

Technical Guide K

Bifold Doors



Product Features

Styles

Traditional, Push Out and Mission® options.

Standard Features

- Natural Douglas Fir interior [no visible finger joints]
- 6 9/16" [166 mm] jamb construction
- 4 mm LowE insulated tempered glazing
- 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.

Glazing

LowE Double, LowE Triple.

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 Contemporary.

Metal Clad Color Spectrum

All Palette colors, including anodized finishes.



Douglas Fir Bifold Door
[3L1R interior view]

LEGEND: ● Standard ○ Optional

	Bifold
HARDWARE STYLES	
Multi-point Handle	●
Verona Handle	●
Meran Handle	●
Shropshire Handle	●
Churchill Handle	●
Athinia Handle	●
Rodos Handle	●
Dallas Handle	●
LOCKING HARDWARE	
Flush Bolts	●
Twin Point Lock	○

	Bifold
HINGES & FLUSH BOLTS – FINISH OPTIONS	
Bronze	○
Brushed Aluminum	○
Bright Brass	●
VARIABLES	
Function:	
Use for Egress	●
Multi-point Hardware	●
Durability:	
Clear Douglas Fir Exterior Finish	○
Clear Mahogany Exterior Finish	○
Primed Exterior Finish	○
Performance:	
LowE Double	●
LowE Triple	○
Appearance:	
SDL	○
Vertical Grain Fir Panel	●

Specifications

Standards

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

Panel & Frame

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.

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 insulating tempered glass configuration 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. Grille bars are permanently applied to the interior and exterior.

Metal Cladding

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

Hardware

Multi-point locking hardware and manual flush bolts are standard. Optional keyed alike locks, concealed locking shoot bolts and low profile handles are available.

