

Technical Guide C

Awning Windows



Product Features

Styles

Traditional, Push Out and Mission® options.

Standard Features

- Natural, clear Douglas Fir interior (no visible finger joints)
- 4 9/16” (116 mm) jamb construction
- LowE insulated glazing with 1/2” (13 mm) airspace
- Roto gear operator and concealed sash locks
- Extruded aluminum cladding in a variety of standard colors, primed wood or clear fir exterior
- Flexible continuous weatherstrip system
- Insect screens
- Metal handle, cover and locks

Hardware

Multiple hardware type and finish choices are available. See the Hardware in section A for more information.

Glazing

LowE Double, LowE Triple and StormForce™. StormForce is not available on all products.

Simulated Divided Lites (SDL)

Ogee Profile — 3/4” (19 mm), 1 1/8” (30 mm), 2” (51 mm)

Putty Profile — 5/8” (16 mm), 7/8” (22 mm), 1 1/8” (30 mm), 2” (51 mm)

Square Profile (interior only) — 3/4” (19 mm), 7/8” (22 mm), 1 1/8” (30 mm), 2” (51 mm)

Casing

Wood: 2” (51 mm) Brickmould, 3 1/2” (89 mm) Flat, 5 1/2” (139 mm) Flat, Adams and Williamsburg.

Metal Clad: 2” (51 mm) Brickmould, 3 1/2” (89 mm) Flat, 2” clad frame extension, Nose & Cove, Adams, Williamsburg and Kerf.

Metal Clad Color Spectrum

All Palette colors, including anodized finishes. Available in Cyprium Collection.

Specifications

Standards

Most units have been tested by an independent laboratory for air and water infiltration, structural performance, and thermal performance requirements.

Frame & Sash

Manufactured from Coastal Douglas Fir kiln-dried lumber with frame construction designed for 4 9/16” (116 mm) jamb. All wood exterior components are factory primed unless specified as clear exterior. Minor scratches or abrasions in the wood surface or primer are not considered defects.

Alternate Species

The entire Loewen product line is also available in optional Mahogany.

Preservative Treated

All wood parts are dipped in approved preservative.

Glazing

With countless glazing configurations and LowE coating options, we ensure that you can choose the perfect blend of protection and comfort.

Insulating Glass

Double or triple glass configurations with 1/2” (13 mm) airspace.

LowE Systems

LowE best describes the benefits of the product that incorporates glazing coatings and Argon gas. LowE systems help reduce heating and cooling costs, providing superior energy efficiency.

Simulated Divided Lites (SDL)

Standard SDL complete with airspace grilles, where available. Grille bars are permanently applied to the interior and exterior.

Hardware Option

Operator and sash locks are available in a variety of finishes. See section A.

Metal Cladding

Heavy duty exterior metal cladding comprised of extruded aluminum is available in a variety of Palette colors, including anodized and Cyprium (copper and bronze cladding). Interior of window can be natural wood (unfinished) or primed. Metal clad units are supplied ready-to-install complete with integral metal nailing flange.

Hardware

Standard awning operator detaches at the sash allowing it to open out to 90 degrees for ease of cleaning. The roto gear operator will hold the sash at any position in its operating radius. The sash is supported by concealed heavy-duty hinges. All awning unitsare supplied with dual sash locks for added security and tighter seal. All steel components are coated for superior corrosion protection.

Double Weatherstrip

The combination of a continuous, flexible foam weatherstrip and a flexible automotive type bulb weatherstrip ensures maximum energy efficiency and protection against air and water infiltration.

Screen

Screens available in bronze, linen, Tuscany brown, brushed aluminum or black aluminum frame, screened with anti-glare fiberglass cloth. Wood-framed screens and High Transparency mesh available. Optional Retractable Screen and Swinging Screen available. Swinging Screen available on Push Out models only.

Egress

Consult local building codes for confirmation of size requirements for your area. Special egress hardware is available for Casement windows, which enables some sizes to meet egress codes, eliminating the need to go to the next larger size window. Consult your Authorized Loewen Dealer for more details.



Awning



Push Out Awning

	Awning	Push Out Awning
HARDWARE STYLES		
Folding Crank Handle	●	
Push Out Handle		●
Multipoint Lock	●	○
Electric Operator	○	

● Standard ○ Optional

Finish Options: Refer to Section A.

	Awning	Push Out Awning
VARIABLES		
Function		
Use for Egress		●
Available with Screen	●	●
Concealed Hardware	●	
Durability		
Low Maintenance Metal Clad Exterior	●	●
Clear Douglas Fir Exterior Finish	○	○
Clear Mahogany Exterior Finish	○	○
Primed Exterior Finish	○	○
Cyprium Collection	○	○
Performance		
LowE Double	●	●
LowE Triple	○	○
StormForce™	○	●
Appearance		
SDL	○	○

Visit the Loewen Photo Gallery online at www.loewen.com for a large collection of Loewen product and elevation photography. Numerous custom window configuration opportunities exist — please contact your Authorized Loewen Dealer. Specifications and technical information are subject to change without notice. Imperial and metric measurements are converted accurately. However, in some cases, industry standards cause a 1 mm variance. (Example: 3/4" is shown as 19 mm for all glass measurements.) Cad Download: www.loewen.com/architect | Installation Instructions: www.loewen.com

