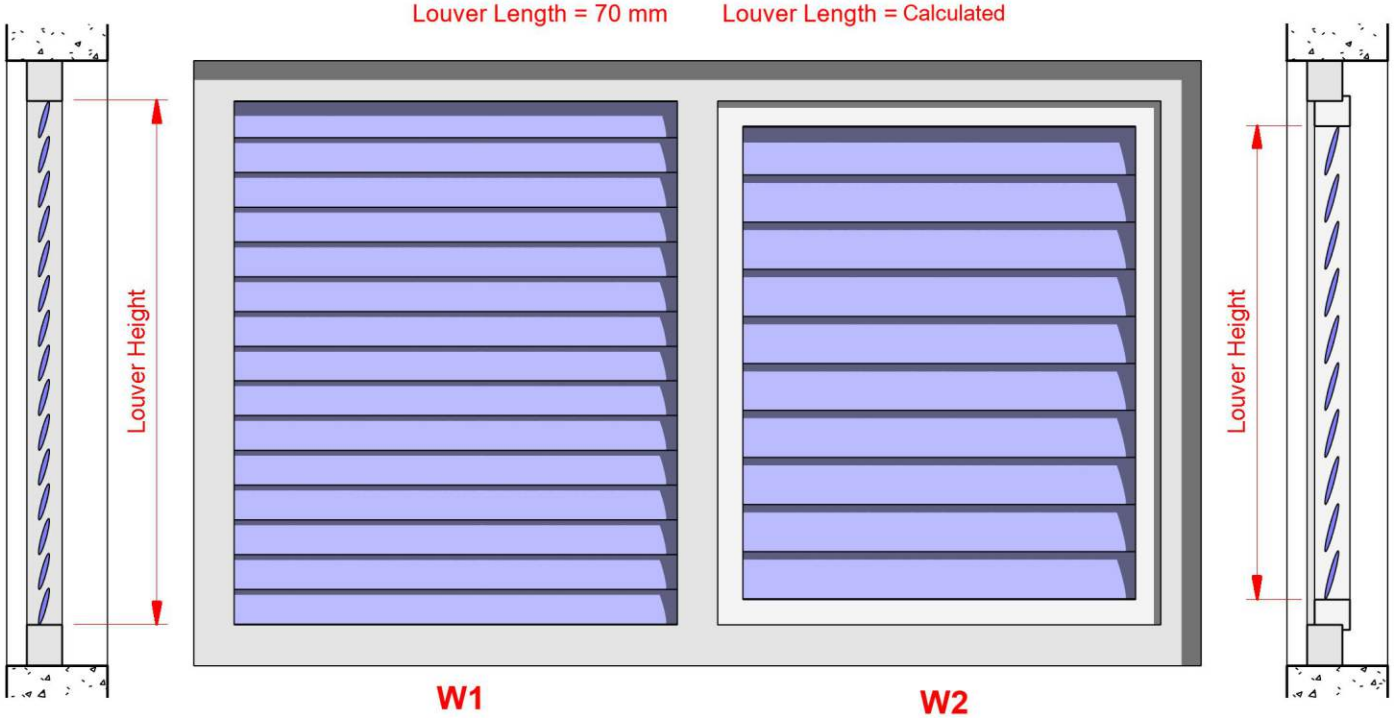
W2 Louver Angle = 30

W1 Louver Angle = 0



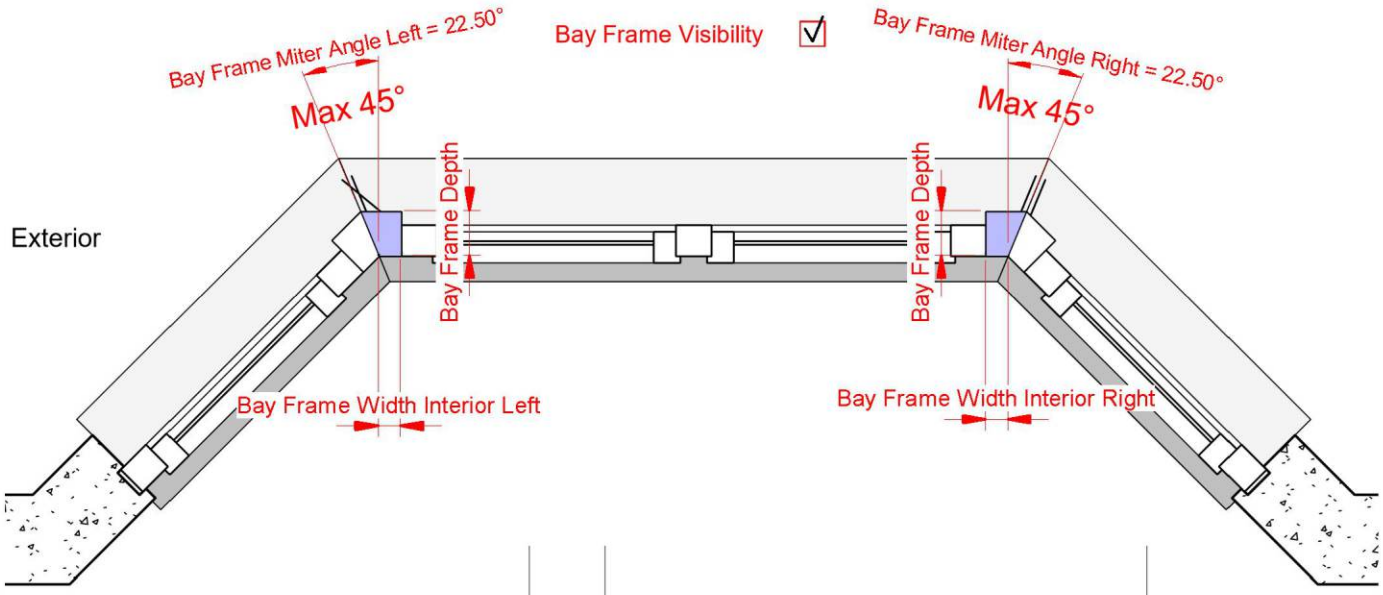
W1 Louver Visibility ☑
W1 Louver Count ☐
W1 Glazing Bar & Louver Horizontal Count = Calculated
Louver Length = 70 mm

W2 Louver Visibility ☑
W2 Louver Count ☑
W2 Glazing Bar & Louver Horizontal Count = 10
Louver Length = Calculated

