

# **W-4500** Folding Doors

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# **W-4500** Folding Door

### **General Information**



#### **DIMENSIONAL DOORS**

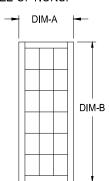
Clad folding patio doors may be specified as "dimensional", by adjusting the desired rough opening width or height in 1/4" increments from standard.

The standard size range includes sizes specifically designed for replacement of older patio door models in existing structures, as well as a full range of "true size" products for architectural consistency.

#### **OPERATION**

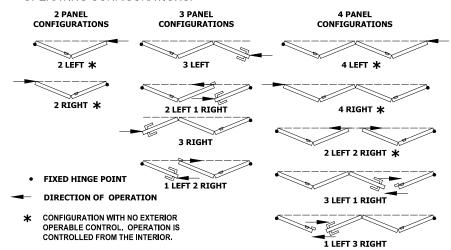
The W4500 Clad Bi-Fold Patio Door is available in eleven 2-panel, 3-panel and 4-panel operating configurations. Each Bi-Fold configuration maximizes the wall opening by folding all panels to one or both side jambs. This Clad Bi-Fold Door System is a beautiful way to create a window wall with and dramatic indoor / outdoor living spaces.



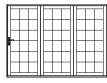


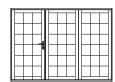
PANEL			
WIDTHS	HEIGHTS		
30 1/8	77		
36 1/8	80		
	93		

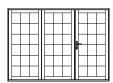
#### **OPERATING CONFIGURATIONS:**

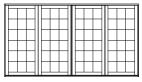


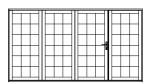


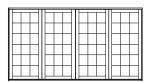










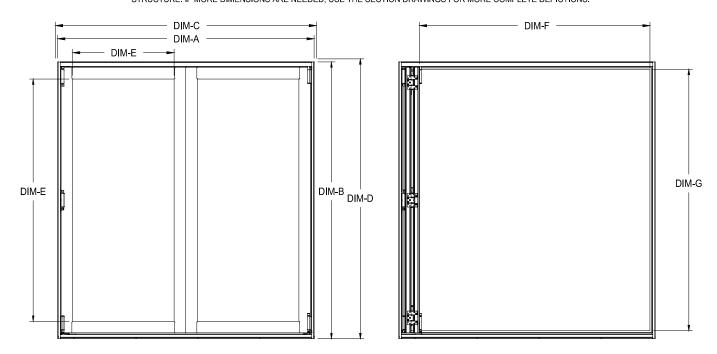




## **W4500** Folding Doors

**Elevation Notes** 

ELEVATION DRAWINGS UTILIZE A LIMITED NUMBER OF PROJECTED LINES TO PRODUCE A RUDIMENTARY DRAWING INTENDED TO BE USED IN A SMALL GRAPHICAL SCALE. ELEVATIONS ARE VIEWED PERPENDICULAR FROM THE EXTERIOR OF THE STRUCTURE. IF MORE DIMENSIONS ARE NEEDED, USE THE SECTION DRAWINGS FOR MORE COMPLETE DEPICTIONS.



Operating Code	Panel Height (in.)	Frame Width (in.)	Frame Height (in.)	Rough Opening Width (in.)	Rough Opening Height (in.)	Total Daylight Opening (sq./ft.)	Clear Opening Width (in.)	Clear Opening Height (in.)
2'-6" Panels		DIM-A	DIM-B	DIM-C	DIM-D	DIM-E	DIM-F	DIM-G
	77	62 1/2	80 3/8	63 1/4	80 7/8	23	54 11/32	75 29/32
2L, 2R (4)	80	62 1/2	83 3/8	63 1/4	83 7/8	23	54 11/32	78 29/32
	93	62 1/2	96 3/8	63 1/4	96 7/8	23	54 11/32	91 29/32
,	77	92 3/4	80 3/8	93 1/2	80 7/8	34	78 17/32	75 29/32
3L, 3R	80	92 3/4	83 3/8	93 1/2	83 7/8	34	78 17/32	78 29/32
	93	92 3/4	96 3/8	93 1/2	96 7/8	34	78 17/32	91 29/32
	77	93 15/16	80 3/8	9411/16	80 7/8	34	81 5/32	75 29/32
2L1R, 2R1L	80	93 15/16	83 3/8	94 11/16	83 7/8	34	81 5/32	78 29/32
	93	93 15/16	96 3/8	94 11/16	96 7/8	34	81 5/32	91 29/32
2L2R (4)	77	123 3/16	80 3/8	123 15/16	80 7/8	46	109 7/8	75 29/32
	80	123 3/16	83 3/8	123 15/16	83 7/8	46	109 7/8	78 29/32
	93	123 3/16	96 3/8	123 15/16	96 7/8	46	109 7/8	91 29/32
	77	123 1/16	80 3/8	123 13/16	80 7/8	46	111 9/16	75 29/32
4L, 4R (4)	80	123 1/16	83 3/8	123 13/16	83 7/8	46	111 9/16	78 29/32
	93	123 1/16	96 3/8	123 13/16	96 7/8	46	111 9/16	91 29/32
	77	124 3/16	80 3/8	124 15/16	80 7/8	46	107 1/16	75 29/32
3L1R, 3R1L	80	124 3/16	83 3/8	124 15/16	83 7/8	46	107 1/16	78 29/32
	93	124 3/16	96 3/8	124 15/16	96 7/8	46	107 1/16	91 29/32