Awning
1 Wide Window Sizes

		Width														
Rough Opening				20 7/16 [519]	24 3/8 [619]	28 5/16 [719]	30 1/4 [769]	32 1/4 [819]	36 3/16 [919]	40 1/8 [1019]	42 [1067]	48 [1219]	55 7/8 [1419]	59 13/16 [1519]	63 3/4 [1619]	71 5/8 [1819]
		Frame	Visible Glass	19 11/16 [500]	23 5/8 [600]	27 9/16 [700]	29 1/2 [750]	31 1/2 [800]	35 7/16 [900]	39 3/8 [1000]	41 1/4 [1048]	47 1/4 [1200]	55 1/8 [1400]	59 1/16 [1500]	63 [1600]	70 7/8 [1800]
				13 11/16 [347]	17 5/8 [447]	21 9/16 [547]	23 1/2 [597]	25 1/2 [647]	29 7/16 [747]	33 3/8 [847]	35 1/4 [895]	41 1/4 [1047]	49 1/8 [1247]	53 1/16 [1347]	56 15/16 [1447]	64 13/16 [1647]
Wood Exterior	Metal Clad															
17 3/16 [436]	16 1/2 [419]	15 3/4 [400]	9 1/2 [242]	AW1 0504	AW1 0604	AW1 0704	AW1 7504	AW1 0804	AW1 0904	AW1 1004	AW1 1104	AW1 1204	AW1 1404	AW1 1504	AW1 1604	AW1 1804
21 1/8 [536]	20 7/16 [519]	19 11/16 [500]	13 7/16 [342]	AW1 0505	AW1 0605	AW1 0705	AW1 7505	AW1 0805	AW1 0905	AW1 1005	AW1 1105	AW1 1205	AW1 1405	AW1 1505	AW1 1605	AW1 1805
25 1/16 [636]	24 3/8 [619]	23 5/8 [600]	17 3/8 [442]	AW1 0506	AW1 0606	AW1 0706	AW1 7506	AW1 0806	AW1 0906	AW1 1006	AW1 1106	AW1 1206	AW1 1406	AW1 1506	AW1 1606	AW1 1806
29 [736]	28 5/16 [719]	27 9/16 [700]	21 5/16 [542]	AW1 0507	AW1 0607	AW1 0707	AW1 7507	AW1 0807	AW1 0907	AW1 1007	✻ AW1 1107	✻ AW1 1207	✻ AW1 1407	✻ AW1 1507	AW1 1607	AW1* 1807
30 15/16 [786]	30 1/4 [769]	29 1/2 [750]	23 5/16 [592]	AW1 0575	AW1 0675	AW1 0775	AW1 7575	AW1 0875	AW1 0975	✻ AW1 1075	✻ AW1 1175	✻ AW1 1275	✻ AW1 1475	✻ AW1 1575	AW1 1675	AW1* 1875
32 15/16 [836]	32 1/4 [819]	31 1/2 [800]	25 1/4 [642]	AW1 0508	AW1 0608	AW1 0708	AW1 7508	AW1 0808	AW1 0908	✻ AW1 1008	✻ AW1 1108	✻ AW1 1208	✻ AW1 1408	✻ AW1 1508	AW1 1608	AW1* 1808
36 7/8 [936]	36 3/16 [919]	35 7/16 [900]	29 3/16 [742]	AW1 0509	AW1 0609	AW1 0709	AW1 7509	AW1 0809	✻ AW1 0909	✻ AW1 1009	✻ AW1 1109	✻ AW1 1209	✻ AW1 1409	✻ AW1 1509	AW1 1609	AW1* 1809
40 13/16 [1036]	40 1/8 [1019]	39 3/8 [1000]	33 1/8 [842]	AW1 0510	AW1 0610	AW1 0710	AW1 7510	AW1 0810	✻ AW1 0910	✻ AW1 1010	✻ AW1 1110	✻ AW1 1210	✻ AW1 1410	✻ AW1 1510	AW1 1610	AW1 1810
42 11/16 [1084]	42 [1067]	41 1/4 [1048]	35 1/16 [890]	AW1 0511	AW1 0611	AW1 0711	AW1 7511	AW1 0811	✻ AW1 0911	✻ AW1 1011	✻ AW1 1111	✻ AW1 1211	✻ AW1 1411	✻ AW1 1511	AW1 1611	AW1 1811
48 11/16 [1236]	48 [1219]	47 1/4 [1200]	41 [1042]	AW1 0512	AW1 0612	AW1 0712	✻ AW1 7512	✻ AW1 0812	✻ AW1 0912	✻ AW1 1012	✻ AW1 1112	✻ AW1 1212	✻ AW1 1412	✻ AW1 1512	AW1 1612	AW1* 1812
56 9/16 [1436]	55 7/8 [1419]	55 1/8 [1400]	48 7/8 [1242]	AW1* 0514	AW1* 0614	AW1* 0714	AW1* 7514	AW1* 0814	AW1* 0914	AW1* 1014	AW1* 1114	AW1* 1214	AW1* 1414	AW1* 1514	AW1* 1614	AW1* 1814
60 1/2 [1536]	59 13/16 [1519]	59 1/16 [1500]	52 13/16 [1342]	AW1* 0515	AW1* 0615	AW1* 0715	AW1* 7515	AW1* 0815	AW1* 0915	AW1* 1015	AW1* 1115	AW1* 1215	AW1* 1415	AW1* 1515	AW1* 1615	
64 7/16 [1636]	63 3/4 [1619]	63 [1600]	56 3/4 [1442]	AW1* 0516	AW1* 0616	AW1* 0716	AW1* 7516	AW1* 0816	AW1* 0916	AW1* 1016	AW1* 1116	AW1* 1216	AW1* 1416	AW1* 1516	AW1* 1616	
75 5/16 [1836]	71 5/8 [1819]	70 7/8 [1800]	64 5/8 [1642]	AW1* 0518	AW1* 0618	AW1* 0718	AW1* 7518	AW1* 0818	AW1* 0918	AW1* 1018	AW1* 1118	AW1* 1218	AW1* 1418	AW1* 1518		
		Product Code														

