

# BIFOLD DOORS

Technical Guide k

# FEATURES & SPECIFICATIONS

### **Standard Features**

Natural Douglas Fir interior [no visible finger joints]

6 9/16" [166 mm] jamb construction

Multi-point locking hardware and easy operating flush bolts

Concealed intermediate guide and sill drainage system

Extruded aluminum cladding in a variety of standard colors, primed wood or clear Fir exterior

Flexible weatherstrip system

### **Hardware**

Multiple hardware type and finish choices are available, see the hardware in section A for more information. Multi-point locking hardware and manual flush bolts are standard. Optional keyed alike locks, concealed locking shoot bolts and low profile handles are available.

### Glazing

LowE Double, LowE Triple, and Tranquility®. Double or triple glass configurations with 1/2" (13 mm) airspace. With countless glazing configurations and LowE coating options, we ensure that you can choose the perfect blend of protection and comfort. 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.

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) – 5/8" (16mm), 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 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). Metal clad units are supplied ready-to-install complete with integral metal nailing flange.

# FEATURES & SPECIFICATIONS

### Wood

In addition to our standard Coastal Douglas Fir, the entire Loewen product line is also available in optional Mahogany. The interior can be natural wood (unfinished), primed, or prefinished in Jet Black or Oxford White paint. Additional wood species, as well as the Jet Black and Oxford White prefinishes, are available through our Custom Shop. All door panels are constructed with a laminated engineered core of Douglas Fir. Alternate species are a thick skin applied over the engineered Douglas Fir core. All wood parts are dipped in approved preservative.

### **Performance Standards**

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

### Frame & Panel

Manufactured with Coastal Douglas Fir. Bronze anodized aluminum door sill with bronze vinyl extrusion thermal break.

All exterior wood components are factory primed unless specified as clear exterior. Minor scratches or abrasions are not considered defects.



Douglas Fir Bifold Door [3L1R interior view]

### Sill Track

Extruded metal sill with stainless steel cap over operating track for ease of operation and long-lasting performance. A dual sill block system with double drainage holes keep water out of the interior trough.

### Weatherstrip

Bottom corners of the door are weatherstripped with a pile dust plug attached to the side jambs.

Operating panels will be sealed with a wrapped foam weatherstrip at the head, side jambs and between panels to provide a tight seal.

Variables	Bifold
Hardware Styles	
Multi-point Handle	•
Verona Handle	•
Meran Handle	•
Shropshire Handle	•
Churchill Handle	•

Variables	Bifold		
Rodos Handle	•		
Dallas Handle	•		
Locking Hardware			
Flush Bolts	•		
Twin Point Lock	0		

### Standard • Optional O

Hinges & Flush Bolts	Bifold			
Finish Options				
Bronze	0			
Brushed Aluminum	0			
Bright Brass	•			
Variables				
Function				
Use for Egress	•			
Multi-point Hardware	•			

Bifold								
Performance								
•								
0								
0								
•								

### Standard • Optional O

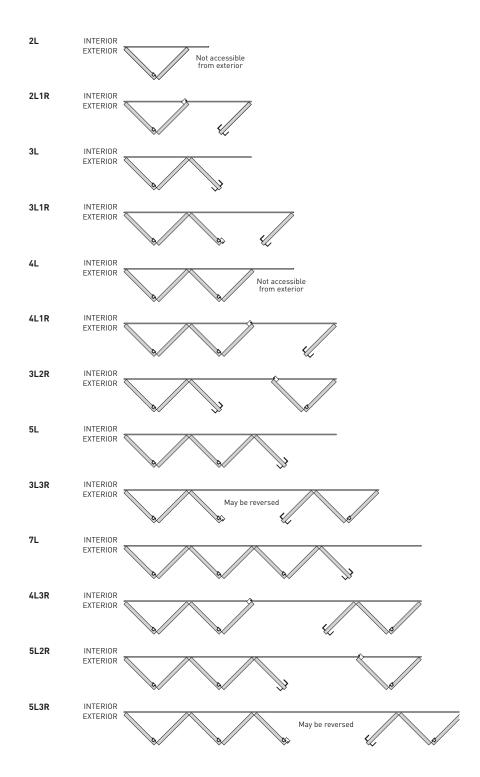
Visit the Loewen Photo Gallery online at www.loewen.com for a large collection of Loewen product and elevation photography.