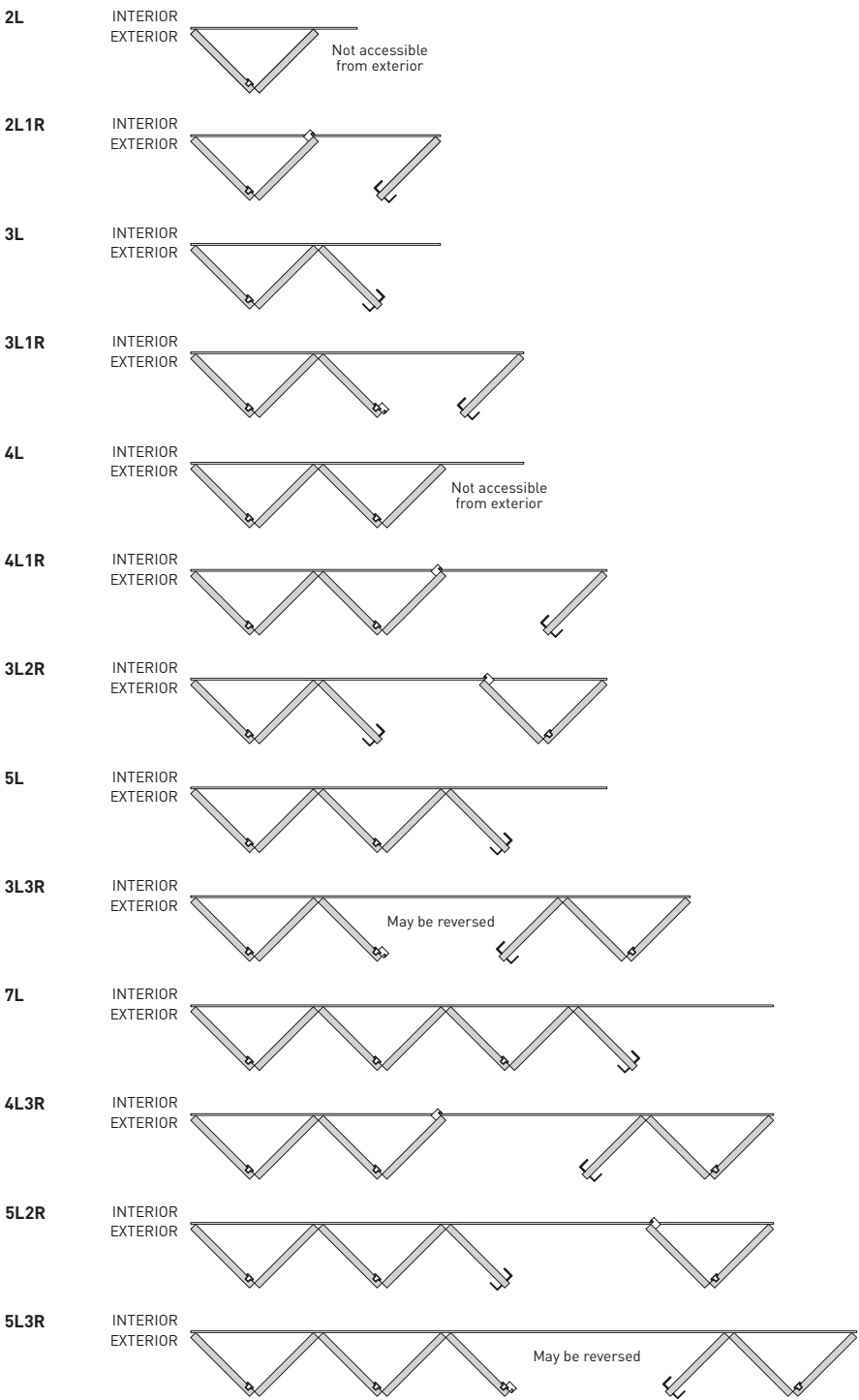
Weatherstrip

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.