Glass Size = Visible Glass + 15/16" (24 mm)

Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:**

 - Available with Mission sash. For a unit with a Mission sash, subtract 13/16" (21 mm) from the vertical visible glass measurement.
 - SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with Push Out hardware.
 - For Masonry opening information see page A24-A29.
 - Sizes are shown as double glazing, not all sizes may be available in triple glazing.
- Egress calculations are based on the unit being opened at 70° for washability hinge, 80° for egress hinge, and having minimum clear openings of:
 - ✦ Meets US Egress: 20" in width, 24" in height, with a total egress area of 5.7 Sq Ft (Push Out Only)
 - ✦ Meets Canadian Egress: 15" in width, 15" in height, with a total egress area of 3.8 Sq Ft
 - Please check your local building codes for any variation in Egress Standards from those stated above. For egress information, contact your Authorized Loewen Dealer.

Awning
2 Wide Window Sizes

Rough Opening				Width												
				40 1/8 [1019]	48 [1219]	55 7/8 [1419]	59 13/16 [1519]	63 3/4 [1619]	71 5/8 [1819]	79 1/2 [2019]	83 1/4 [2134]	95 1/4 [2419]	111 [2819]	118 7/8 [3019]	126 3/4 [3219]	142 1/2 [3619]
				Frame		39 3/8 [1000]	47 1/4 [1200]	55 1/8 [1400]	59 1/16 [1500]	63 [1600]	70 7/8 [1800]	78 3/4 [2000]	82 1/2 [2096]	94 1/2 [2400]	110 1/4 [2800]	118 1/8 [3000]
Wood Exterior	Metal Clad		Visible Glass	13 11/16 [347]	17 5/8 [447]	21 9/16 [547]	23 1/2 [597]	25 1/2 [647]	29 7/16 [747]	33 3/8 [847]	35 1/4 [895]	41 1/4 [1047]	49 1/8 [1247]	53 1/16 [1347]	56 15/16 [1447]	64 13/16 [1647]
17 3/16 [436]	16 1/2 [419]	15 3/4 [400]	9 1/2 [242]	AW2 1004	AW2 1204	AW2 1404	AW2 1504	AW2 1604	AW2 1804	AW2 2004	AW2 2204	AW2 2404	AW2 2804	AW2 3004	AW2 3204	AW2 3604
21 1/8 [536]	20 7/16 [519]	19 11/16 [500]	13 7/16 [342]	AW2 1005	AW2 1205	AW2 1405	AW2 1505	AW2 1605	AW2 1805	AW2 2005	AW2 2205	AW2 2405	AW2 2805	AW2 3005	AW2 3205	AW2 3605
25 1/16 [636]	24 3/8 [619]	23 5/8 [600]	17 3/8 [442]	AW2 1006	AW2 1206	AW2 1406	AW2 1506	AW2 1606	AW2 1806	AW2 2006	AW2 2206	AW2 2406	AW2 2806	AW2 3006	AW2 3206	AW2 3606
29 [736]	28 5/16 [719]	27 9/16 [700]	21 5/16 [542]	AW2 1007	AW2 1207	AW2 1407	AW2 1507	AW2 1607	AW2 1807	AW2 2007	✻ AW2 2207	✻ AW2 2407	✻ AW2 2807	✻ AW2 3007	AW2 3207	AW2* 3607
30 15/16 [786]	30 1/4 [769]	29 1/2 [750]	23 5/16 [592]	AW2 1075	AW2 1275	AW2 1475	AW2 1575	AW2 1675	AW2 1875	✻ AW2 2075	✻ AW2 2275	✻ AW2 2475	✻ AW2 2875	✻ AW2 3075	AW2 3275	AW2* 3675
32 15/16 [836]	32 1/4 [819]	31 1/2 [800]	25 1/4 [642]	AW2 1008	AW2 1208	AW2 1408	AW2 1508	AW2 1608	AW2 1808	✻ AW2 2008	✻ AW2 2208	✻ AW2 2408	✻ AW2 2808	✻ AW2 3008	AW2 3208	AW2* 3608
36 7/8 [936]	36 3/16 [919]	35 7/16 [900]	29 3/16 [742]	AW2 1009	AW2 1209	AW2 1409	AW2 1509	AW2 1609	✻ AW2 1809	✻ AW2 2009	✻ AW2 2209	✻ AW2 2409	✻ AW2 2809	✻ AW2 3009	AW2 3209	AW2* 3609
40 13/16 [1036]	40 1/8 [1019]	39 3/8 [1000]	33 1/8 [842]	AW2 1010	AW2 1210	AW2 1410	AW2 1510	AW2 1610	✻ AW2 1810	✻ AW2 2010	✻ AW2 2210	✻ AW2 2410	✻ AW2 2810	✻ AW2 3010	AW2 3210	AW2 3610
42 11/16 [1084]	42 [1067]	41 1/4 [1048]	35 1/16 [890]	AW2 1011	AW2 1211	AW2 1411	AW2 1511	AW2 1611	✻ AW2 1811	✻ AW2 2011	✻ AW2 2211	✻ AW2 2411	✻ AW2 2811	✻ AW2 3011	AW2 3011	AW2 3611
48 11/16 [1236]	48 [1219]	47 1/4 [1200]	41 [1042]	AW2 1012	AW2 1212	AW2 1412	✻ AW2 1512	✻ AW2 1612	AW2 1812	✻ AW2 2012	✻ AW2 2212	✻ AW2 2412	✻ AW2 2812	AW2 3012	AW2 3212	AW2* 3612
56 9/16 [1436]	55 7/8 [1419]	55 1/8 [1400]	48 7/8 [1242]	AW2* 1014	AW2* 1214	AW2* 1414	AW2* 1514	AW2* 1614	AW2* 1814	AW2* 2014	AW2* 2214	AW2* 2414	AW2* 2814	AW2* 3014	AW2* 3214	AW2* 3614
60 1/2 [1536]	59 13/16 [1519]	59 1/16 [1500]	52 13/16 [1342]	AW2* 1015	AW2* 1215	AW2* 1415	AW2* 1515	AW2* 1615	AW2* 1815	AW2* 2015	AW2* 2215	AW2* 2415	AW2* 2815	AW2* 3015	AW2* 3215	
64 7/16 [1636]	63 3/4 [1619]	63 [1600]	56 3/4 [1442]	AW2* 1016	AW2* 1216	AW2* 1416	AW2* 1516	AW2* 1616	AW2* 1816	AW2* 2016	AW2* 2216	AW2* 2416	AW2* 2816	AW2* 3016	AW2* 3216	
72 5/16 [1836]	71 5/8 [1819]	70 7/8 [1800]	64 5/8 [1642]	AW2* 1018	AW2* 1218	AW2* 1418	AW2* 1518	AW2* 1618	AW2* 1818	AW2* 2018	AW1* 2218	AW1* 2418	AW1* 2818	AW1* 3018		
Product Code																
Glass Size = Visible Glass + 15/16" (24 mm)																