	W4500 BI-FOLD PATIO DOOR SIZING AND CONFIGURATION MATRIX - 3'-0" PANEL WIDTH									
	Operating Code	Panel Height (in.)	Frame Width (in.)	Frame Height (in.)	Rough Opening Width(in.)	Rough Opening Height (in.)	Total Daylight Opening (sq./ft.)	Clear Opening Width (in.)	Clear Opening Height (in.)	
Ш	3'-0" Panels		DIM-A	DIM-B	DIM-C	DIM-D	DIM-E	DIM-F	DIM-G	
	2L, 2R (4)	77	74 1/2	80 3/8	75 1/4	80 7/8	29	69 11/32	75 29/32	
		80	74 1/2	83 3/8	75 1/4	83 7/8	29	69 11/32	78 29/32	
		93	74 1/2	96 3/8	75 1/4	96 7/8	29	69 11/32	9129/32	
		77	110 3/4	80 3/8	111 1/2	80 7/8	43	96 17/32	75 29/32	
	3L, 3R	80	110 3/4	83 3/8	111 1/2	83 7/8	43	96 17/32	78 29/32	
		93	110 3/4	96 3/8	111 1/2	96 7/8	43	96 17/32	9129/32	
		77	11115/16	80 3/8	112 11/16	80 7/8	43	99 5/32	75 29/32	
	2L1R, 2R1L	80	11115/16	83 3/8	112 11/16	83 7/8	43	99 5/32	78 29/32	
		93	11115/16	96 3/8	112 11/16	96 7/8	43	99 5/32	9129/32	
	2L2R (4)	77	147 3/16	80 3/8	147 15/16	80 7/8	58	133 7/8	75 29/32	
		80	147 3/16	83 3/8	147 15/16	83 7/8	58	133 7/8	78 29/32	
		93	147 3/16	96 3/8	147 15/16	96 7/8	58	133 7/8	9129/32	
	4L, 4R (4)	77	147 1/16	80 3/8	147 13/16	80 7/8	58	135 9/16	75 29/32	
		80	147 1/16	83 3/8	147 13/16	83 7/8	58	135 9/16	78 29/32	
		93	147 1/16	96 3/8	147 13/16	96 7/8	58	135 9/16	9129/32	
	3L1R, 3R1L	77	148 3/16	80 3/8	148 15/16	80 7/8	58	131 1/16	75 29/32	
		80	148 3/16	83 3/8	148 15/16	83 7/8	58	131 1/16	78 29/32	
		93	148 3/16	96 3/8	148 15/16	96 7/8	58	131 1/16	9129/32	

### **GENERAL FOLDING DOOR NOTES**

- 1. W-4500 CLAD BI-FOLD PATIO DOORS ARE AVAILABLE AS OPERATING UNITS
- 2. UNIT ELEVATIONS ARE SHOWN WITHOUT EXTERIOR TRIM. UNIT SIZES & MASONRY OPENING DIMENSIONS WILL CHANGE WITH THE ADDITION OF EXTERIOR TRIM. SEE THE 'UNIT SIZING, ROUGH OPENINGS & MASONRY OPENINGS' PAGE FOR EXTERIOR TRIM EFFECTS.
- 3. OPERATING UNITS ARE AVAILABLE AS LEFT OR RIGHT HAND OPERATION. FOUR PANEL, TWO PANEL LEFT, TWO PANEL RIGHT ARE NOT HANDED
- 4. CONFIGURATIONS WITH NO EXTERIOR OPERABLE CONTROL. OPERATION IS



## W-4500 Folding Doors

### EXTERIOR FOLDING DOORS 2-6 Panel

#### 2 DOOR CONFIGURATIONS

EXTERIOR FOLDING
SYSTEM NOTES

Frame 62

SCALE: 1/8"=1'-0"

All elevations are viewed from the exterior.

Hinges, flushbolts & carrier hardware included. Lockets not included, but available at an additional charge.