 ${\tt Numerous\ custom\ window\ configuration\ opportunities\ exist}-{\tt please\ contact\ your\ Authorized\ Loewen\ Dealer}.$ 

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

### Bifold Door Detail

### Typical Bifold Configurations



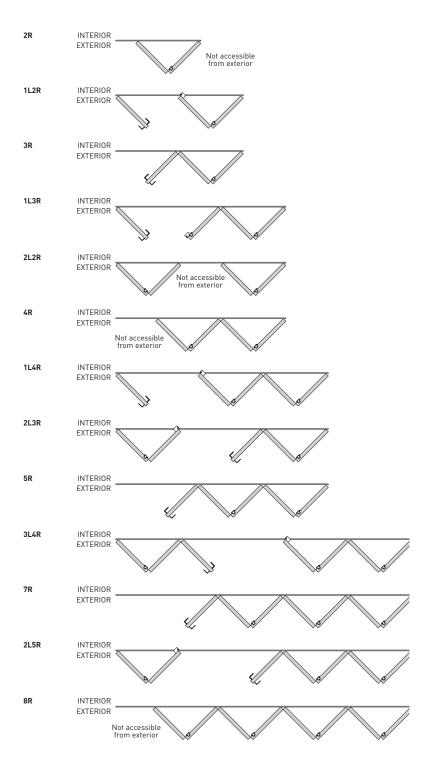
Note: • The preparation of the rough opening for large openings such as those required by, but not limited to, LiftSlide, Bifold and MultiSlide doors have unique requirements. Structural headers that allow for deflection no greater than 1/8" along the unsupported length once the header is fully loaded are required. Special care needs to be taken when installing any unit including transoms above such large opening units.

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### Bifold Door Sizing Charts

