

# Ultimate Wood Casement and Push Out Bows and Bays

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**Unit Features**

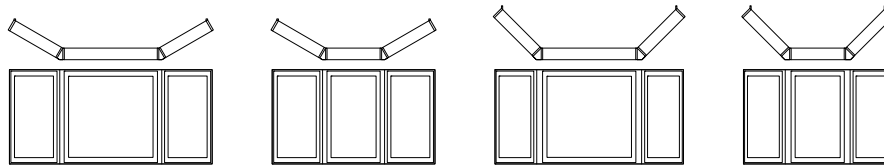
**Ultimate Wood Casement / Awning Bow and Bay - UWCABB, UAWNBB**

**Ultimate Wood Push Out Casement / Awning Bow and Bay - UWCAPOBB UAWNPOBB**

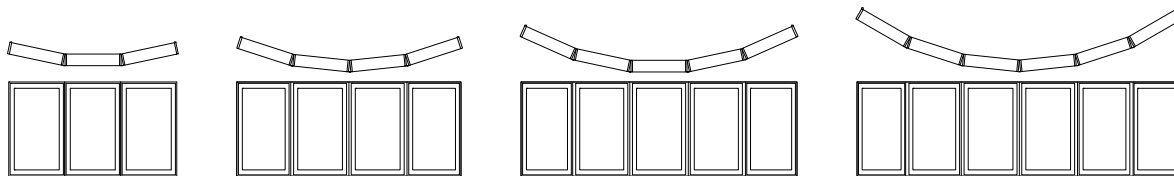
- 6 degree angle on Bows
- Laminated Pine wood or optional Douglas Fir head and seat boards installed
- Installation brackets are available in lieu of nailing fin
- Optional retro fit bay square jamb return for UWCABB and UWCAPOBB

Information concerning Daylight Opening, Egress Opening, and Vent Opening will be determined based on the individual components of the Bow or Bay.

**Bay standard operation as viewed from exterior.**



**Bow standard operation as viewed from exterior.**



*NOTE: Also see Ultimate Wood Casement Collection for more unit features.*

*Use of wood flat casing will change the Rough Opening and Projection. Contact your Marvin representative for further information.*

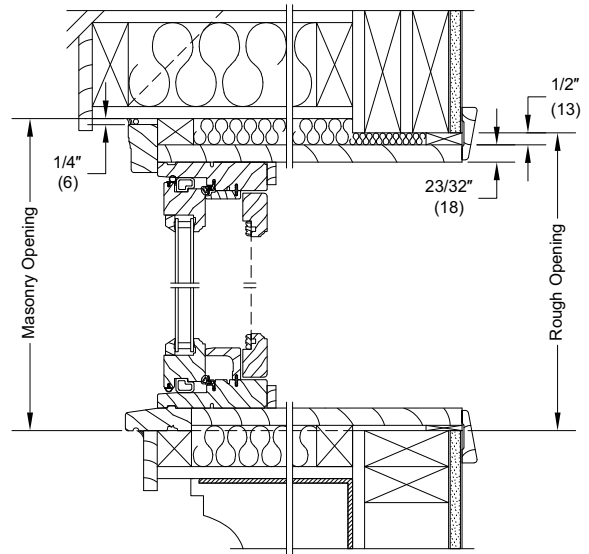
Min and Max Sizing, Projection and Standard Heights for Bows and Bays

Configuration	Minimum and Maximum Rough Opening Guidelines									
	Min Width		x	Min Height		Max Width		x	Max Height	
	in	mm		in	mm	in	mm		in	mm
Bow - 3 Wide	50 1/16	(1272)	x	26	(660)	109 3/16	(2773)	x	74	(1880)
Bow - 4 Wide	65 3/4	(1670)	x	26	(660)	143 19/32	(3647)	x	74	(1880)
Bow - 5 Wide	80 11/16	(2049)	x	26	(660)	157 7/32	(3993)	x	74	(1880)
Bow - 6 Wide	94 5/8	(2403)	x	26	(660)	162 1/8	(4118)	x	74	(1880)
Special Angle Bow	48	(1219)	x	26	(660)	162 1/8	(4118)	x	74	(1880)
Bay - 30°	48 13/32	(1230)	x	26	(660)	139	(3531)	x	74	(1880)
Bay - 45°	43 7/8	(1114)	x	26	(660)	128 5/32	(3255)	x	74	(1880)
Bay - 60°	36 1/4	(921)	x	26	(660)	112 1/4	(2851)	x	74	(1880)
Bay - 90°	17 5/8	(448)	x	26	(660)	73 5/8	(1870)	x	74	(1880)

Configuration	Projection Depth			
	Minimum		Maximum	
	in	mm	in	mm
Bow - 3 Wide	3 3/4	(95)	7 29/32	(201)
Bow - 4 Wide	7 11/32	(187)	15 5/8	(397)
Bow - 5 Wide	10 7/8	(276)	20 11/16	(525)
Bow - 6 Wide	16 1/32	(407)	27	(686)
Special Angle Bow	1/2	(13)	42 1/16	(1068)
Bay - 30°	9 3/8	(238)	19 3/8	(492)
Bay - 45°	12 21/32	(321)	26 13/16	(681)
Bay - 60°	17 1/2	(445)	34 13/16	(884)
Bay - 90°	22 1/16	(560)	42 1/16	(1068)