Frame Height = Panel Height + 3 3/8" Rough Opening Height = Frame Height + 1/2"

Standard Frame Heights:

77" Panel - 80 3/8" 80" Panel - 83 3/8" 93" Panel - 96 3/8"

Rough Opening Width = Frame Width + 3/4"

- \* Indicates a system configuration that does not require a lock. These systems will not be accessible from the exterior when flushbolts are engaged, therefore are not recommended unless an additional exit door is nearby.
- ^ Indicates a system configuration that will require an active lock only. The end panel will be active (manned door).
- \*\*^ Indicates a system configuration that will require an active lock and an optional dummy trim set. In odd-odd configurations, the customer may choose which door will be active (manned door). In odd-even configurations, the leading odd panel will be active (manned door).

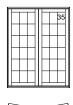
#### ## ELEVATION SYMBOL LEGEND

The number indicates design pressure (DP) rating with standard glazing. Operating units utilize multi-point locking hardware for DP ratings.

## 2L\* Frame Width: 62 1/2"







#### 3 DOOR CONFIGURATIONS

Frame Width: 92 3/4"

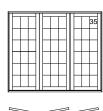


Frame Width:



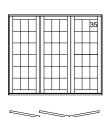
2L1R\*\*^

Frame Width: 93 15/16"



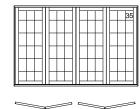
2R1L\*\*^

Frame Width: 93 15/16"



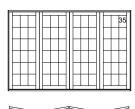
#### 4 DOOR CONFIGURATIONS

2L2R\* Frame Width: 123 3/16"

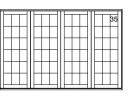


4L\*

Frame Width: 123 1/16"

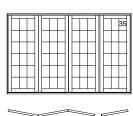


4R\* Frame Width: 123 1/16"

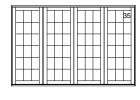


3L1R\*\*^

Frame Width: 124 3/16"



3R1L\*\*^ Frame Width: 124 3/16"





## W-4500

**Folding Doors** 

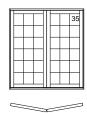
## **EXTERIOR FOLDING DOORS** 3-0 Panel

### 2 DOOR CONFIGURATIONS

Frame Width: 74 1/2"



Frame Width: 74 1/2"



## **EXTERIOR FOLDING** SYSTEM NOTES

Hinges, flushbolts & carrier hardware included. Lockets not included, but available at an additional charge.

Frame Height = Panel Height + 3 3/8" Rough Opening Height = Frame Height + 1/2"

Standard Frame Heights:

77" Panel - 80 3/8" 80" Panel - 83 3/8" 93" Panel - 96 3/8"

Rough Opening Width = Frame Width + 3/4"

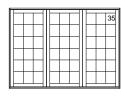
- \* Indicates a system configuration that does not require a lock. These systems will not be accessible from the exterior when flushbolts are engaged, therefore are not recommended unless an additional exit door is nearby.
- ^ Indicates a system configuration that will require an active lock only. The end panel will be active (manned door).
- $^{**\mbox{\tiny $\Lambda$}}$  Indicates a system configuration that will require an active lock and an optional dummy trim set. In odd-odd configurations, the customer may choose which door will be active (manned door). In odd-even configurations, the leading odd panel will be active (manned door).

#### # ELEVATION SYMBOL LEGEND

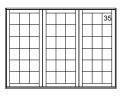
The number indicates design pressure (DP) rating with standard glazing. Operating units utilize multi-point locking hardware for DP ratings.

### **3 DOOR CONFIGURATIONS**



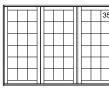




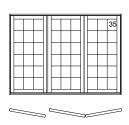






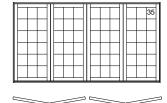


2R1L\*\*^ Frame Width: 111 15/16"

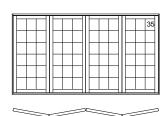


#### **4 DOOR CONFIGURATIONS**

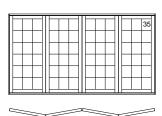
2L2R\* Frame Width: 147 3/16"



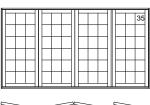




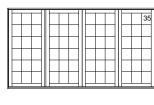
4R\* Frame Width: 147 1/16"







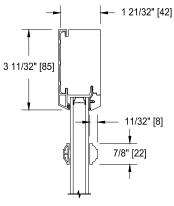
3R1L\*\*^ Frame Width: 148 3/16"