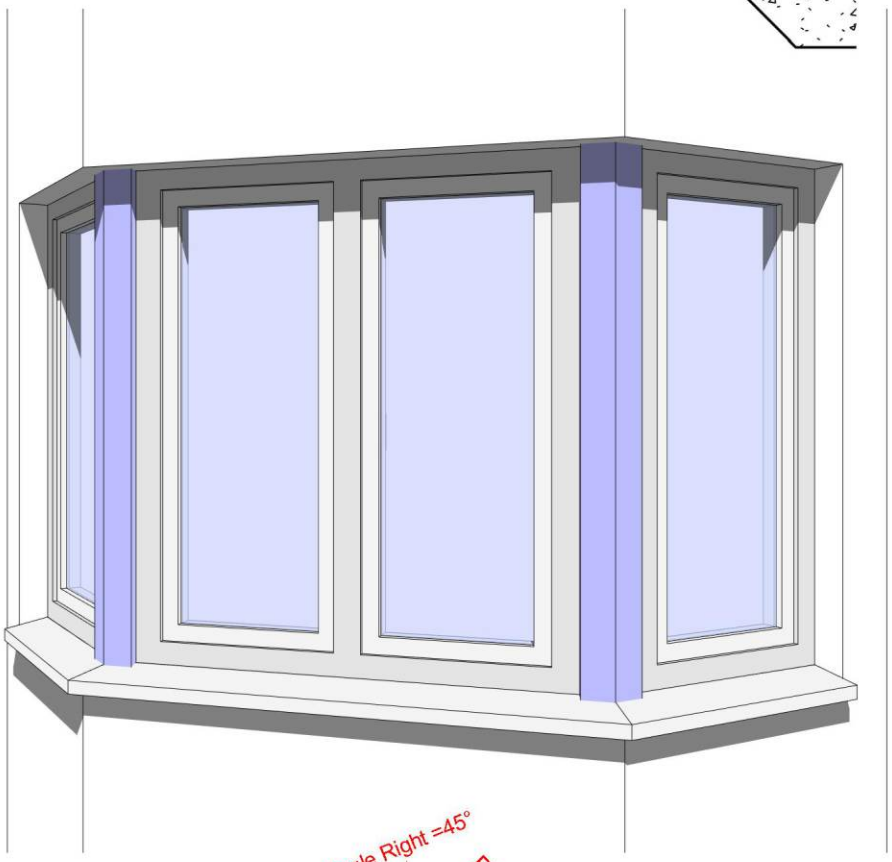


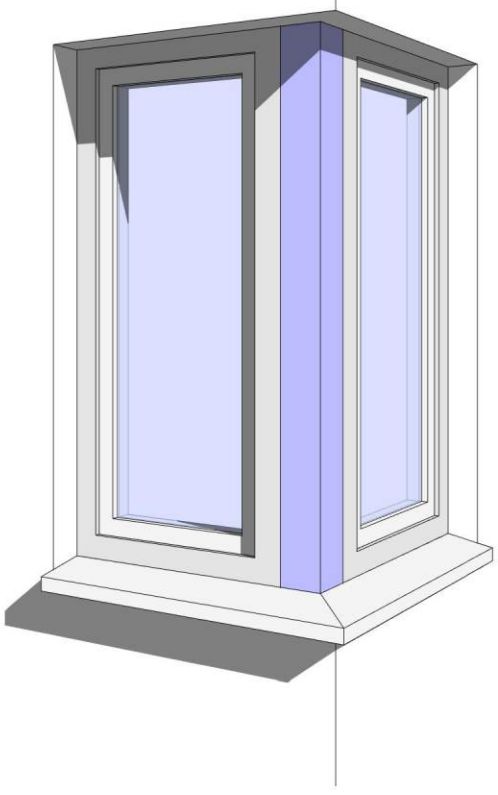
Louver Height / Louver Length = W1 Glazing Bar & Louver Horizontal Count

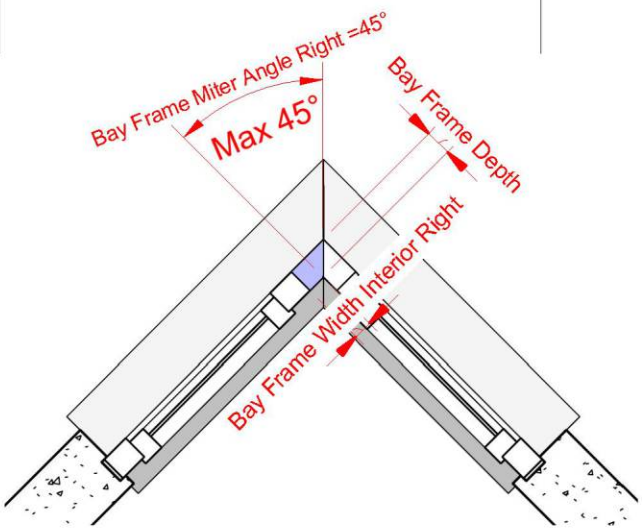
Louver Height / W2 Glazing Bar & Louver Horizontal Count = Louver Length