Glass Size = Visible Glass + 15/16" (24 mm)

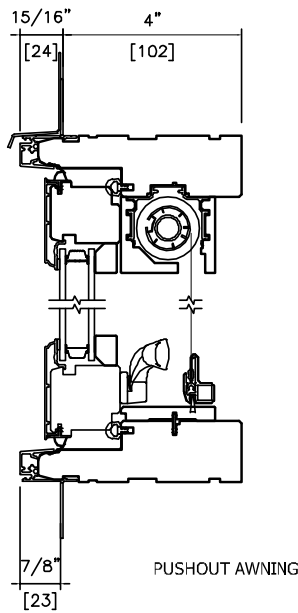
Standard sizes Shown. Additional sizes may be available. Custom sizes can be ordered.

- Note:**

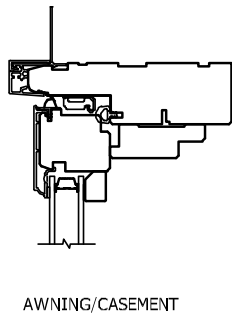
 - Available with Mission sash. For a unit with a Mission sash, subtract 13/16" (21 mm) from the vertical visible glass measurement.
 - SDL/Grille patterns are dependent on SDL/Grille type and window size. Please verify SDL/Grille patterns before confirming your order.
 - Available with Push Out hardware.
 - For Masonry opening information see page A24-A29.
 - Sizes are shown as double glazing, not all sizes may be available in triple glazing.
- Egress calculations are based on the unit being opened at 70° for washability hinge, 80° for egress hinge, and having minimum clear openings of:
 - ✦ Meets US Egress: 20" in width, 24" in height, with a total egress area of 5.7 Sq Ft (Push Out Only)
 - ✦ Meets Canadian Egress: 15" in width, 15" in height, with a total egress area of 3.8 Sq Ft
 - Please check your local building codes for any variation in Egress Standards from those stated above. For egress information, contact your Authorized Loewen Dealer.