**Standard Heights for Bows and Bays**

Call Number Height	Rough Opening Height (w/ head & seat boards)		Frame Size Height (w/ head & seat boards)	
	ft-in	mm	ft-in	mm
24	2-1	(635)	2-0 1/2	(622)
26	2-3	(686)	2-2 1/2	(673)
28	2-5	(737)	2-4 1/2	(724)
32	2-9	(838)	2-8 1/2	(826)
36	3-1	(940)	3-0 1/2	(927)
40	3-5	(1041)	3-4 1/2	(1029)
44	3-9	(1143)	3-8 1/2	(1130)
48	4-1	(1245)	4-0 1/2	(1232)
54	4-7	(1397)	4-6 1/2	(1384)
56	4-9	(1448)	4-8 1/2	(1435)
60	5-1	(1549)	5-0 1/2	(1537)
64	5-5	(1651)	5-4 1/2	(1638)
72	6-1	(1854)	6-0 1/2	(1842)



**Measurement Conversions: UWCABB and UWCAPOBB**

Unit Measurements		Width		Height	
From	To				
<b>Rough Opening - 30° Bay</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Masonry Opening	Rough Opening (w/ head and seat boards)	-4 5/16	(110)	+ 1/2	(13)
<b>Rough Opening - 45° Bay</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Masonry Opening	Rough Opening (w/ head and seat boards)	-4 5/8	(117)	+ 1/2	(13)
<b>Rough Opening - 60° Bay</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Masonry Opening	Rough Opening (w/ head and seat boards)	-7 15/16	(202)	+ 1/2	(13)
<b>Rough Opening - 90° Bay</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Masonry Opening	Rough Opening (w/ head and seat boards)	-10 7/16	(265)	+ 1/2	(13)
<b>Rough Opening - 3W Bow</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Masonry Opening	Rough Opening (w/ head and seat boards)	-3 3/16	(81)	+ 1/2	(13)
<b>Rough Opening - 4W Bow</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Masonry Opening	Rough Opening (w/ head and seat boards)	-3 9/16	(90)	+ 1/2	(13)
<b>Rough Opening - 5W Bow</b>		<b>in</b>	<b>mm</b>	<b>in</b>	<b>mm</b>
Masonry Opening	Rough Opening (w/ head and seat boards)	-3 15/16	(100)	+ 1/2	(13)

NOTE: if no head board, Deduct 11/16" (17) from Rough Opening Height

NOTE: If no seat board, Deduct 11/16" (17) from Rough Opening Height

NOTE: Wood Flat Casing will change Rough Opening and Projection. Contact your Marvin representative.

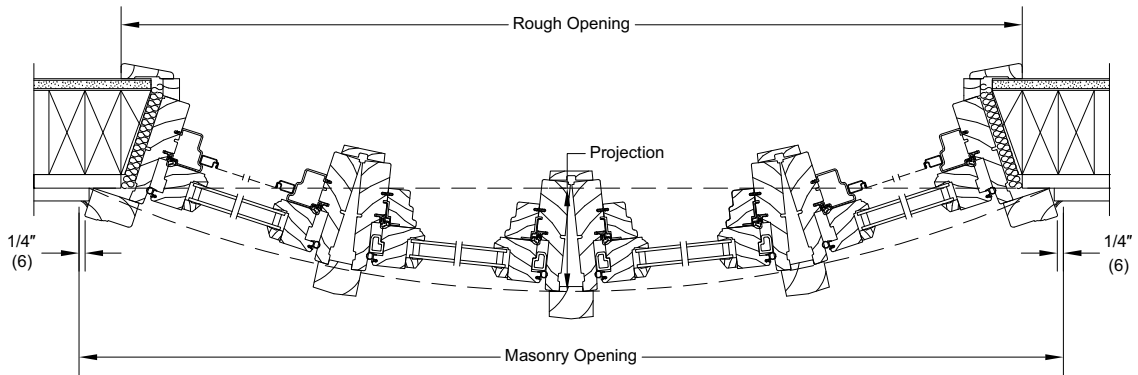
**Bow Rough Opening and Projection - 3 Wide, 4 Wide, 5 Wide, 6 Wide**

Call Number (Width)	Number Wide	Bow			
		RO		Projection	
16	3	4-2 1/16	(1272)	0-3 3/4	(95)
16	4	5-5 3/4	(1670)	0-7 11/32	(187)
16	5	6-8 11/16	(2049)	0-10 7/8	(276)
16	6	7-10 5/8	(2403)	1-4 1/32	(407)
18	3	4-7 31/32	(1422)	0-4 11/64	(106)
18	4	6-1 35/64	(1868)	0-8 11/64	(208)
18	5	7-6 1/4	(2292)	1-0 3/32	(307)
18	6	8-9 7/8	(2689)	1-5 55/64	(454)
20	3	5-1 7/8	(1572)	0-4 9/16	(116)
20	4	6-9 5/16	(2065)	0-9	(229)
20	5	8-3 13/16	(2535)	1-1 5/16	(338)
20	6	9-9 1/8	(2975)	1-7 11/16	(500)
24	3	6-0 11/16	(1846)	0-5 7/16	(138)
24	4	8-0 7/8	(2461)	0-10 21/32	(271)
24	5	9-10 15/16	(3021)	1-3 25/32	(401)
24	6	11-7 5/8	(3546)	1-11 11/32	(593)
26	3	6-7 5/8	(2022)	0-5 53/64	(148)
26	4	8-8 43/64	(2659)	0-11 31/64	(292)
26	5	10-8 33/64	(3264)	1-5 1/64	(432)
26	6	12-6 55/64	(3832)	2-1 11/64	(639)
28	3	7-1 17/32	(2172)	0-6 1/4	(159)
28	4	9-4 7/16	(2856)	1-3 5/16	(389)
28	5	11-6 1/16	(3507)	1-6 1/4	(464)
28	6	13-6 1/8	(4118)	2-3	(686)
30	3	7-7 29/64	(2323)	0-6 21/32	(169)
30	4	10-0 15/64	(3054)	1-1 9/64	(334)
30	5	12-3 41/64	(3750)	1-7 15/32	(495)
32	3	8-1 3/8	(2473)	0-7 1/16	(179)
32	4	10-8	(3251)	1-1 31/32	(355)
32	5	13-1 3/16	(3993)	1-8 11/16	(525)
36	3	9-1 3/16	(2773)	0-7 29/32	(201)
36	4	11-11 19/32	(3647)	1-3 5/8	(397)