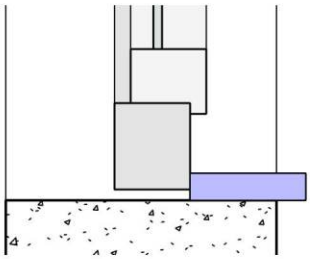
Interior





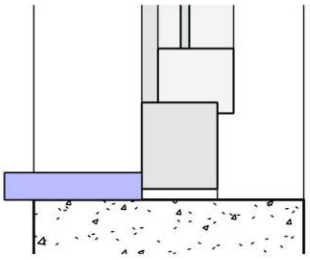


Exterior



Interior Sill Interior Or Exterior Side Visibility = 1

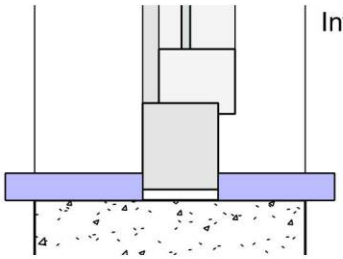
Exterior Sill Visibility = 0



Interior Sill Interior Or Exterior Side Visibility = 2

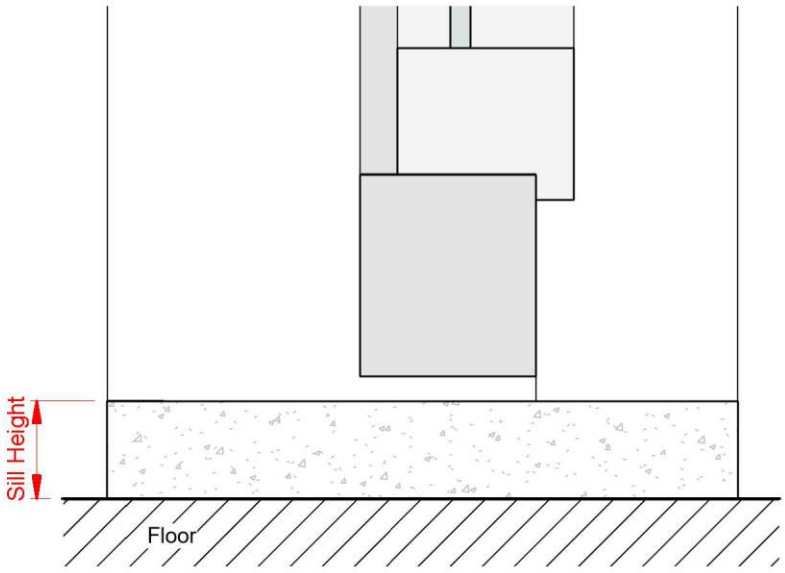
Exterior Sill Visibility = 0

Interior



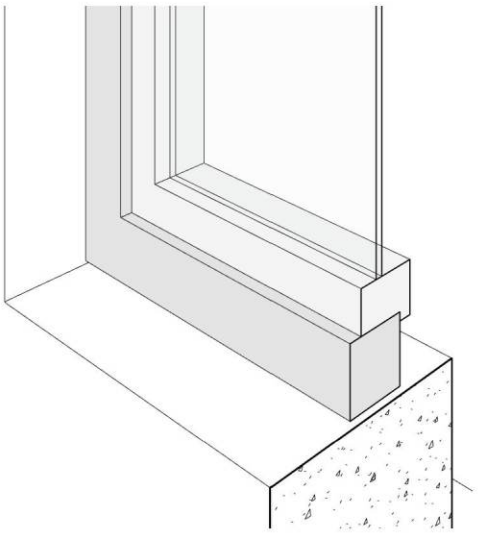
Interior Sill Interior Or Exterior Side Visibility = 3