Contemporary Frame Cladding
Detail

Head & Sill
Detail

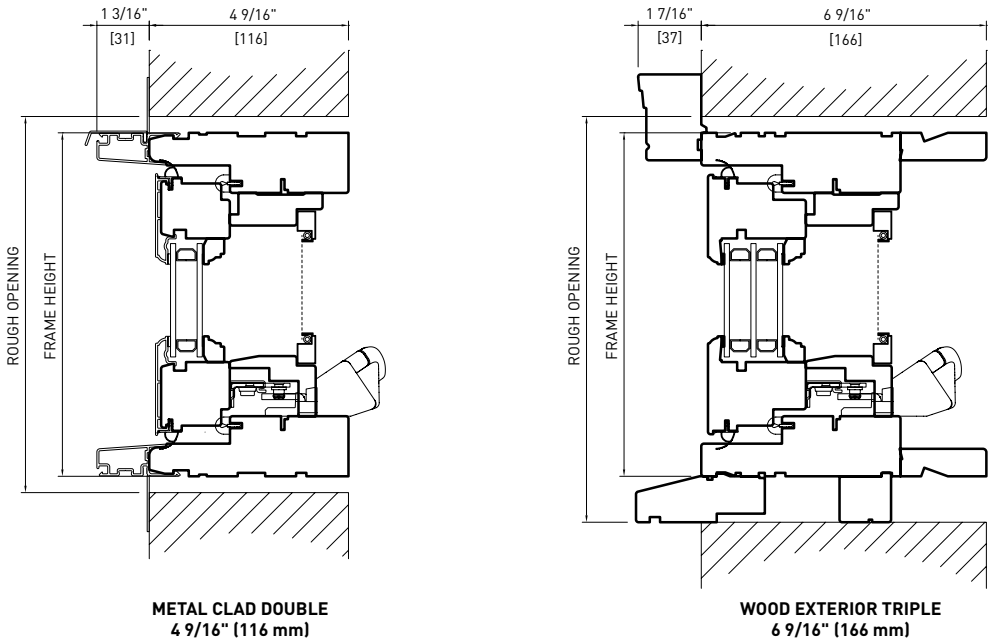


Casing

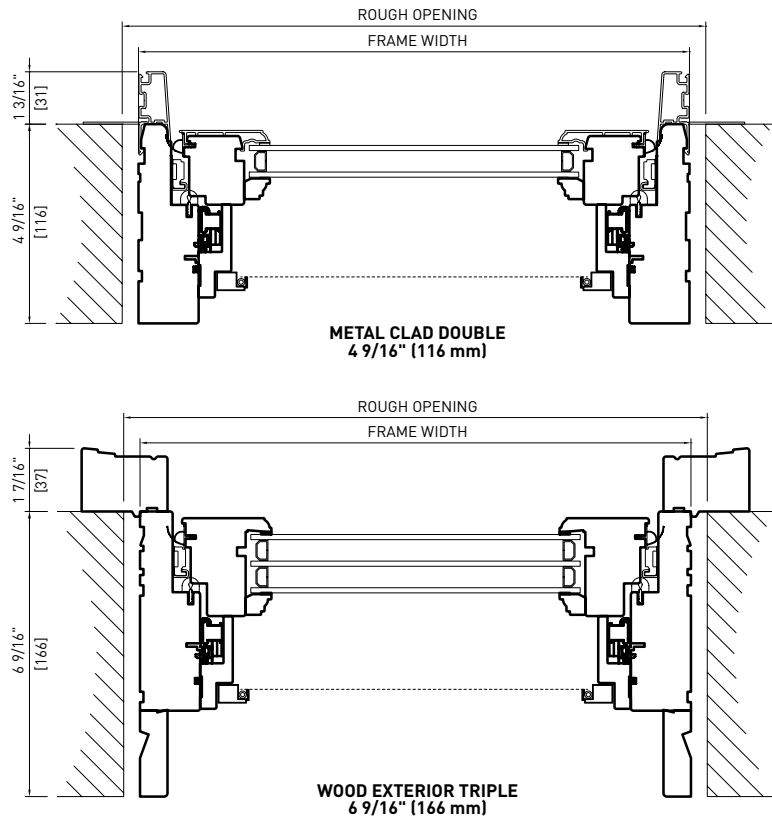


Awning Window Wall Connection
Detail

Head & Sill Detail



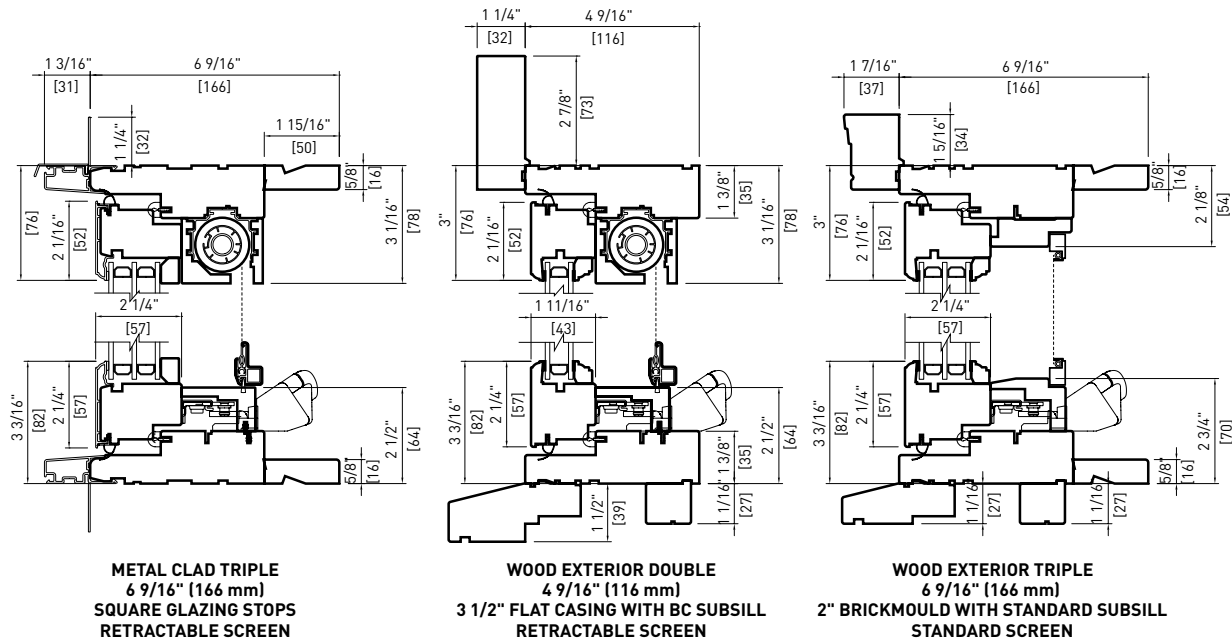
Plan View



Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2mm) tolerance.