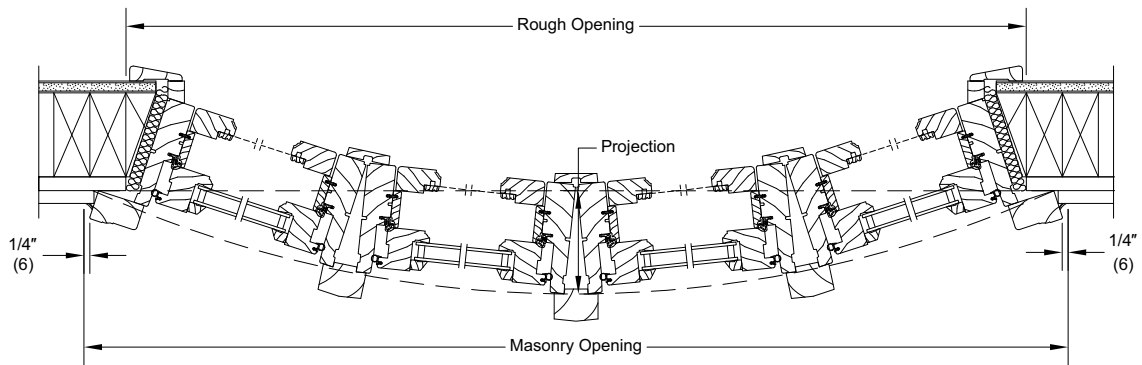
NOTE: Wood Flat Casing will change Rough Opening and Projection. Contact your Marvin representative.

**Section Details: Bow**

**Crank Out**



**Push Out**



*NOTE: Use of wood flat casing will change Rough Opening and Projection. Contact your Marvin representative for further information.*



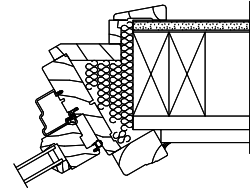
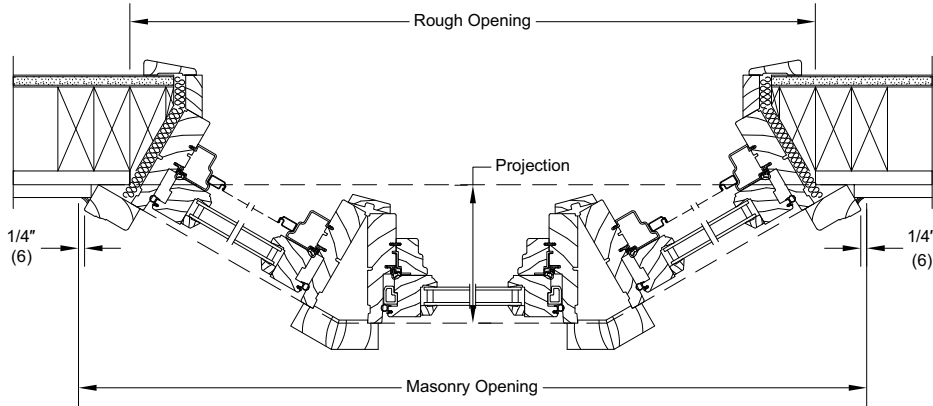
Standard Width Call Number: UWCABB and UWCAPOBB-30° Bay