### – Width –

Sizing C									
R.O.				34 11/16" [881]	46 1/2" [1181]	60 3/16" [1529]	66 3/4" [1695]	72" [1829]	79 7/8" [2029]
		2 Panel Fran	ne	33 15/16" [862]	45 3/4" [1162]	59 7/16" [1510]	66" [ 1676]	71 1/4" [1810]	79 1/8" [2010]
R.O.				50 11/16" [1287]	68 3/8" [1737]	88 15/16" [2259]	98 3/4" [2508]	106 5/8" [2709]	118 7/16" [3009]
	(	3 Panel Fran	ne	49 15/16" [1268]	67 5/8" [1718]	88 3/16" [2240]	98" [2489]	105 7/8" [2690]	117 11/16" [2990]
R.O.				66 5/8" [1693]	90 1/4" [2293]	117 11/16" [2989]	130 3/4" [3321]	141 5/16" [3589]	157 1/16" [3989]
	4	4 Panel Fran	пе	65 7/8" [1674]	89 1/2" [2274]	116 15/16" [2970]	130" [3302]	140 9/16" [3570]	156 5/16" [3970]
R.O.				82 5/8" [2099]	112 3/16" [2849]	146 7/16" [3719]	162 3/4" [4134]	175 15/16" [4469]	195 5/8" [4969]
	Į	5 Panel Fran	пе	81 7/8" [2080]	111 7/16" [2830]	145 11/16" [3700]	162" [4115]	175 3/16" [4450]	194 7/8" [4950]
R.O.				98 5/8" [2505]	134 1/16" [3405]	175 3/16" [4449]	194 3/4" [4947]	210 9/16" [5349]	234 3/16" [5949]
	(	6 Panel Fran	пе	97 7/8" [2486]	133 5/16" [3386]	174 7/16" [4430]	194" [4928]	209 13/16" [5330]	233 7/16" [5930]
R.O.				114 5/8" [2911]	155 15/16" [3961]	203 7/8" [5179]	226 3/4" [5760]	245 1/4" [6229]	272 13/16" [6929 ]
	-	7 Panel Fran	ne	113 7/8" [2892]	155 3/16" [3942]	203 1/8" [5160]	226" [5741]	244 1/28" [6210]	272 1/16" [6910]
R.O.				130 9/16" [3317]	177 13/16" [4517]	232 5/8" [5909]	258 3/4" [6573]	279 7/8" [7109]	311 3/8" [7909]
	3	3 Panel Fran	пе	129 13/16" [3298]	177 1/16" [4498]	231 7/8" [5890]	258" [6554]	279 1/8" [7090]	310 5/8" [7890]
R.O.				146 9/16" [3723]	199 3/4" [5073]	261 3/8" [6639]	290 13/16" [7386]	314 1/2" [7989]	349 15/16" [8889]
	Ç	Panel Fran	ne	145 13/16" [3704]	199" [5054]	260 5/8" [6620]	290 1/16" [7367]	13 3/4" [7970]	349 3/16" [8870]
R.O.				162 9/16" [4129]	221 5/8" [5629]	290 1/8" [7369]	322 13/16" [8199]	349 3/16" [8869]	388 9/16" [9869]
	1	0 Panel Frai	me	161 13/16" [4110]	220 7/8" [5610]	289 3/8" [7350]	322 1/16" [8180]	348 7/16" [8850]	387 13/16" [9850]
R.O.				178 9/16" [4535]	243 1/2" [6185]	318 7/8" [8099]	354 13/16" [9012]	383 13/16" [9749]	427 1/8" [10849]
	1	1 Panel Frai	ne	177 13/16" [4516]	242 3/4" [6166]	318 1/8" [8080]	354 1/16" [8993]	383 1/16" [9730]	426 3/8" [10830]
R.O.				194 1/2" [4941]	265 3/8" [6741]	347 5/8" [8829]	386 13/16" [9825]	418 7/16" [10629]	465 11/16" [11829]
	1	2 Panel Frai	me	193 3/4" [4922]	264 5/8" [6722]	346 7/8" [8810]	386 1/16" [9806]	417 11/16" [10610]	464 15/16" [11810]
R.O.				210 1/2" [5347]	287 5/16" [7297]	376 5/16" [9559]	418 13/16" [10638]	453 1/8" [11509]	504 5/16" [12809]
	1	3 Panel Frai	me	209 3/4" [5328]	286 9/16" [7278]	375 9/16" [9540]	418 1/16" [10619]	452 3/8" [11490]	503 9/16" [12790]
R.O.				226 1/2" [5753]	309 3/16" [7853]	405 1/16" [10289]	450 13/16" [11451]	487 3/4" [12389]	542 7/8" [13789]
14 Panel Frame		225 3/4" [5734]	308 7/16" [7834]	404 5/16" [10270]	450 1/16" [11432]	487" [12370]	542 1/8" [13770]		
R.O.				242 1/2" [6159]	331 1/16" [8409]	433 13/16" [11019]	482 13/16" [12264]	522 3/8" [13269]	581 7/16" [14768]
	1	15 Panel Frame			330 5/16" [8390]	433 1/16" [11000]	482 1/16" [12245]	521 5/8" [13250]	580 11/16" [14750]
	R.O.			258 7/16" [6565]	352 15/16" [8965]	462 9/164" [11749]	514 13/16" [13077]	557 1/16" [14149]	620" [15749]
	16 Panel Frame			257 11/16" [6546]	352 3/16" [8946]	461 13/16" [11730]	514 1/16" [13058]	556 5/16" [14130]	619 1/4" [15730]
				15 13/16" [402]	21 3/4" [552]	28 9/16" [726]	31 7/8" [809]	34 1/2" [876]	38 7/16" [976]
R.O.	Frame	Panel	Visible	7 3/16" [182]	13 1/16" [332]	19 15/16" [506]	23 3/16" [589]	25 13/16" [656]	29 3/4" [756]
81 5/16 [2066]	80 9/16 [2047]	76 1/8 [1933]	63 7/8 [1623]	BiFold	BiFold	BiFold	BiFold	BiFold	BiFold
83 1/8 [2111]	82 3/8 [2092]	77 7/8 [1978]	65 11/16 [1668]	BiFold	BiFold	BiFold	BiFold	BiFold	BiFold
87 13/16 [2230]	87 1/16 [2211]	82 9/16 [2097]	70 3/8 [1787]	BiFold	BiFold	BiFold	BiFold	BiFold	BiFold
96 5/16 [2446]	95 9/16 [2427]	91 1/16 [2313]	78 7/8 [2003]	BiFold	BiFold	BiFold	BiFold	BiFold	BiFold
99 3/16 [2520]	98 7/16 [2501]	94 [2387]	81 3/4 [2077]	BiFold	BiFold	BiFold	BiFold	BiFold	BiFold
100 7/8 [2562]	100 1/8 [2543]	95 5/8 [2429]	83 7/16 [2119]	BiFold	BiFold	BiFold	BiFold	BiFold	BiFold
108 1/8 [2746]	107 3/8 [2727]	102 7/8 [2613]	90 11/16 [2303]	BiFold	BiFold	BiFold	BiFold	BiFold	BiFold