Exterior Sill Visibility = 0



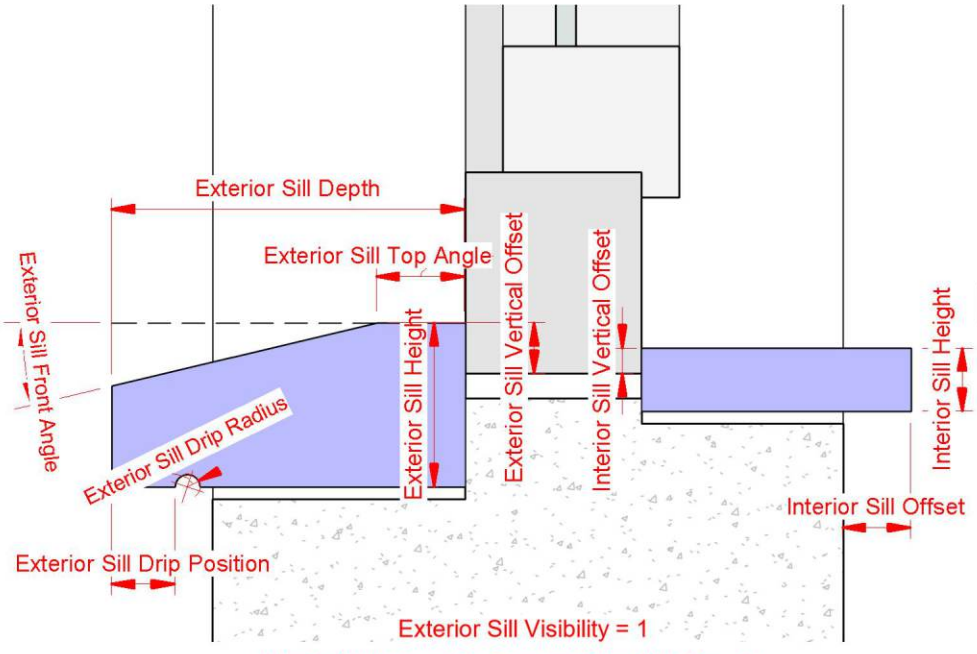
Exterior Sill Visibility = 0

Interior Sill Interior Or Exterior Side Visibility = 0



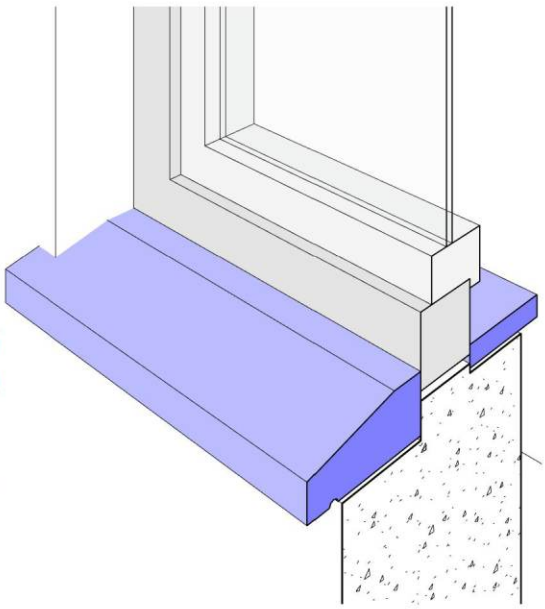
Exterior

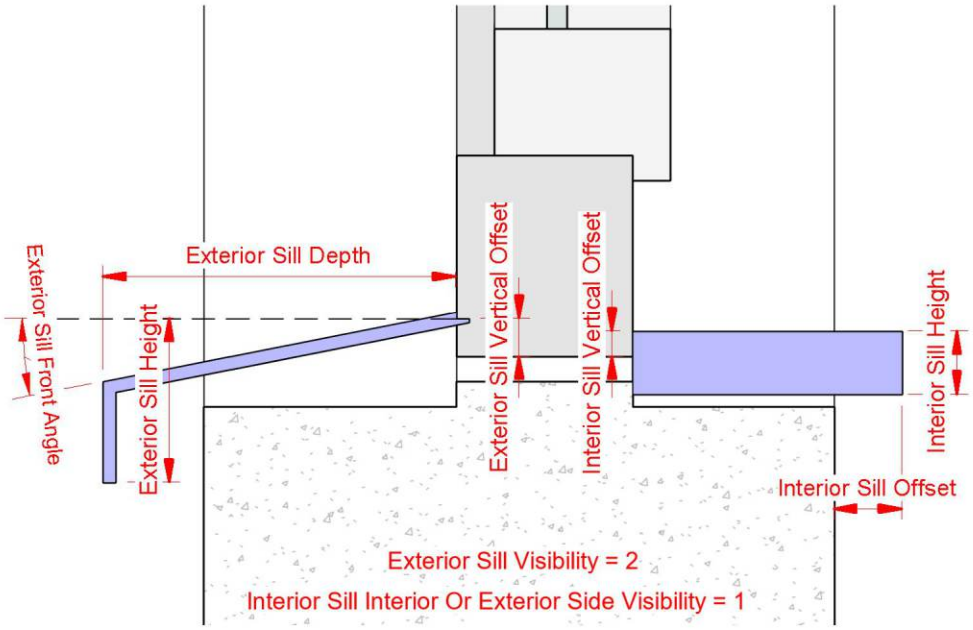
Interior

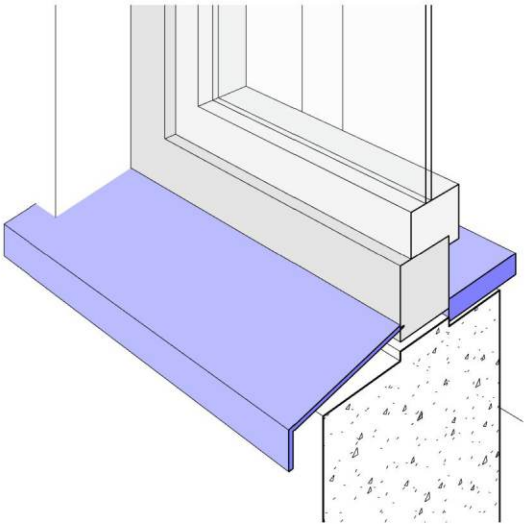


Exterior Sill Visibility = 1

Interior Sill Interior Or Exterior Side Visibility = 1

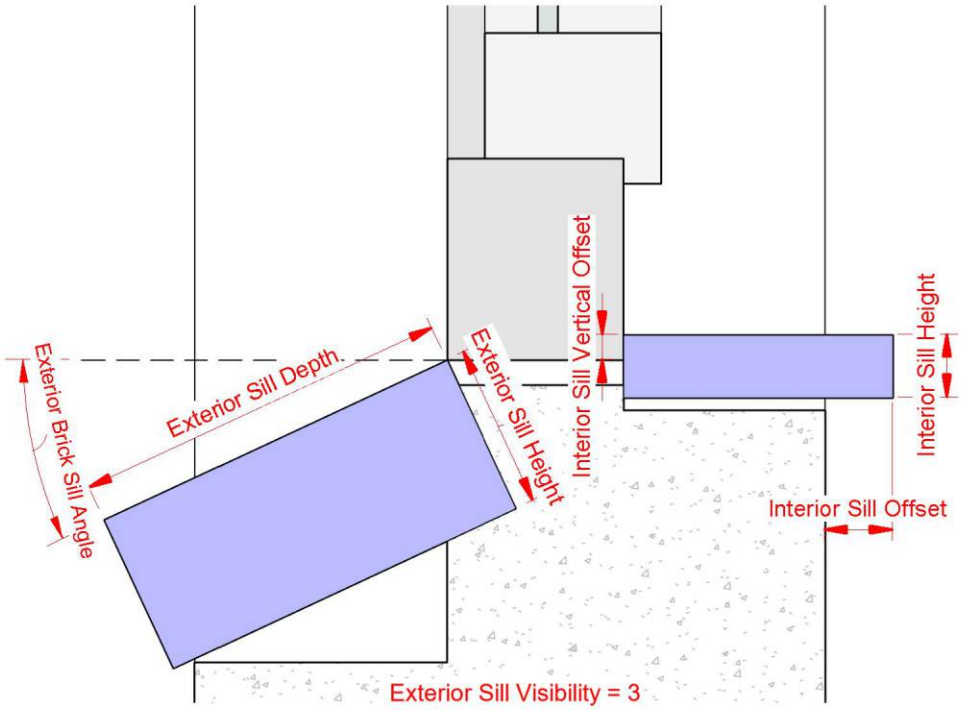


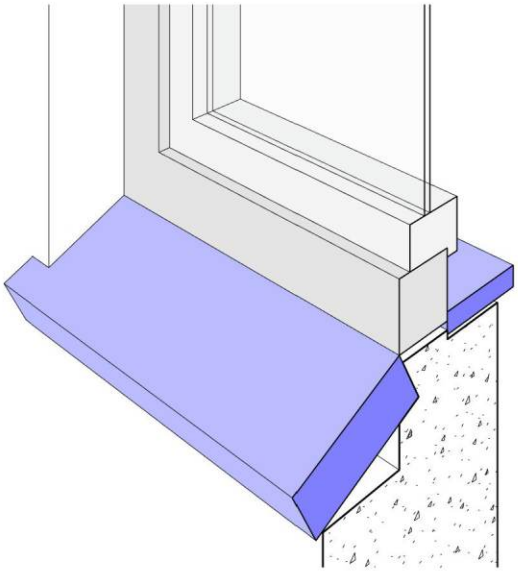


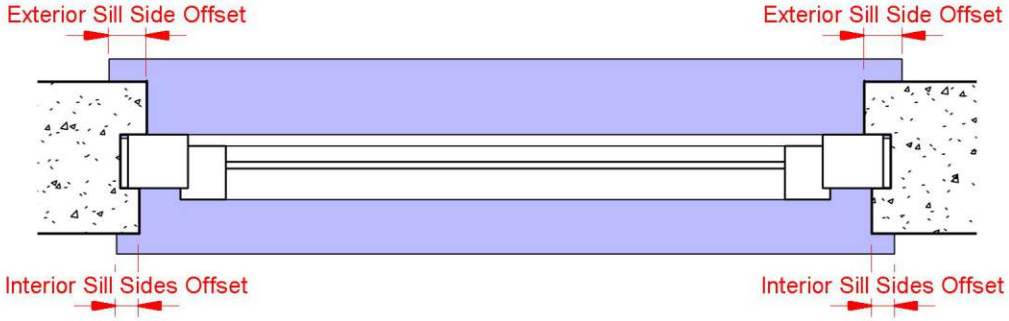


Exterior

Interior



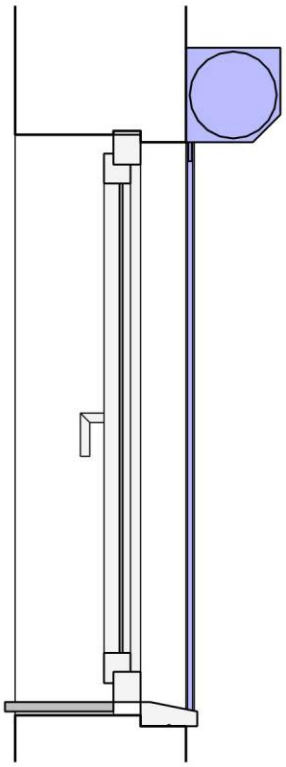




Interior