Call Number (Width)			30° Bay			
Side	Center	Side	RO		Projection	
16	16	16	4-0 3/8	(1229)	0-9 25/64	(239)
16	18	16	4-2 3/8	(1279)	0-9 25/64	(239)
16	20	16	4-4 3/8	(1330)	0-9 25/64	(239)
16	24	16	4-8 3/8	(1432)	0-9 25/64	(239)
16	26	16	4-10 3/8	(1483)	0-9 25/64	(239)
16	28	16	5-0 3/8	(1533)	0-9 25/64	(239)
16	30	16	5-2 3/8	(1584)	0-9 25/64	(239)
16	32	16	5-4 3/8	(1635)	0-9 25/64	(239)
16	36	16	5-8 3/8	(1737)	0-9 25/64	(239)
16	40	16	6-0 3/8	(1838)	0-9 25/64	(239)
16	48	16	6-8 3/8	(2041)	0-9 25/64	(239)
16	56	16	7-4 3/8	(2245)	0-9 25/64	(239)
16	60	16	7-8 3/8	(2346)	0-9 25/64	(239)
16	64	16	8-0 3/8	(2448)	0-9 25/64	(239)
16	72	16	8-8 3/8	(2651)	0-9 25/64	(239)
18	18	18	4-5 27/32	(1367)	0-10 25/64	(264)
18	20	18	4-7 27/32	(1418)	0-10 25/64	(264)
18	24	18	4-11 27/32	(1520)	0-10 25/64	(264)
18	26	18	5-1 27/32	(1571)	0-10 25/64	(264)
18	28	18	5-3 27/32	(1621)	0-10 25/64	(264)
18	30	18	5-5 27/32	(1672)	0-10 25/64	(264)
18	32	18	5-7 27/32	(1723)	0-10 25/64	(264)
18	36	18	5-11 27/32	(1825)	0-10 25/64	(264)
18	40	18	6-3 27/32	(1926)	0-10 25/64	(264)
18	48	18	6-11 27/32	(2129)	0-10 25/64	(264)
18	56	18	7-7 27/32	(2333)	0-10 25/64	(264)
18	60	18	7-11 27/32	(2434)	0-10 25/64	(264)
18	64	18	8-3 27/32	(2536)	0-10 25/64	(264)
18	72	18	8-11 27/32	(2739)	0-10 25/64	(264)
20	20	20	4-11 19/64	(1506)	0-11 25/64	(289)
20	24	20	5-3 19/64	(1608)	0-11 25/64	(289)
20	26	20	5-5 19/64	(1659)	0-11 25/64	(289)
20	28	20	5-7 19/64	(1709)	0-11 25/64	(289)
20	30	20	5-9 19/64	(1760)	0-11 25/64	(289)
20	32	20	5-11 19/64	(1811)	0-11 25/64	(289)
20	36	20	6-3 19/64	(1913)	0-11 25/64	(289)
20	40	20	6-7 19/64	(2014)	0-11 25/64	(289)
20	48	20	7-3 19/64	(2217)	0-11 25/64	(289)
20	56	20	7-11 19/64	(2421)	0-11 25/64	(289)
20	60	20	8-3 19/64	(2522)	0-11 25/64	(289)
20	64	20	8-7 19/64	(2624)	0-11 25/64	(289)
20	72	20	9-3 19/64	(2827)	0-11 25/64	(289)
24	24	24	5-10 15/64	(1784)	1-1 25/64	(340)
24	26	24	6-0 15/64	(1835)	1-1 25/64	(340)
24	28	24	6-2 15/64	(1885)	1-1 25/64	(340)
24	30	24	6-4 15/64	(1936)	1-1 25/64	(340)
24	32	24	6-6 15/64	(1987)	1-1 25/64	(340)
24	36	24	6-10 15/64	(2089)	1-1 25/64	(340)
24	40	24	7-2 15/64	(2190)	1-1 25/64	(340)
24	48	24	7-10 15/64	(2393)	1-1 25/64	(340)
24	56	24	8-6 15/64	(2597)	1-1 25/64	(340)
24	60	24	8-10 15/64	(2698)	1-1 25/64	(340)
24	64	24	9-2 15/64	(2800)	1-1 25/64	(340)
24	72	24	9-10 15/64	(3003)	1-1 25/64	(340)

Call Number (Width)			30° Bay			
Side	Center	Side	RO		Projection	
26	26	26	6-3 11/16	(1229)	1-2 25/64	(239)
26	28	26	6-5 11/16	(1279)	1-2 25/64	(239)
26	30	26	6-7 11/16	(1330)	1-2 25/64	(239)
26	32	26	6-9 11/16	(1432)	1-2 25/64	(239)
26	36	26	7-1 11/16	(1483)	1-2 25/64	(239)
26	40	26	7-5 11/16	(1533)	1-2 25/64	(239)
26	48	26	8-1 11/16	(1584)	1-2 25/64	(239)
26	56	26	8-9 11/16	(1635)	1-2 25/64	(239)
26	60	26	9-1 11/16	(1737)	1-2 25/64	(239)
26	64	26	9-5 11/16	(1838)	1-2 25/64	(239)
26	72	26	10-1 11/16	(2041)	1-2 25/64	(239)
28	28	28	6-9 5/32	(2245)	1-3 25/64	(239)
28	30	28	6-11 5/32	(2346)	1-3 25/64	(239)
28	32	28	7-1 5/32	(2448)	1-3 25/64	(239)
28	36	28	7-5 5/32	(2651)	1-3 25/64	(239)
28	40	28	7-9 5/32	(1367)	1-3 25/64	(264)
28	48	28	8-5 5/32	(1418)	1-3 25/64	(264)
28	56	28	9-1 5/32	(1520)	1-3 25/64	(264)
28	60	28	9-5 5/32	(1571)	1-3 25/64	(264)
28	64	28	9-9 5/32	(1621)	1-3 25/64	(264)
28	72	28	10-5 5/32	(1672)	1-3 25/64	(264)
30	30	30	7-2 5/8	(1723)	1-4 25/64	(264)
30	32	30	7-4 5/8	(1825)	1-4 25/64	(264)
30	36	30	7-8 5/8	(1926)	1-4 25/64	(264)
30	40	30	8-0 5/8	(2129)	1-4 25/64	(264)
30	48	30	8-8 5/8	(2333)	1-4 25/64	(264)
30	56	30	9-4 5/8	(2434)	1-4 25/64	(264)
30	60	30	9-8 5/8	(2536)	1-4 25/64	(264)
30	64	30	10-0 5/8	(2739)	1-4 25/64	(264)
30	72	30	10-8 5/8	(1506)	1-4 25/64	(289)
32	32	32	7-8 5/64	(1608)	1-5 25/64	(289)
32	36	32	8-0 5/64	(1659)	1-5 25/64	(289)
32	40	32	8-4 5/64	(1709)	1-5 25/64	(289)
32	48	32	9-0 5/64	(1760)	1-5 25/64	(289)
32	56	32	9-8 5/64	(1811)	1-5 25/64	(289)
32	60	32	10-0 5/64	(1913)	1-5 25/64	(289)
32	64	32	10-4 5/64	(2014)	1-5 25/64	(289)
32	72	32	11-0 5/64	(2217)	1-5 25/64	(289)
36	36	36	8-7 1/64	(2421)	1-7 25/64	(289)
36	40	36	8-11 1/64	(2522)	1-7 25/64	(289)
36	48	36	9-7 1/64	(2624)	1-7 25/64	(289)
36	56	36	10-3 1/64	(2827)	1-7 25/64	(289)
36	60	36	10-7 1/64	(1784)	1-7 25/64	(340)
36	64	36	10-11 1/64	(1835)	1-7 25/64	(340)
36	72	36	11-7 1/64	(1885)	1-7 25/64	(340)