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

Bifold Door Detail

Typical Bifold Configurations

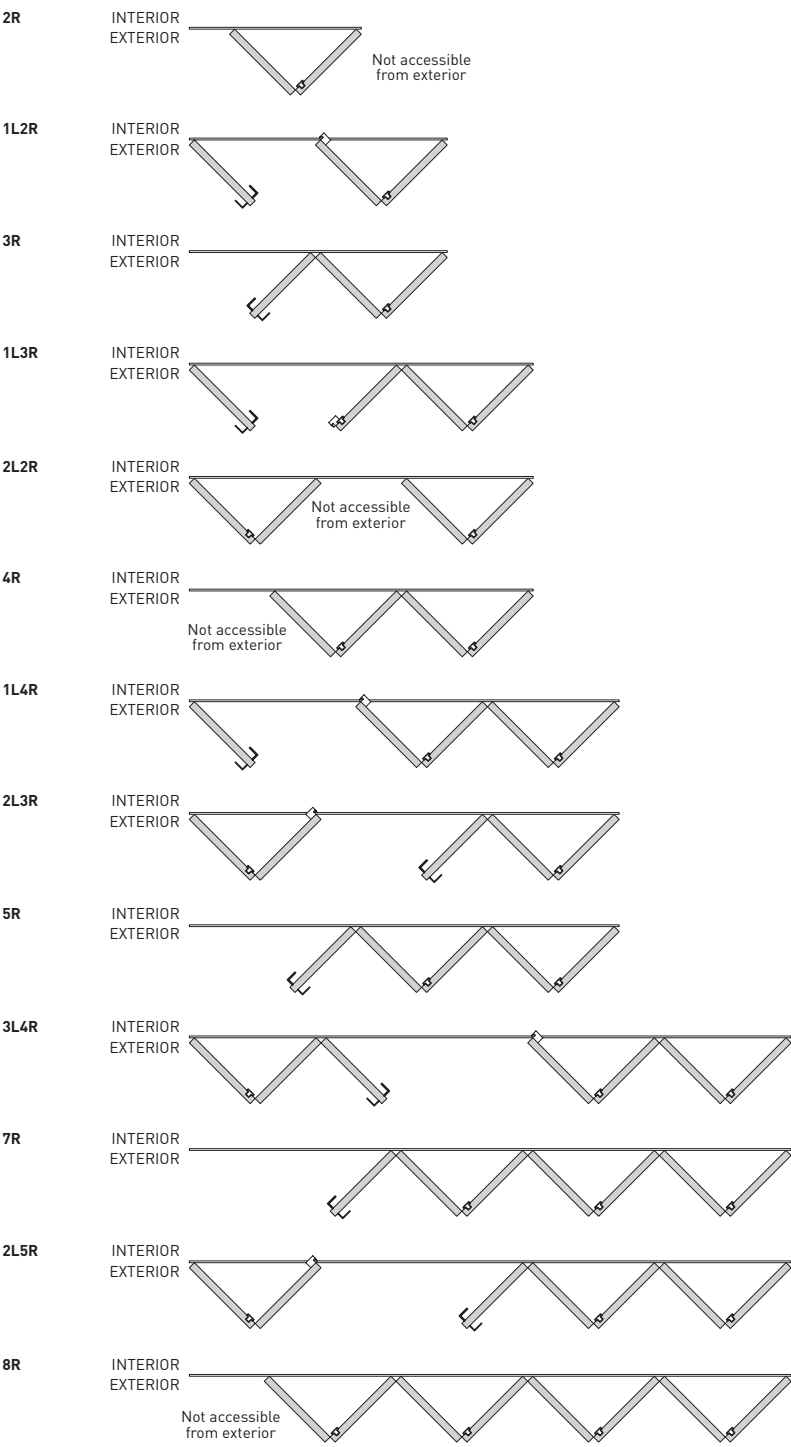


Note:

- 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.
- 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.

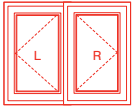
Bifold Door Detail

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.
- 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.



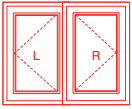
Bifold Door Sizing Charts

Width

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 Frame			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 Frame			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 15/16" [3589]	157 1/16" [3989]
	4 Panel Frame			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]
	5 Panel Frame			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 Frame			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 Frame			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]
	8 Panel Frame			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]
	9 Panel Frame			145 13/16" [3704]	199" [5054]	260 5/8" [6620]	290 1/16" [7367]	313 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]
	10 Panel Frame			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]
	11 Panel Frame			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]
	12 Panel Frame			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]
	13 Panel Frame			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]
	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]
R.O.	Frame	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]
		Panel	Visible	15 13/16" [402]	21 3/4" [552]	28 9/16" [726]	31 7/8" [809]	34 1/2" [876]	38 7/16" [976]
				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.

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.
• 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 Sizing Charts

Width

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 Frame			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 Frame			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 15/16" [3589]	157 1/16" [3989]
	4 Panel Frame			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]
	5 Panel Frame			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 Frame			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 Frame			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]
	8 Panel Frame			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]
	9 Panel Frame			145 13/16" [3704]	199" [5054]	260 5/8" [6620]	290 1/16" [7367]	313 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]
	10 Panel Frame			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]
	11 Panel Frame			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]
	12 Panel Frame			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]
	13 Panel Frame			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]
	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]
R.O.	Frame	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]
		Panel	Visible	15 13/16" [402]	21 3/4" [552]	28 9/16" [726]	31 7/8" [809]	34 1/2" [876]	38 7/16" [976]
				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

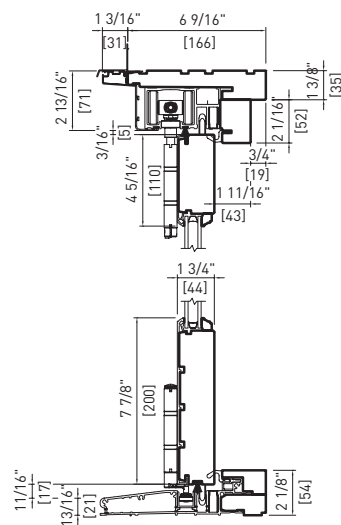
R.O. = Frame Height + 3/4" [19 mm] • Note: Bifold doors using standard TD panels will be 1 1/16" [27 mm] higher than standard TD/FD units. If astragal is used for TwinPointlock add 1" to frame width.