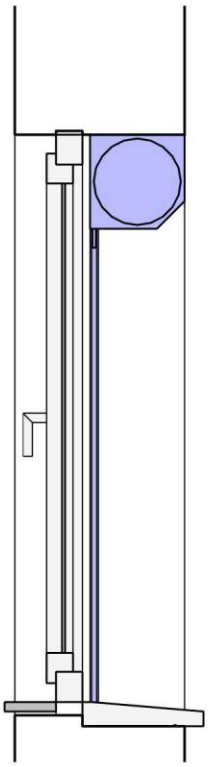
Exterior

Type 1



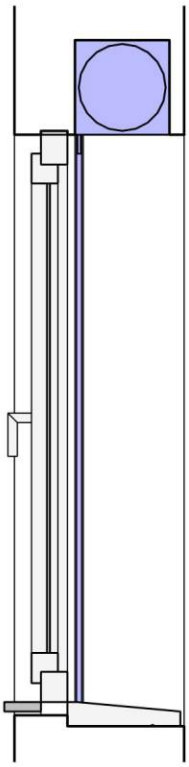
Roller Shutter Visibility = 1

Type 2



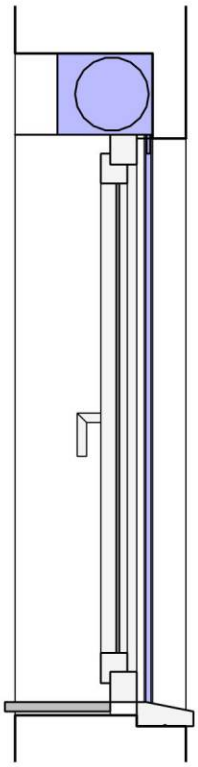
Roller Shutter Visibility = 2

Type 3



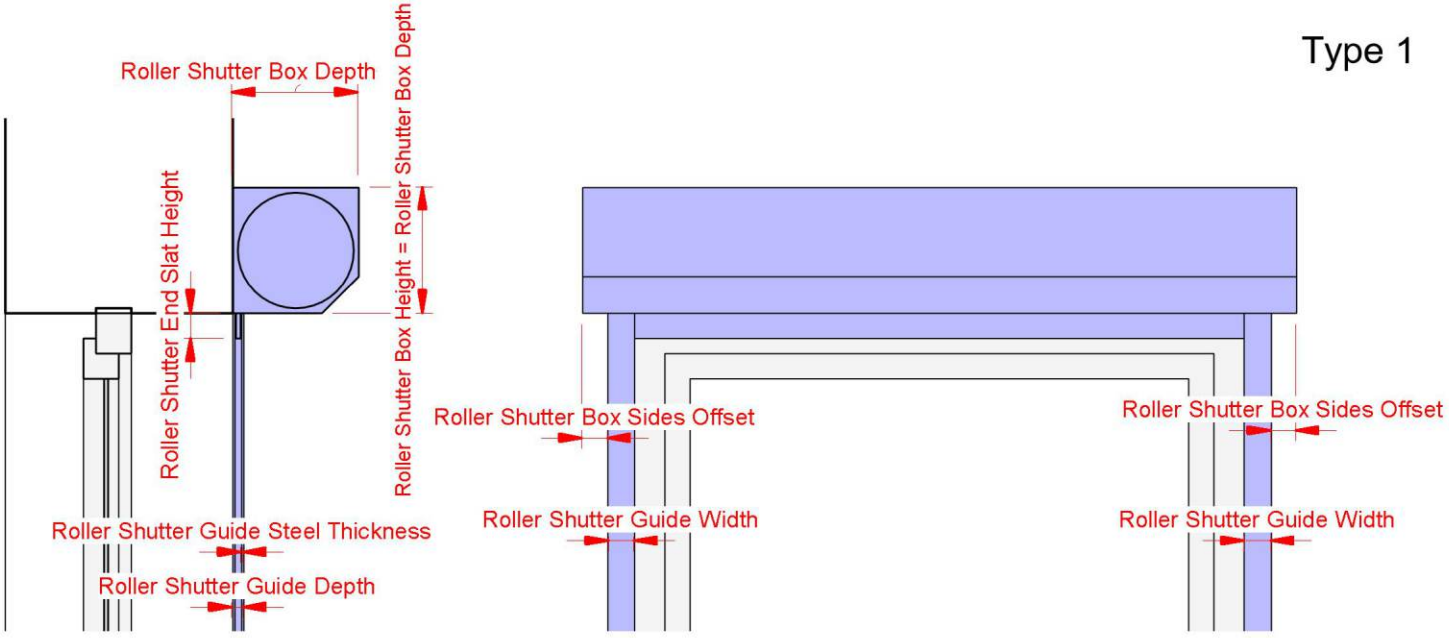
Roller Shutter Visibility = 3

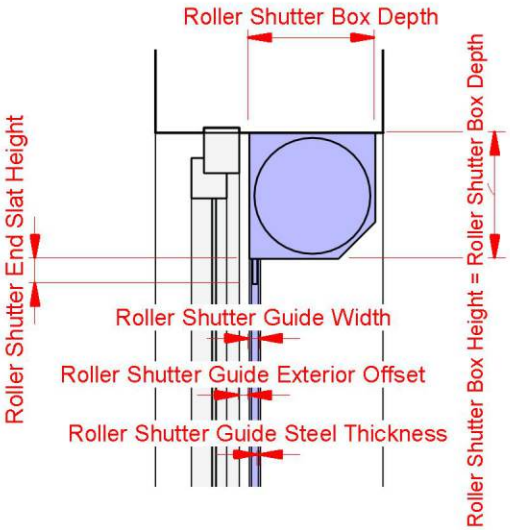
Type 4



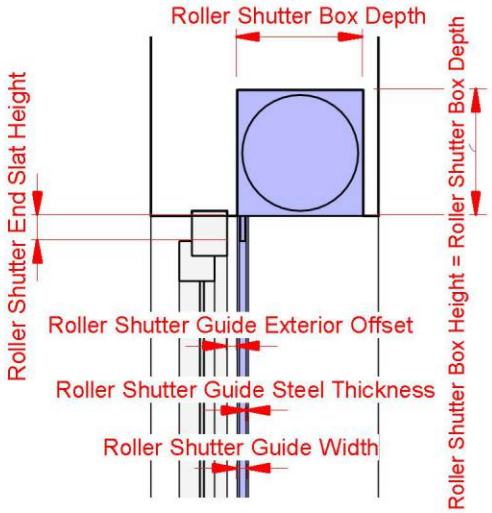
Roller Shutter Visibility = 4

Type 1

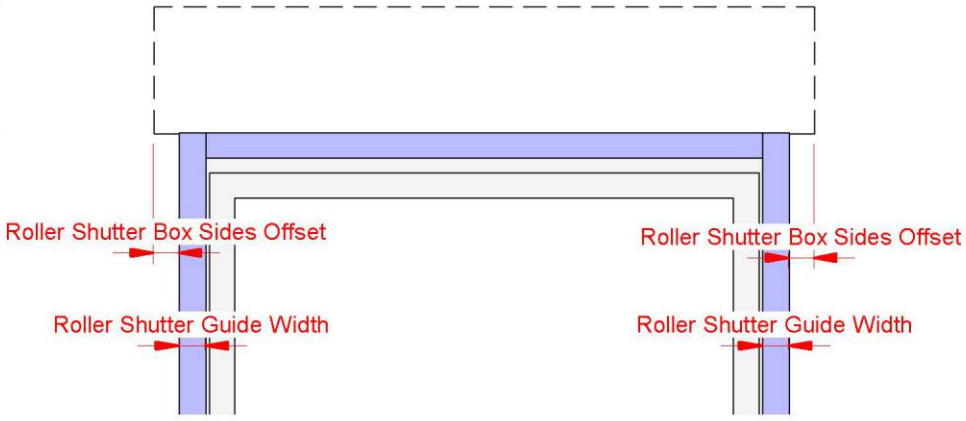


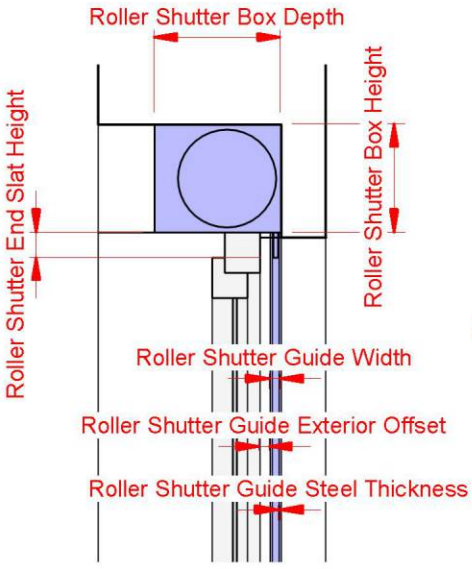


Type 2

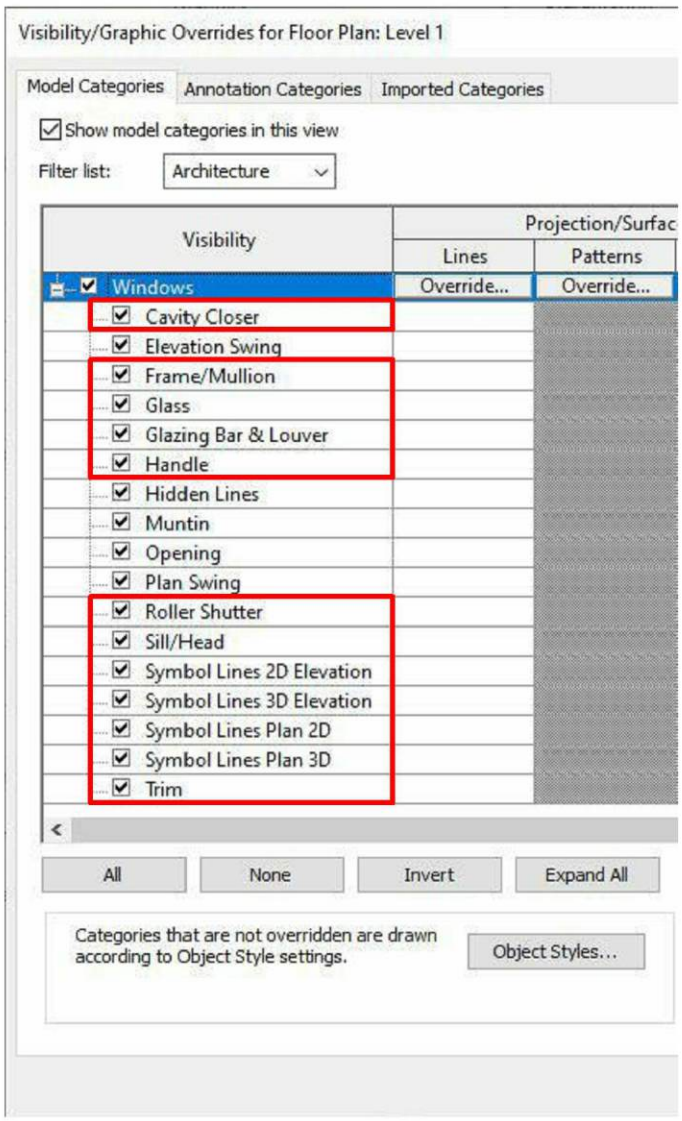


Type 3



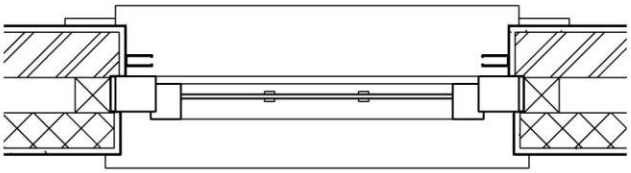