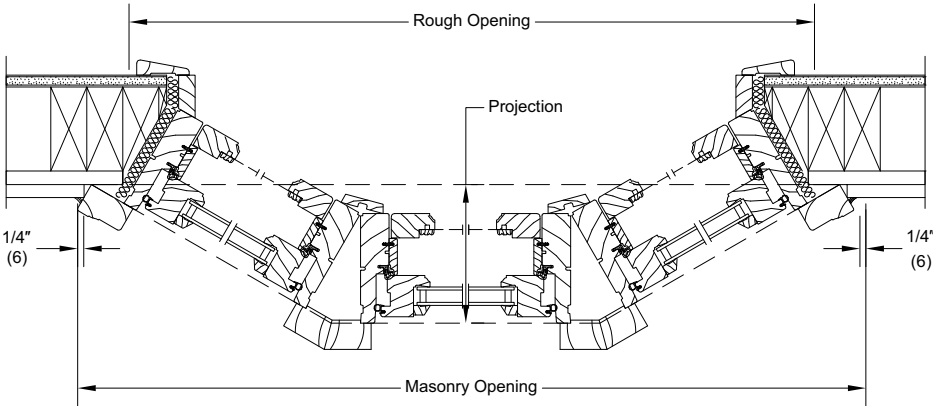
**Construction Details / Rough Opening and Projection Calculations: 30° Bay**

**30-Degree Bay - Ultimate Wood Casement**



**Optional retro fit bay square jamb return for UWCA Bay.**

**30-Degree Bay - Ultimate Wood Casement Push Out**



Ultimate Wood Casement Bay Ultimate Wood Casement Push Out Bay	
30-Degree	
Projection	OM width of flanker unit PLUS 2.785 x 0.5
Rough Opening Width	(Projection x 1.732-1.304) x 2 PLUS 2.445 PLUS OM width of Center Unit
Masonry Opening Unit	Add 4 5/16" (110) to Rough Opening width
Rough Opening Height (with Head and Seat boards)	OM height on center unit(s) PLUS 1 3/16" (30)
Masonry Opening Height (with Head and Seat boards)	Rough Opening height ADD 11/16" (17)

*NOTE: If no head board, Deduct 11/16" (17) from Rough Opening Height.*

*NOTE: If no seat board, Deduct 11/16" (17) from Rough Opening Height.*

*NOTE: Use of Wood casing other than 2" (51) will change the Rough Opening and Projection. Contact your Marvin representative for further information.*

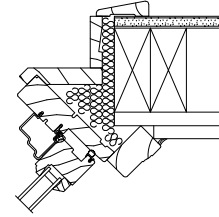
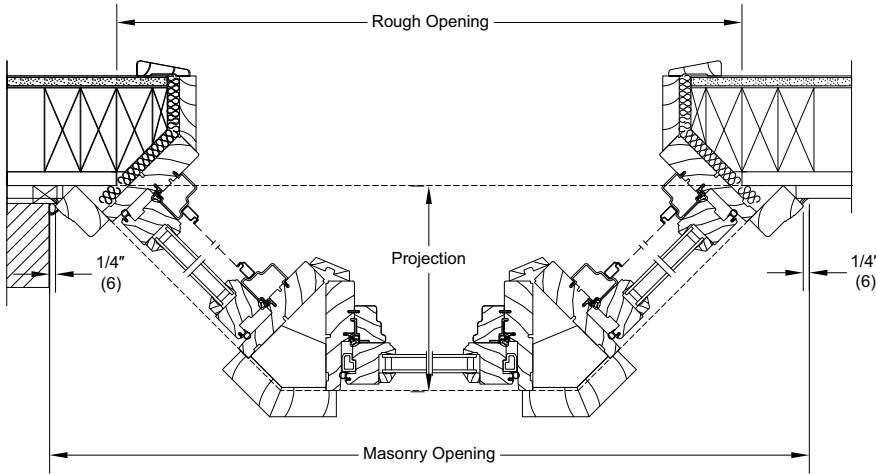
**Standard Width Call Number: UWCABB and UWCAPOBB-45° Bay**