R.O. = Frame Height + 3/4" [19 mm] • Note: Bifold doors using standard TD panels will be 1 1/16" [27 mm] higher than standard TD/FD units. If astragal is used for TwinPointlock add 1" to frame width.

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## 3" Narrow Stile Bifold Door Sizing Charts

### Width -

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n.o.	2	Panel Fram	10				66" [1676]		
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n.u.	2	Panel Fram		50 11/16" [1287]	68 3/8" [1737]	88 15/16" [2259]	98 3/4" [2508] 98" [2489]	106 5/8" [2709]	
D.O.	3	Panei Fran	ie	49 15/16" [1268]	67 5/8" [1718]	88 3/16" [2240]		105 7/8" [2690]	117 11/16" [2990]
R.O.	4	D I F		66 5/8" [1693]	90 1/4" [2293]	117 11/16" [2989]	130 3/4" [3321]	141 5/16" [3589]	157 1/16" [3989]
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	15 Panel Frame			241 3/4" [6140]	330 5/16" [8390]	433 1/16" [11000]	482 1/16" [12245]	521 5/8" [13250]	580 11/16" [14750]
	R.O.			258 7/16" [6565]	352 15/16" [8965]	462 9/164" [11749]	514 13/16" [13077]	557 1/16" [14149]	620" [15749]
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R.O.	Frame	Panel	Visible	9 15/16" [252]	15 13/16" [402]	22 11/16" [576]	25 15/16" [659]	28 9/16" [726]	32 1/2" [826]
81 5/16 [2066]	80 9/16 [2047]	76 1/8 [1933]	68 13/16 [1748]	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile
83 1/8	82 3/8	77 7/8	70 9/16	BiFold	BiFold	BiFold	BiFold	BiFold	BiFold
[2111] 87 13/16	[2092] 87 1/16	[1978] 82 9/16	[1793] 75 1/4	3" Narrow Stile BiFold	3" Narrow Stile BiFold	3" Narrow Stile BiFold	3" Narrow Stile BiFold	3" Narrow Stile BiFold	3" Narrow Stile BiFold
[2230] 96 5/16	[2211] 95 9/16	[2097] 91 1/16	[1912] 83 3/4	3" Narrow Stile BiFold	3" Narrow Stile BiFold	3" Narrow Stile BiFold	3" Narrow Stile BiFold	3" Narrow Stile BiFold	3" Narrow Stile BiFold
[2446]	[2427]	[2313]	[2128]	3" Narrow Stile	3" Narrow Stile	3" Narrow Stile	3" Narrow Stile	3" Narrow Stile	3" Narrow Stile
99 3/16 [2520]	98 7/16 [2501]	94 [2387]	86 11/16 [2202]	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile
100 7/8 [2562]	100 1/8 [2543]	95 5/8 [2429]	88 3/8 [2244]	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile
108 1/8	107 3/8	102 7/8 [2613]	95 9/16 [2428]	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile	BiFold 3" Narrow Stile