Type 4

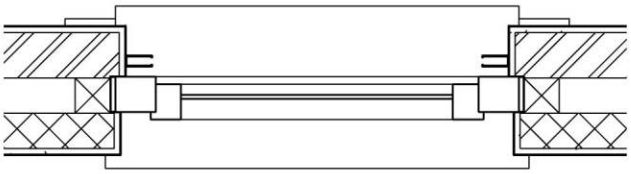


Exterior

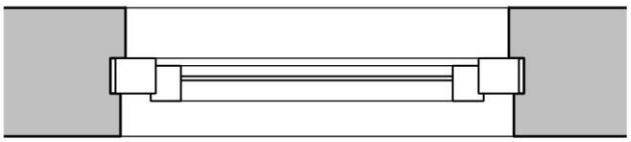
Detail Level: Fine



Detail Level: Medium



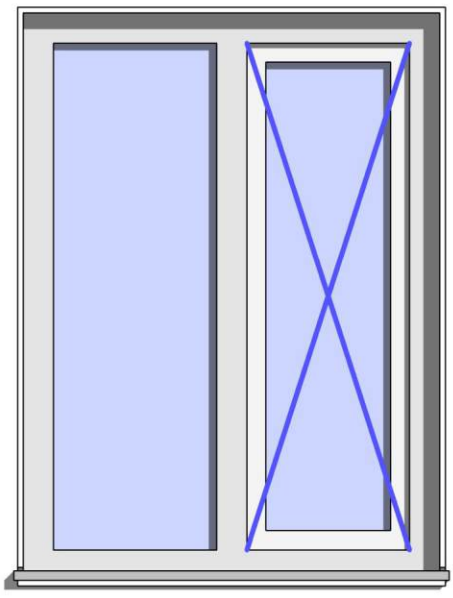
Detail Level: Coarse



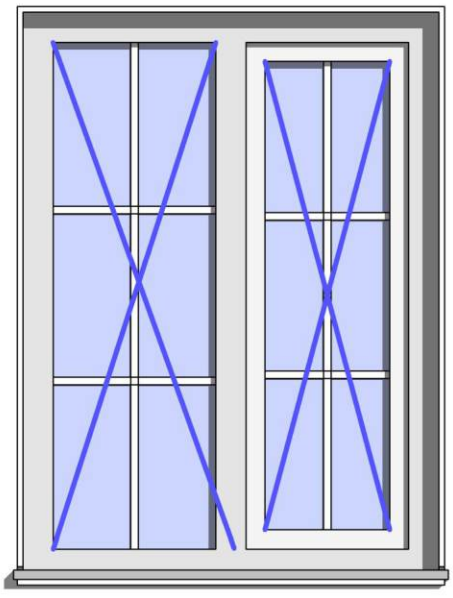
Interior

Shared Parameters:

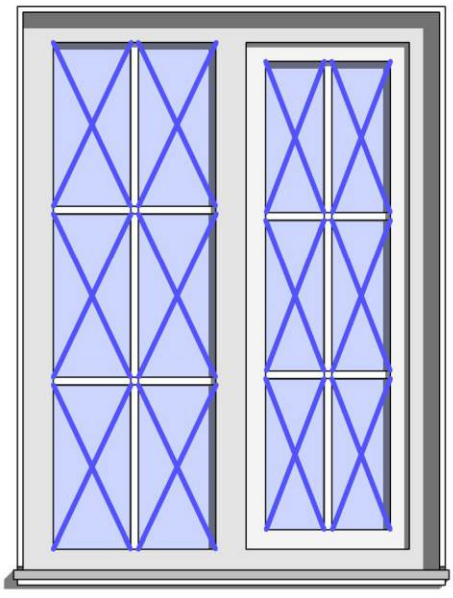
.Bay Frame
.Casement Frame Depth
.Casement Frame Width
.Frame Depth
.Frame Width
.Panel Double Glazing
.Roller Shutter
.Rough Height
.Rough Width



.Opening Area



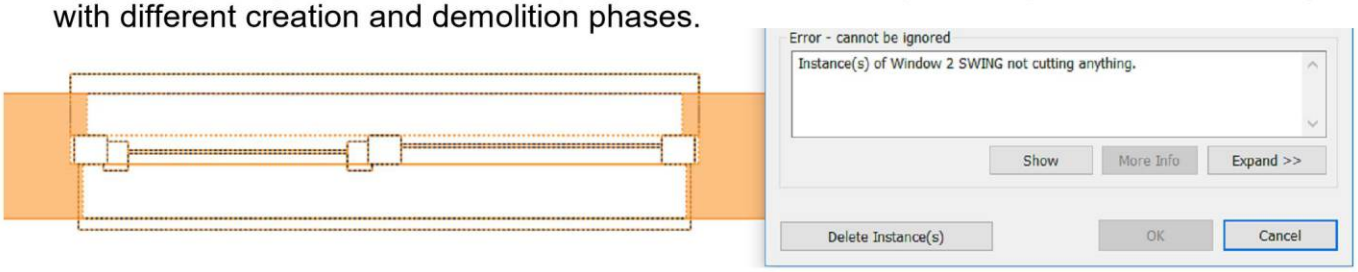
.Glass Area With Glazing Bar



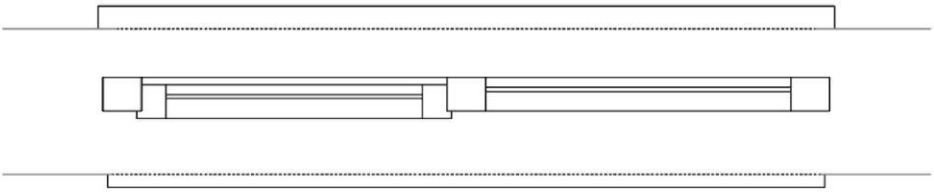