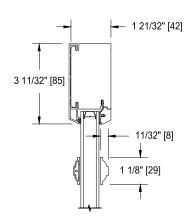


## INTERIOR GLAZING OPTIONS

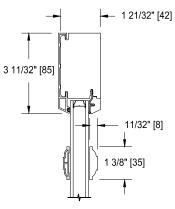
## **INSULATED 3/4" [19] GLASS**



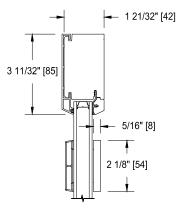
7/8" GRILLE BAR



1 1/8" GRILLE BAR



1 3/8" GRILLE BAR



2 1/8" GRILLE BAR



5/8" GRILLE



23/32" GRILLE



1" GRILLE



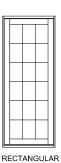
## W-4500 Folding Doors

### LITE CUT INFORMATION

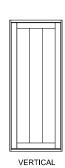
W-4500 Clad Bi-Fold Patio Doors are available with removable grilles in 7/8", 1-1/8" and 1-3/8" widths, with grilles between the glass (GBG), or with Simulated Divided Lites. Standard lite cuts are rectangular, and conform to the layouts noted in the charts on the next page. To use the chart, refer to the appropriate table by the type of patio door and type of bars or grilles the section drawings illustrate. Then simply cross reference the frame height and width to determine the standard lite cut.

#### LITE CUT OPTIONS

Special lite cut patterns can include a wide variety of straight line and radius patterns. The illustrations shown here represent just a few of the possibilities. Rectangular, horizontal, vertical and Prairie lite patterns are available in all standard size clad gliding patio doors. Uneven, diamond, radius and Gothic lite cuts are available, subject to approval. Approvals are based on the ability to fulfill the design requirement while maintaining the construction integrity of the finished product.

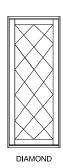


HORIZONTAL



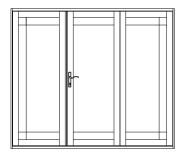


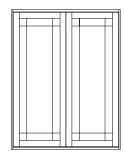


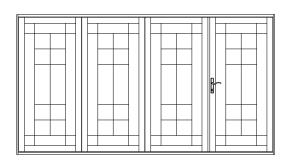


#### **BAR ALIGNMENT**

Alignment of divided lite muntin bars from one product to the next is often required by fine architectural design. Wood grilles, GBG's, and Simulated Divided Lites may be specified with muntin bars aligned.

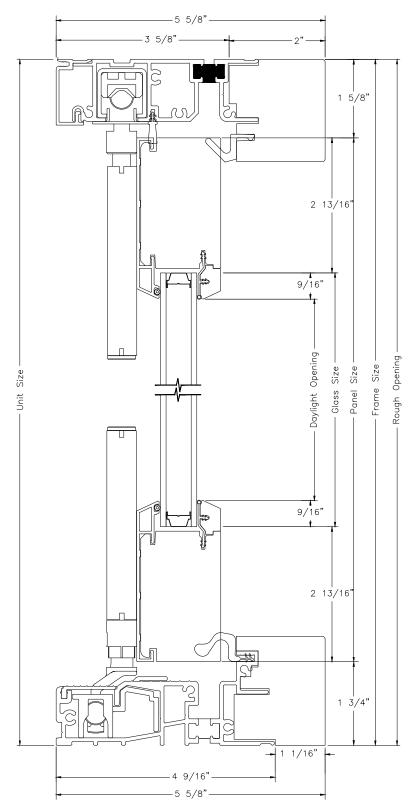








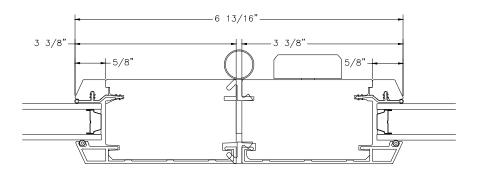
## **FOLDING PATIO DOOR**



Vertical Section



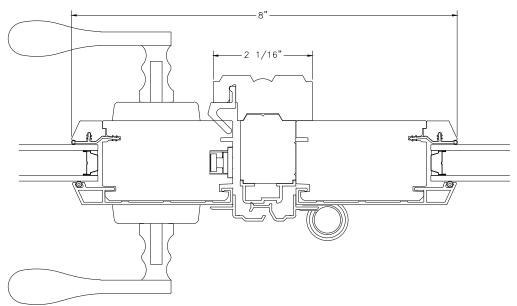
## **PANEL TO PANEL**



**Horizontal Section** 



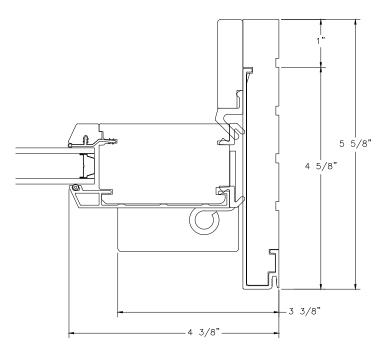
**ASTRAGAL** 



**Horizontal Section** 



**SIDE JAMB** 



**Horizontal Section**