



TECHNICAL GUIDE

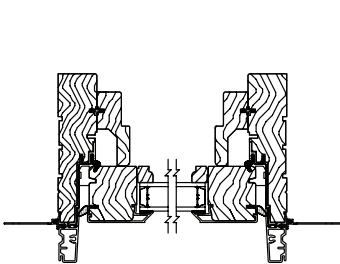
LINCOLN WOOD PRODUCTS, INC.

09/2024

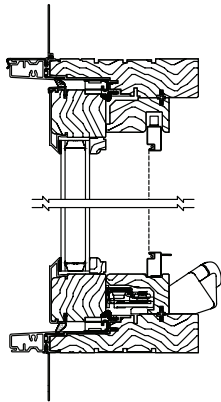
This data accurate as of 09/2024. Reference www.lincolnwindows.com for most current information.

Casement

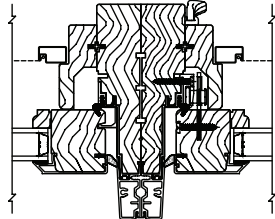
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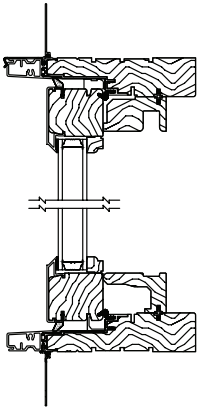
Clad Horizontal Section