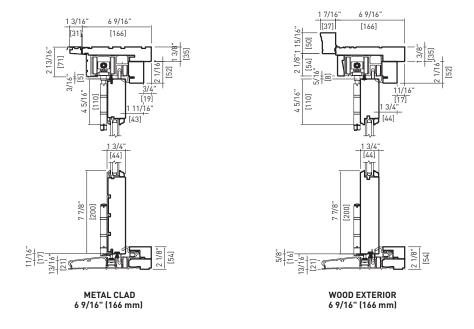
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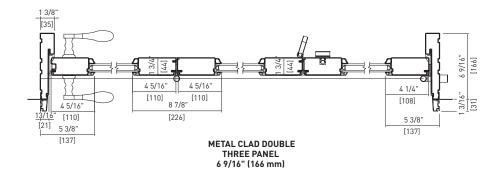
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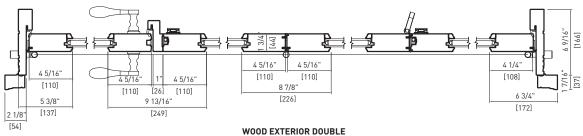
### **Bifold Door Detail STD**

### **Head & Sill Detail**



### **Plan View**





FOUR PANEL WITH TWINPOINT LOCKS 6 9/16" (166 mm)

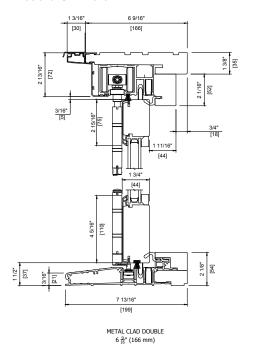
- Other jamb widths available. Note:

  - All dimensions to have +/- 1/16" [2 mm] tolerance.

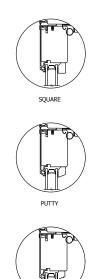
    The preparation of the rough opening for large openings such as those required by, but not limited to, LiftSlide, Bifold and MultiSlide doors have unique requirements. Structural headers that allow for deflection no greater than 1/8" along the unsupported length once the header is fully loaded are required. Special care needs to be taken when installing any unit including transoms above such large opening units.
- Loewen is not responsible for site measurements or the determination of structural and architectural requirements for the installation of large opening products such as but not limited to, LiftSlide, Bifold and MultiSlide doors. Site specifications are the responsibility of building professionals or engineers to determine.

### 3" Narrow Stile Bifold Door Detail

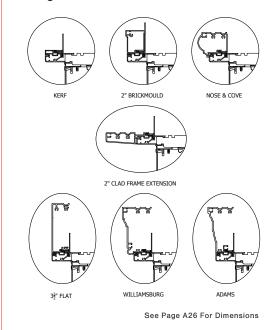
### **Head & Sill Detail**



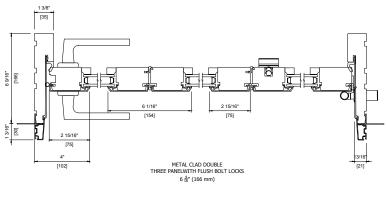
### **Glazing Stop Profiles**

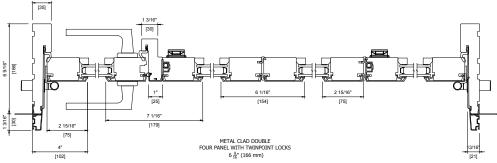


### Casing



### **Plan View**





Other jamb widths available. Note:

- All dimensions to have +/- 1/16" [2 mm] tolerance.

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