Note:

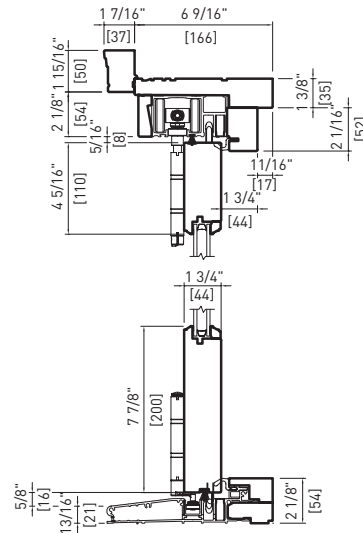
- The preparation of the rough opening for large openings such as those required by, but not limited to, LiftSlide, Bifold and MultiSlide doors have unique requirements. Structural headers that allow for deflection no greater than 1/8" along the unsupported length once the header is fully loaded are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

Bifold Door Detail STD

Head & Sill Detail

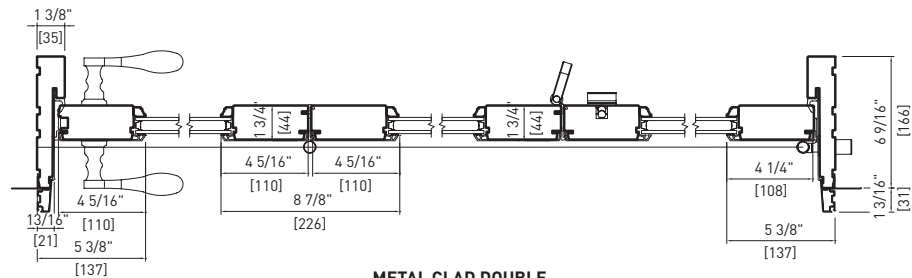


METAL CLAD
6 9/16" (166 mm)

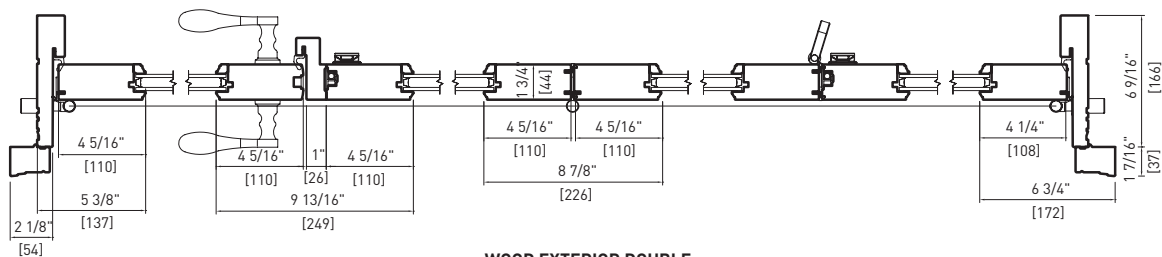


WOOD EXTERIOR
6 9/16" (166 mm)

Plan View



METAL CLAD DOUBLE
THREE PANEL
6 9/16" (166 mm)

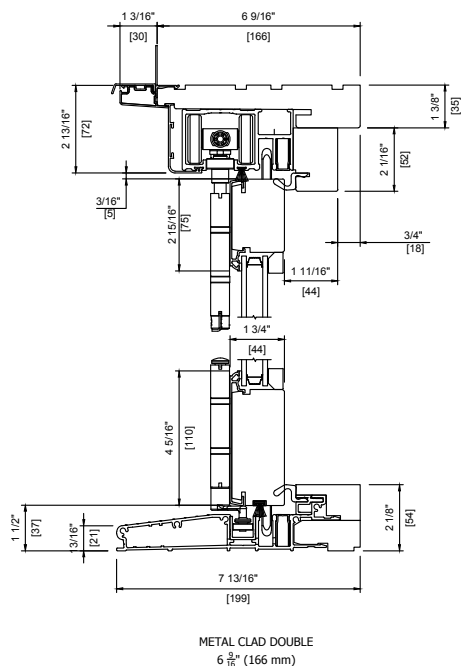


WOOD EXTERIOR DOUBLE
FOUR PANEL WITH TWINPOINT LOCKS
6 9/16" (166 mm)