Call Number (Width)			45° Bay			
Side	Center	Side	RO		Projection	
16	16	16	3-7 7/8	(1114)	1-1 3/4	(349)
16	18	16	3-9 7/8	(1165)	1-1 3/4	(349)
16	20	16	3-11 7/8	(1216)	1-1 3/4	(349)
16	24	16	4-3 7/8	(1317)	1-1 3/4	(349)
16	26	16	4-5 7/8	(1368)	1-1 3/4	(349)
16	28	16	4-7 7/8	(1419)	1-1 3/4	(349)
16	30	16	4-9 7/8	(1470)	1-1 3/4	(349)
16	32	16	4-11 7/8	(1521)	1-1 3/4	(349)
16	36	16	5-3 7/8	(1622)	1-1 3/4	(349)
16	40	16	5-7 7/8	(1724)	1-1 3/4	(349)
16	48	16	6-3 7/8	(1927)	1-1 3/4	(349)
16	56	16	6-11 7/8	(2130)	1-1 3/4	(349)
16	60	16	7-3 7/8	(2232)	1-1 3/4	(349)
16	64	16	7-7 7/8	(2333)	1-1 3/4	(349)
16	72	16	8-3 7/8	(2537)	1-1 3/4	(349)
18	18	18	4-0 45/64	(1237)	1-3 11/64	(385)
18	20	18	4-2 45/64	(1288)	1-3 11/64	(385)
18	24	18	4-6 45/64	(1389)	1-3 11/64	(385)
18	26	18	4-8 45/64	(1440)	1-3 11/64	(385)
18	28	18	4-10 45/64	(1491)	1-3 11/64	(385)
18	30	18	5-0 45/64	(1542)	1-3 11/64	(385)
18	32	18	5-2 45/64	(1593)	1-3 11/64	(385)
18	36	18	5-6 45/64	(1694)	1-3 11/64	(385)
18	40	18	5-10 45/64	(1796)	1-3 11/64	(385)
18	48	18	6-6 45/64	(1999)	1-3 11/64	(385)
18	56	18	7-2 45/64	(2202)	1-3 11/64	(385)
18	60	18	7-6 45/64	(2304)	1-3 11/64	(385)
18	64	18	7-10 45/64	(2405)	1-3 11/64	(385)
18	72	18	8-6 45/64	(2609)	1-3 11/64	(385)
20	20	20	4-5 17/32	(1360)	1-4 37/64	(421)
20	24	20	4-9 17/32	(1461)	1-4 37/64	(421)
20	26	20	4-11 17/32	(1512)	1-4 37/64	(421)
20	28	20	5-1 17/32	(1563)	1-4 37/64	(421)
20	30	20	5-3 17/32	(1614)	1-4 37/64	(421)
20	32	20	5-5 17/32	(1664)	1-4 37/64	(421)
20	36	20	5-9 17/32	(1766)	1-4 37/64	(421)
20	40	20	6-1 17/32	(1868)	1-4 37/64	(421)
20	48	20	6-9 17/32	(2071)	1-4 37/64	(421)
20	56	20	7-5 17/32	(2274)	1-4 37/64	(421)
20	60	20	7-9 17/32	(2376)	1-4 37/64	(421)
20	64	20	8-1 17/32	(2477)	1-4 37/64	(421)
20	72	20	8-9 17/32	(2680)	1-4 37/64	(421)
24	24	24	5-3 3/16	(1605)	1-7 13/32	(493)
24	26	24	5-5 3/16	(1656)	1-7 13/32	(493)
24	28	24	5-7 3/16	(1706)	1-7 13/32	(493)
24	30	24	5-9 3/16	(1757)	1-7 13/32	(493)
24	32	24	5-11 3/16	(1808)	1-7 13/32	(493)
24	36	24	6-3 3/16	(1910)	1-7 13/32	(493)
24	40	24	6-7 3/16	(2011)	1-7 13/32	(493)
24	48	24	7-3 3/16	(2214)	1-7 13/32	(493)
24	56	24	7-11 3/16	(2418)	1-7 13/32	(493)
24	60	24	8-3 3/16	(2519)	1-7 13/32	(493)
24	64	24	8-7 3/16	(2621)	1-7 13/32	(493)
24	72	24	9-3 3/16	(2824)	1-7 13/32	(493)

Call Number (Width)			45° Bay			
Side	Center	Side	RO		Projection	
26	26	26	2-2	(1728)	1-8 53/64	(529)
26	28	26	2-2	(1778)	1-8 53/64	(529)
26	30	26	2-2	(1829)	1-8 53/64	(529)
26	32	26	2-2	(1880)	1-8 53/64	(529)
26	36	26	2-2	(1982)	1-8 53/64	(529)
26	40	26	2-2	(2083)	1-8 53/64	(529)
26	48	26	2-2	(2286)	1-8 53/64	(529)
26	56	26	2-2	(2490)	1-8 53/64	(529)
26	60	26	2-2	(2591)	1-8 53/64	(529)
26	64	26	2-2	(2693)	1-8 53/64	(529)
26	72	26	2-2	(2896)	1-8 53/64	(529)
28	28	28	2-4	(1850)	1-10 15/64	(565)
28	30	28	2-4	(1901)	1-10 15/64	(565)
28	32	28	2-4	(1952)	1-10 15/64	(565)
28	36	28	2-4	(2053)	1-10 15/64	(565)
28	40	28	2-4	(2155)	1-10 15/64	(565)
28	48	28	2-4	(2358)	1-10 15/64	(565)
28	56	28	2-4	(2561)	1-10 15/64	(565)
28	60	28	2-4	(2663)	1-10 15/64	(565)
28	64	28	2-4	(2765)	1-10 15/64	(565)
28	72	28	2-4	(2968)	1-10 15/64	(565)
30	30	30	2-6	(1973)	1-11 21/32	(601)
30	32	30	2-6	(2024)	1-11 21/32	(601)
30	36	30	2-6	(2125)	1-11 21/32	(601)
30	40	30	2-6	(2227)	1-11 21/32	(601)
30	48	30	2-6	(2430)	1-11 21/32	(601)
30	56	30	2-6	(2633)	1-11 21/32	(601)
30	60	30	2-6	(2735)	1-11 21/32	(601)
30	64	30	2-6	(2836)	1-11 21/32	(601)
30	72	30	2-6	(3040)	1-11 21/32	(601)
32	32	32	2-8	(2095)	2-1 1/16	(637)
32	36	32	2-8	(2197)	2-1 1/16	(637)
32	40	32	2-8	(2299)	2-1 1/16	(637)
32	48	32	2-8	(2502)	2-1 1/16	(637)
32	56	32	2-8	(2705)	2-1 1/16	(637)
32	60	32	2-8	(2807)	2-1 1/16	(637)
32	64	32	2-8	(2908)	2-1 1/16	(637)
32	72	32	2-8	(3111)	2-1 1/16	(637)
36	36	36	3-0	(2341)	2-3 57/64	(709)
36	40	36	3-0	(2442)	2-3 57/64	(709)
36	48	36	3-0	(2646)	2-3 57/64	(709)
36	56	36	3-0	(2849)	2-3 57/64	(709)
36	60	36	3-0	(2950)	2-3 57/64	(709)
36	64	36	3-0	(3052)	2-3 57/64	(709)
36	72	36	3-0	(3255)	2-3 57/64	(709)