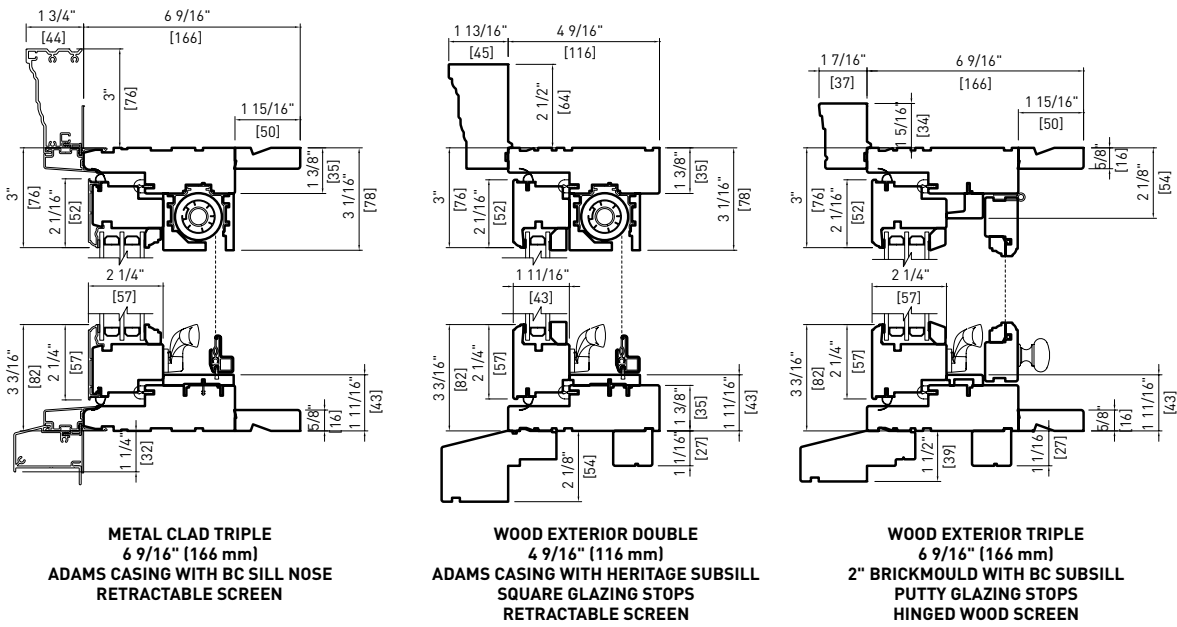
Awning Window
Detail

Head & Sill Detail

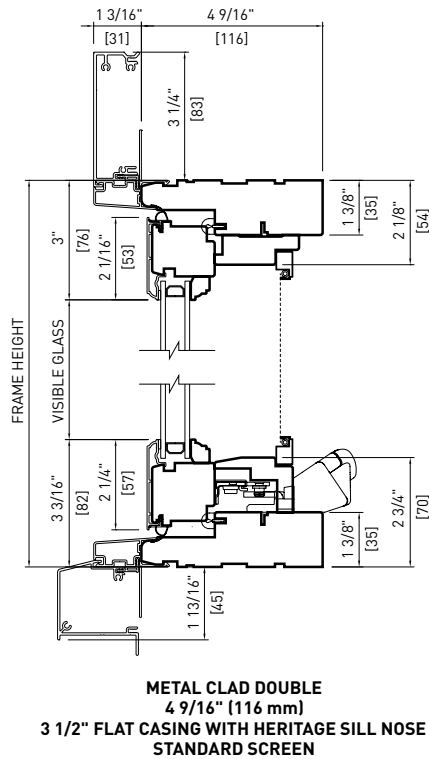


Push Out Awning Window
Detail

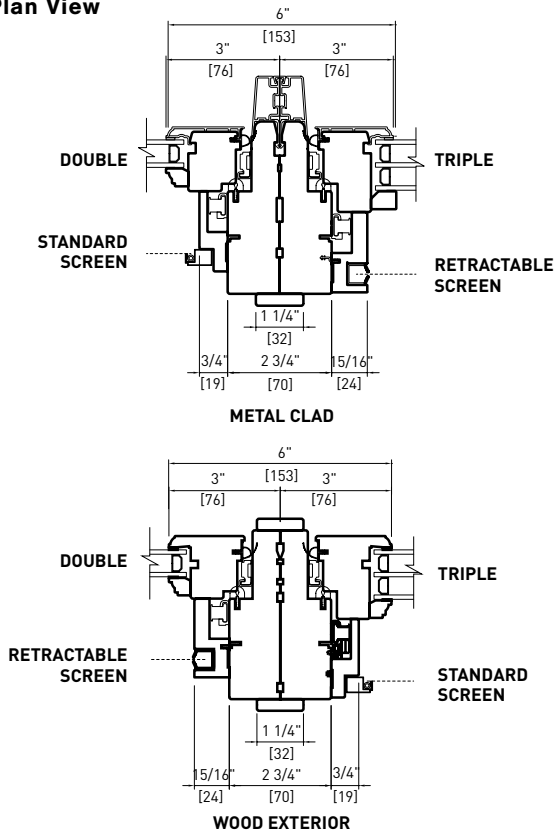
Head & Sill Detail



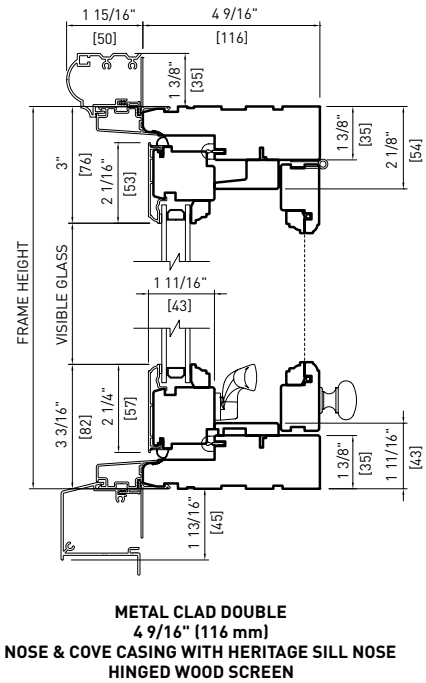
Head & Sill Detail



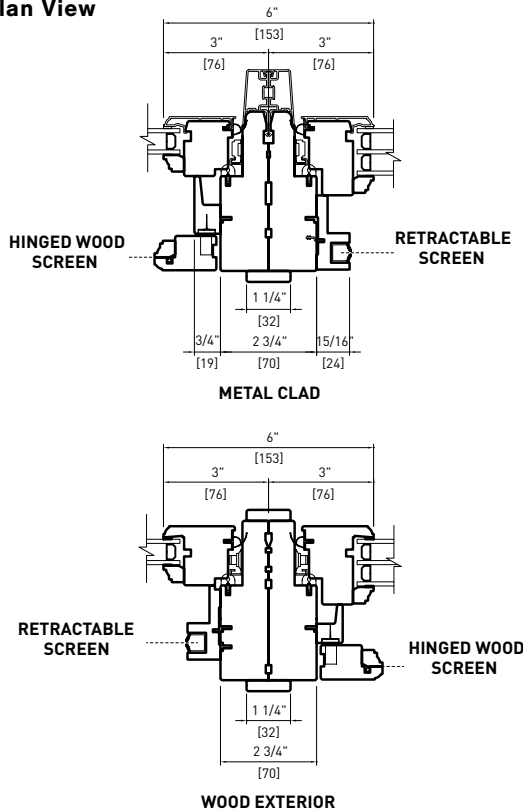
Plan View



Head & Sill Detail



Plan View

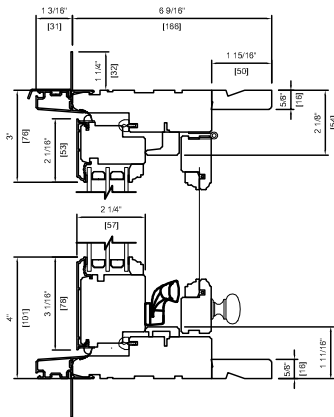


Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2mm) tolerance.

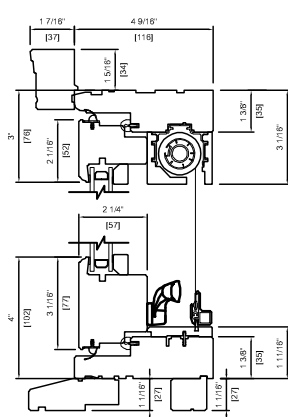