.Glass Area Without Glazing Bar

Instead of the simple opening tool, this family uses various voids for the wall opening, to provide features like rough distance, render offsets, and taper reveals. This causes issues in the following scenarios:

1. When placing the same window (copied instance or newly loaded) in the exact same place with different creation and demolition phases.



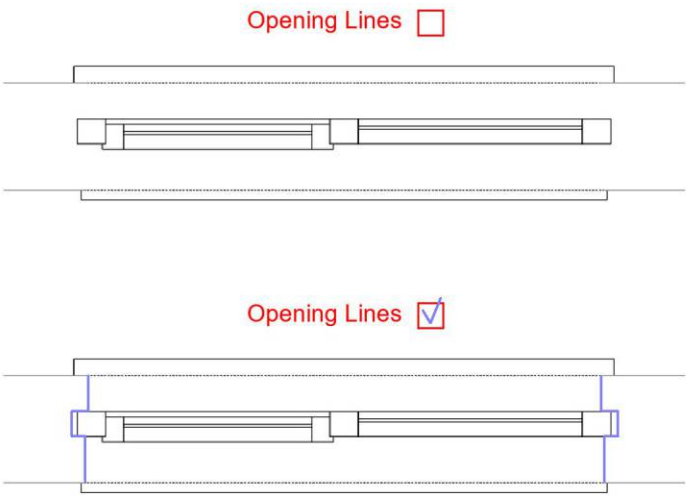
2. Wall opening lines are hidden when host wall has **"Phase Created: Existing"**, and window has **"Phase Created: New Construction"** (usually used in renovation).