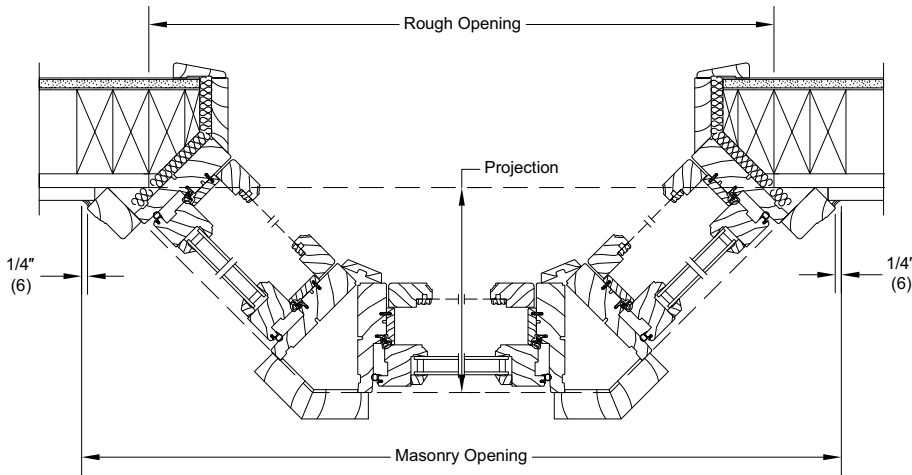
**Construction Details / Rough Opening and Projection Calculations: 45° Bay**

**45-Degree Bay - Ultimate Wood Casement**



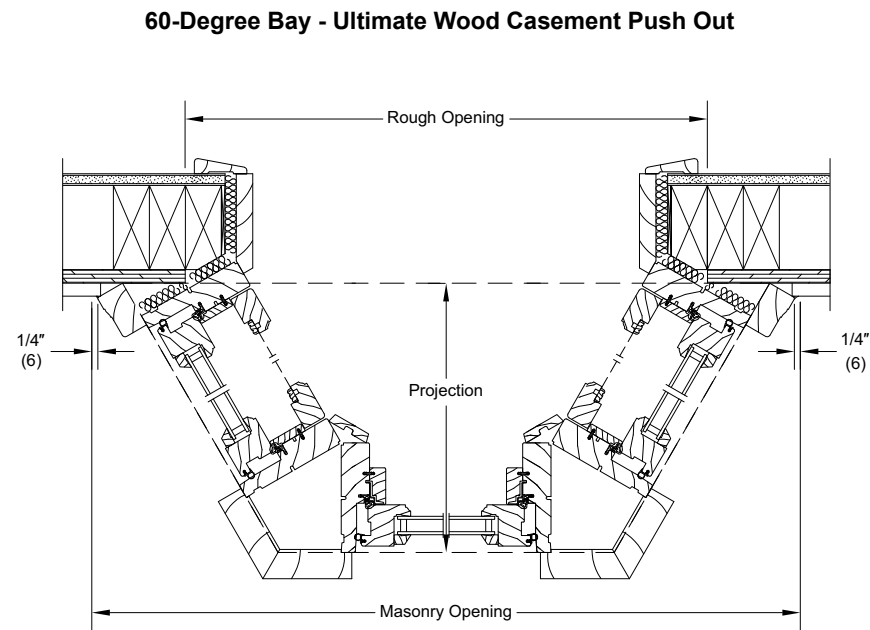
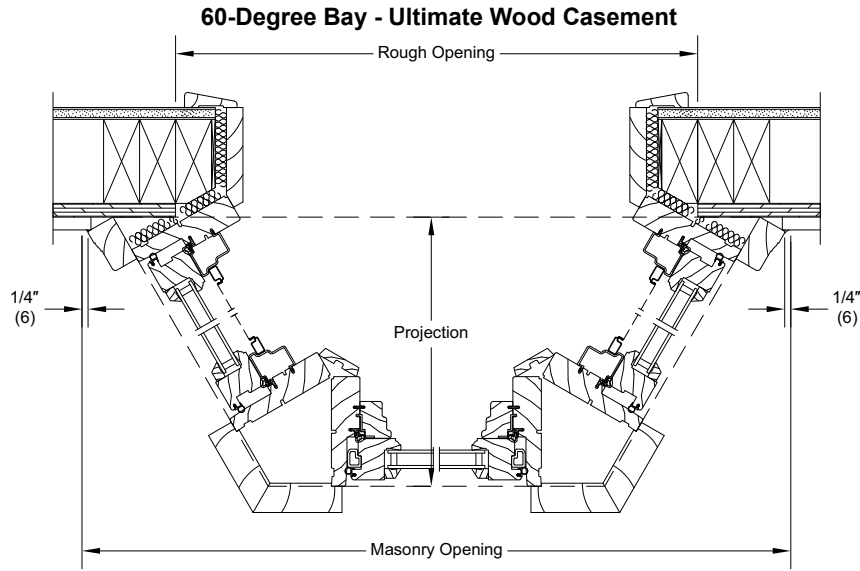
**Optional retro fit bay square jamb return for UWCA Bay.**