Note: • Other jamb widths available.
• All dimensions to have +/- 1/16" (2mm) tolerance.

Mission Awning Window Detail

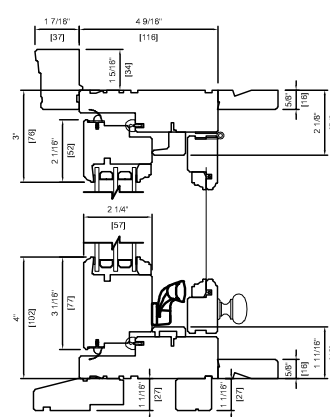
Head & Sill Detail



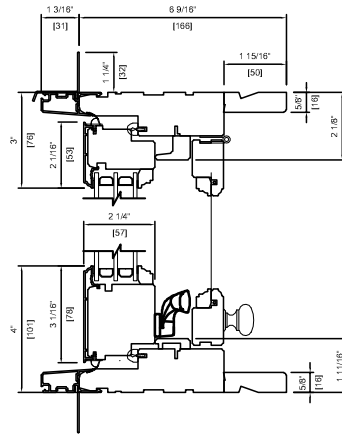
METAL CLAD TRIPLE
6 9/16" (166mm)
HINGED WOOD SCREEN



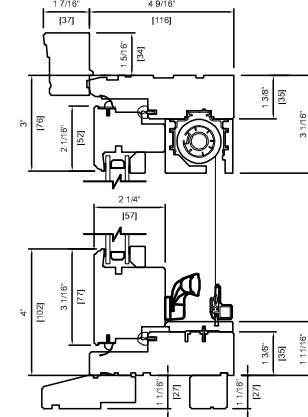
NON CLAD DOUBLE
4 9/16" (116mm)
SQUARE GLAZING STOPS
RETRACTABLE SCREEN
2" BRICKMOULD STANDARD SUBSILL



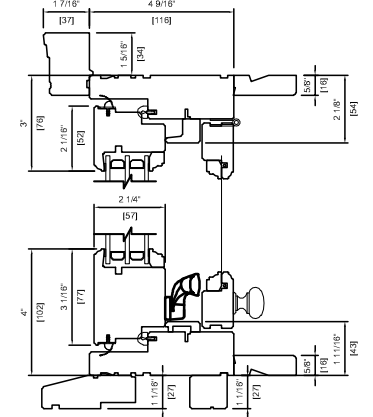
NON CLAD TRIPLE
6 9/16" (166mm)
HINGED WOOD SCREEN
2" BRICKMOULD STANDARD SUBSILL