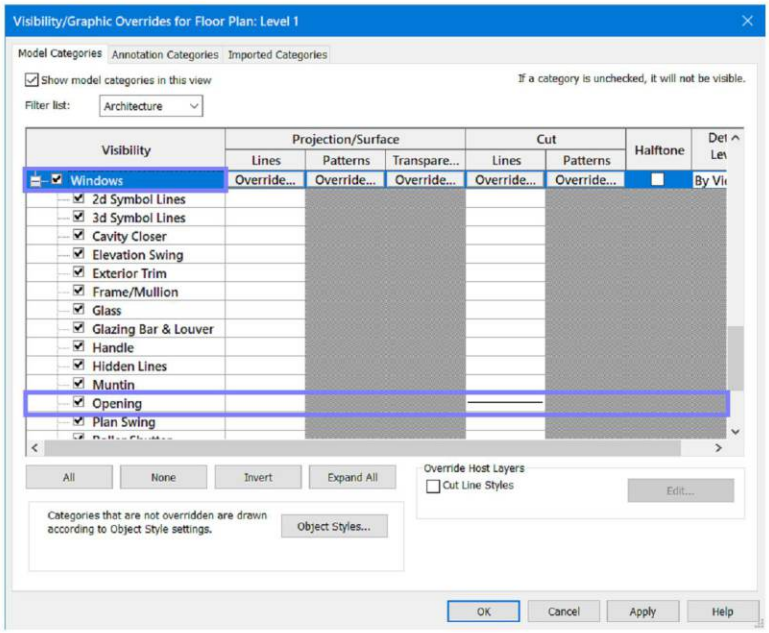


Solutions:

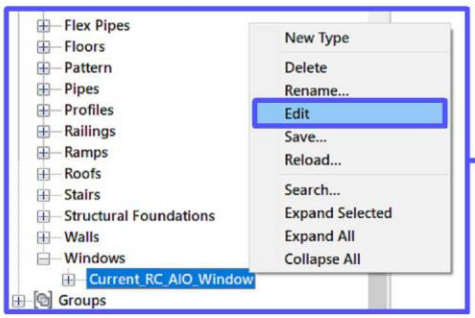
1. Move one of the window instances by a small distance (min 0,2 mm/0,55 decimal inches), applied either to the **Sill Height** or **Frame Position** (instance parameters).

2. Activate instance parameter **"Opening Lines"** and setup visibility via Visibility/Graphic.



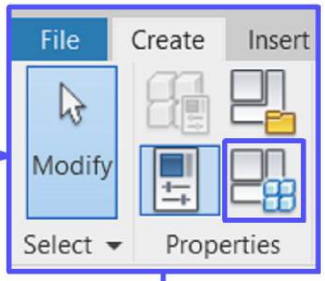


Step 1 - Project - Edit Family



Edit Current Family from the project

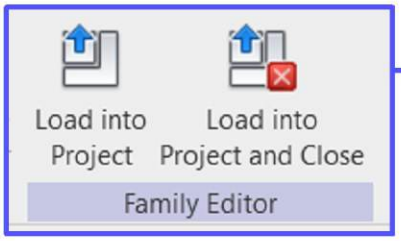
Step 2 - Family - Open Family Type



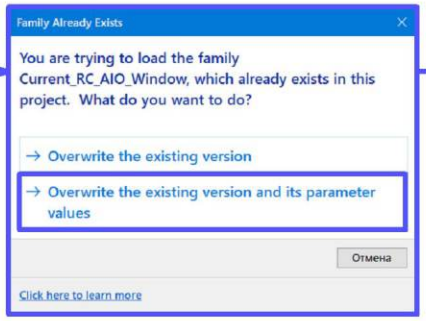
Step 3 - Family - Rename parameters

Current parameters	Category	New parameters
Bay	Constraints	Bay Frame Visibility
Bay Frame Left Interior Post Width	Dimensions	Bay Frame Width Interior Left
Bay Frame Right Interior Post Width	Dimensions	Bay Frame Width Interior Right
Bay Frame Miter Left Angle	Dimensions	Bay Frame Miter Angle Left
Bay Frame Miter Right Angle	Dimensions	Bay Frame Miter Angle Right
Bay Frame Post Depth	Dimensions	Bay Frame Depth
Louver Height	Dimensions	Louver Length
Louver Offset	Dimensions	Louver Overlap
Mullion Depth	Dimensions	Glazing Bar Depth
Mullion Width	Dimensions	Glazing Bar Width
Window Profile Depth	Dimensions	Casement Frame Depth
Window Profile Width	Dimensions	Casement Frame Width
Window Subframe Width	Dimensions	Mullion & Transom Width
Wx Mullion & Louver Horizontal Count	Graphics	Wx Glazing Bar & Louver Horizontal Count
Wx Mullion Vertical Count	Graphics	Wx Glazing Bar Vertical Count
Wx Offset Horizontal.	Graphics	Wx Offset Horizontal %
Wx Offset Vertical.	Graphics	Wx Offset Vertical %
Interior Window Sill	Materials	Interior Sill
Glass	Materials	Wx Glass
Mullion	Materials	Glazing Bar

Step 4 - Family - Load into Project



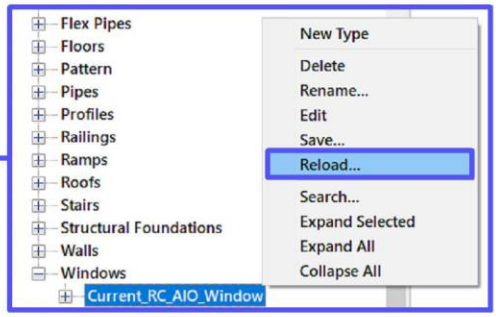
Step 5 - Project - Overwrite



Step 6 - Rename Family file

New_RC_Window
to
Current_RC_Window

Step 7 - Project - Reload Family



Open renamed Family file

Step 8 - Project - Overwrite