**45-Degree Bay - Ultimate Wood Casement Push Out**



<b>Ultimate Wood Casement Bay Ultimate Wood Casement Push Out Bay</b>	
<b>45-Degree</b>	
Projection	OM <b>width</b> of flanker unit PLUS 3.452 x 0.707
Rough Opening Width	(Projection minus 1.710) x 2 Plus 3.780 Plus OM <b>width</b> of Center Unit
Masonry Opening Width	Add 5 5/8" (143) to Rough Opening <b>width</b>
Rough Opening Height (with Head and Seat Boards)	OM height on center unit(s) Plus 1 3/16" (30)
Masonry Opening Height (with Head and Seat Boards)	Rough Opening height add 11/16" (17)

**Construction Details / Rough Opening and Projection Calculations: 60° Bay**

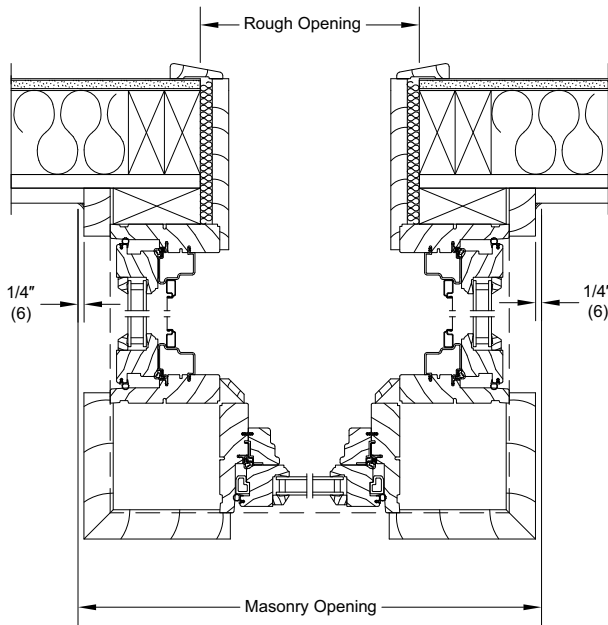


<b>Ultimate Wood Casement Bay Ultimate Wood Push Out Bay</b>	
<b>60-Degree</b>	
Projection	OM <b>width</b> of flanker unit PLUS 4.197 x 0.866
Rough Opening Width	OM <b>width</b> of Center Unit(s) PLUS 1 5/8" (41)
Masonry Opening Unit	Add 7 29/32" (201) to Rough Opening <b>width</b>
Rough Opening Height (with Head and Seat boards)	OM height on center unit(s) PLUS 1 3/16" (30)
Masonry Opening Height (with Head and Seat boards)	Rough Opening height ADD 11/16" (17)

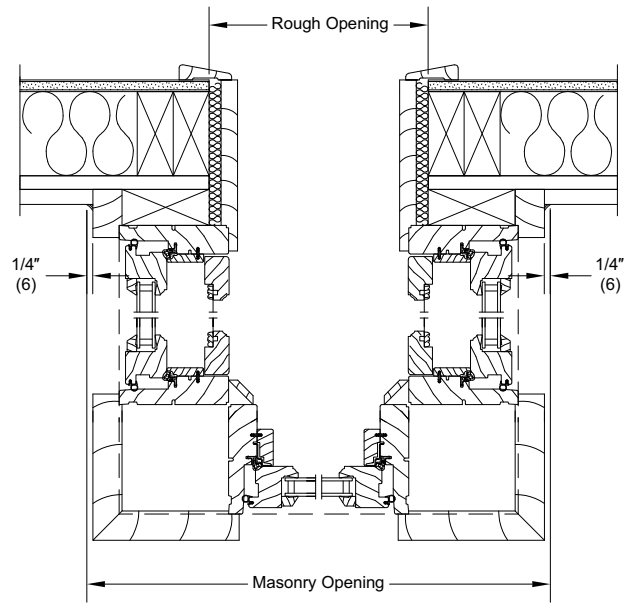
*NOTE: Use of Wood casing other than 2" (51) will change the Rough Opening and Projection. Contact your Marvin representative for further information.*

**Construction Details / Rough Opening and Projection Calculations: 90° Bay**

**90-Degree Bay - Ultimate Wood Casement**



**90-Degree Bay - Ultimate Wood Casement Push Out**



<b>Ultimate Casement Bay Ultimate Casement Push Out Bay</b>	
<b>90-Degree</b>	
Projection	OM <b>width</b> of flanker unit PLUS 6 1/16" (154)
Rough Opening Width	OM <b>width</b> of Center Unit(s) PLUS 1 5/8" (41)
Masonry Opening Unit	Add 10 7/16" (265) to Rough Opening <b>width</b>
Rough Opening Height (with Head and Seat boards)	OM height on center unit(s) PLUS 1 3/16" (30)
Masonry Opening Height (with Head and Seat boards)	Rough Opening height ADD 11/16" (17)

*NOTE: Use of Wood casing other than 2" (51) will change the Rough Opening and Projection. Contact your Marvin representative for further information.*