METAL CLAD TRIPLE
6 9/16" (166mm)
HINGED WOOD SCREEN

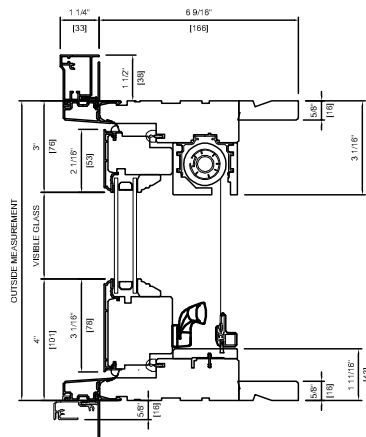


NON CLAD DOUBLE
4 9/16" (116mm)
SQUARE GLAZING STOPS
RETRACTABLE SCREEN
2" BRICKMOULD STANDARD SUBSILL



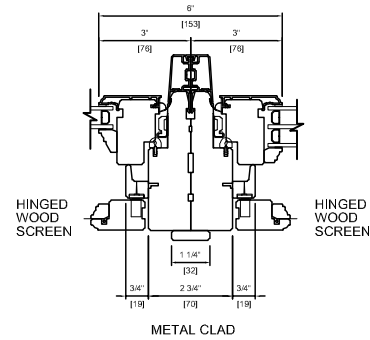
NON CLAD TRIPLE
6 9/16" (166mm)
HINGED WOOD SCREEN
2" BRICKMOULD STANDARD SUBSILL

Head & Sill Detail

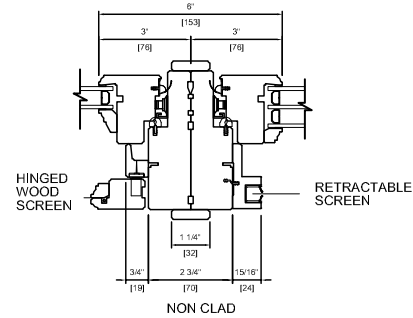


METAL CLAD DOUBLE
6 9/16" (166mm)
2" BRICKMOULD STANDARD SILL NOSE
RETRACTABLE SCREEN

Plan View



METAL CLAD



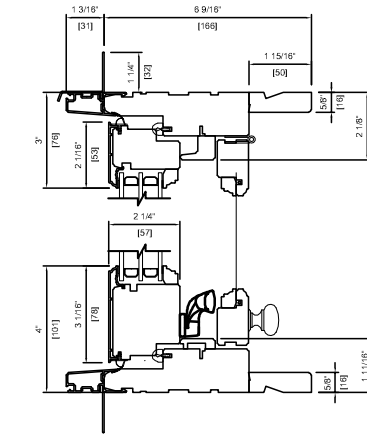
NON CLAD

Note:

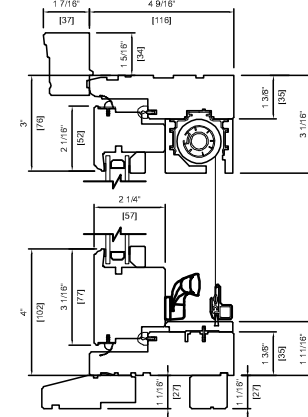
- Other jamb widths available.
- All dimensions to have +/- 1/16" (2mm) tolerance.

Push Out Mission Awning Window Detail

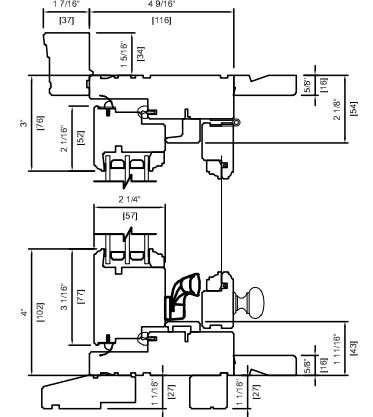
Head & Sill Detail



METAL CLAD TRIPLE
6 9/16" (166mm)
HINGED WOOD SCREEN

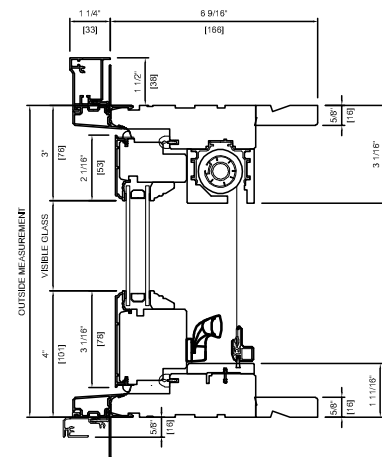


NON CLAD DOUBLE
4 9/16" (116mm)
SQUARE GLAZING STOPS
RETRACTABLE SCREEN
2" BRICKMOULD STANDARD SUBSILL



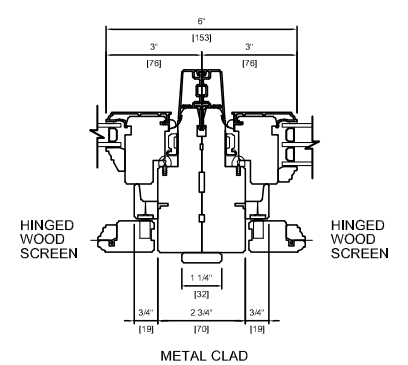
NON CLAD TRIPLE
6 9/16" (166mm)
HINGED WOOD SCREEN
2" BRICKMOULD STANDARD SUBSILL

Head & Sill Detail

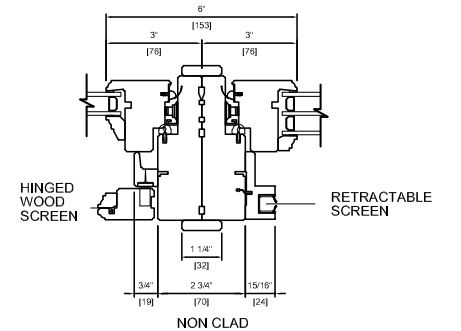


METAL CLAD DOUBLE
6 9/16" (166mm)
2" BRICKMOULD STANDARD SILL NOSE
RETRACTABLE SCREEN

Plan View



METAL CLAD



NON CLAD

Note:

- Other jamb widths available.
- All dimensions to have +/- 1/16" (2mm) tolerance.