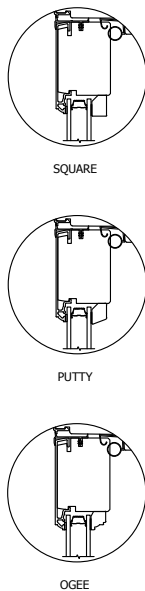
- Note:**
- Other jamb widths available.
 - All dimensions to have +/- 1/16" [2 mm] tolerance.
 - The preparation of the rough opening for large openings such as those required by, but not limited to, LiftSlide, Bifold and MultiSlide doors have unique requirements. Structural headers that allow for deflection 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

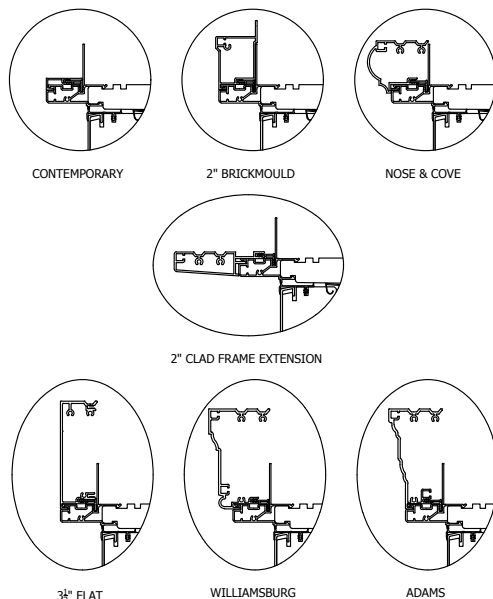
Head & Sill Detail



Glazing Stop Profiles



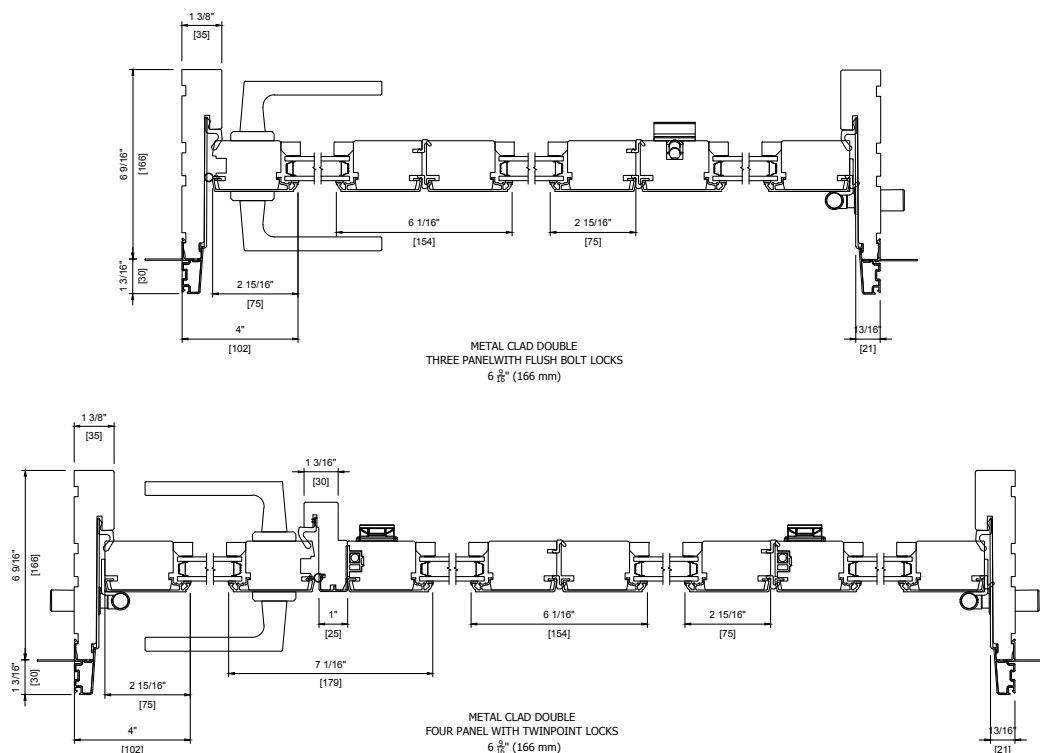
Casing



SEE PAGE A22 FOR DIMENSIONS.

See Page A26 For Dimensions

Plan View



Note:

- Other jamb widths available.
- 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.