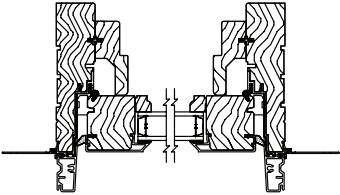
Clad Vertical Section



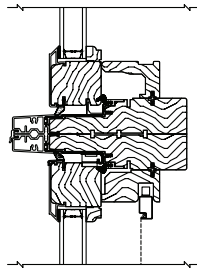
Clad Vertical Mull Horizontal Section



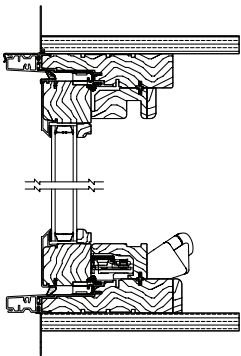
Clad Studio Vertical Section



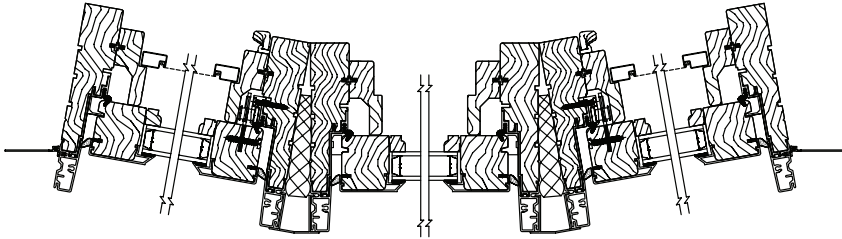
Clad Studio Horizontal Section



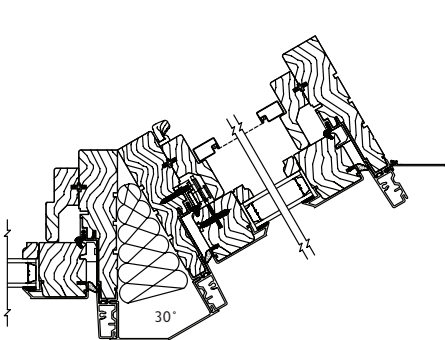
Clad Horizontal Mull Vertical Section



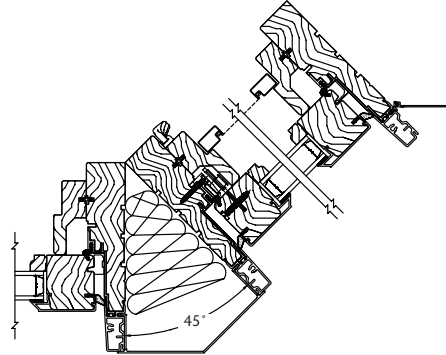
Clad Bow & Bay Vertical Section



Clad Bow Horizontal Section



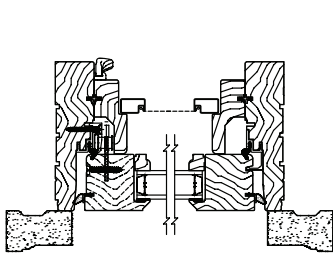
Clad 30° Bay Mull Horizontal Section



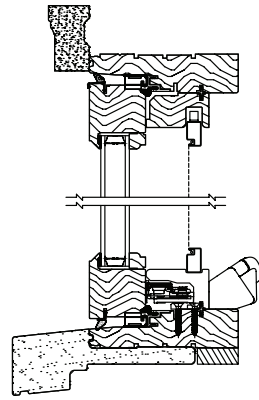
Clad 45° Bay Mull Horizontal Section

Casement

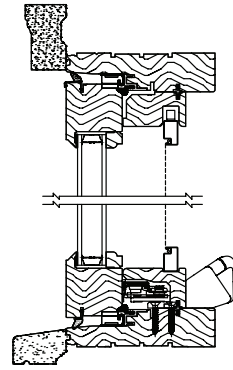
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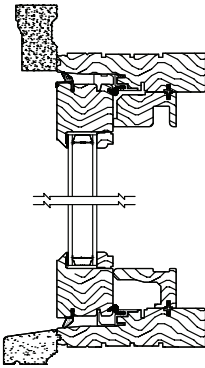
Primed Horizontal Section



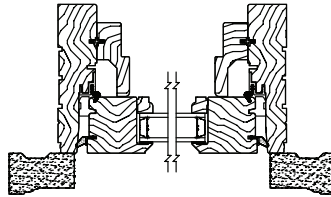
Primed with 2" Sill Nosing Vertical Section



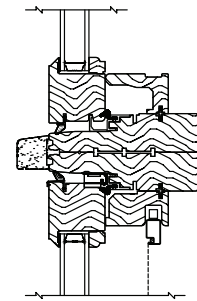
Primed Vertical Section



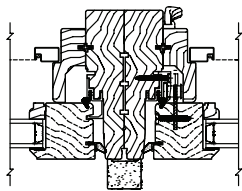
Primed Studio Vertical Section



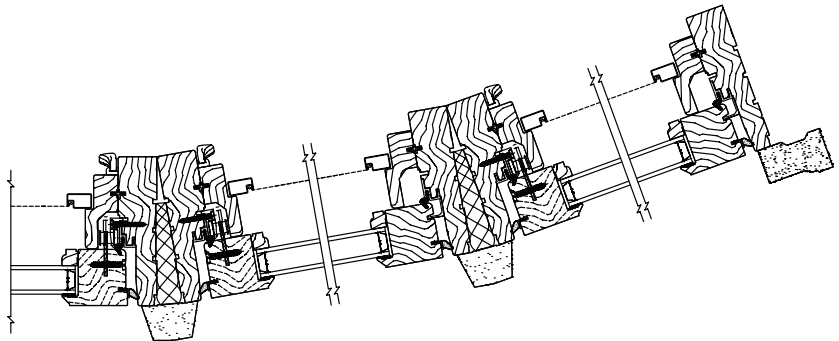
Primed Studio Horizontal Section



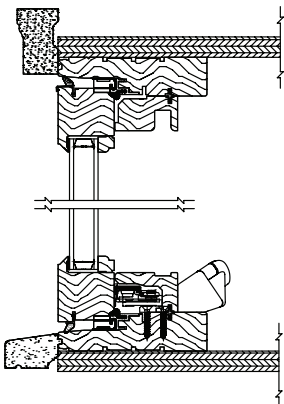
Primed Horizontal Mull Vertical Section



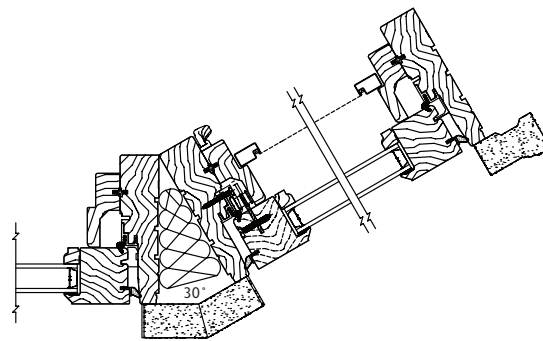
Primed Vertical Mull Horizontal Section



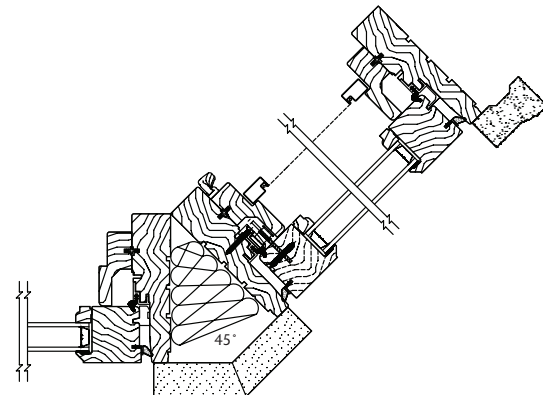
Primed Bow Mull Horizontal Section



Primed Bow & Bay Vertical Section



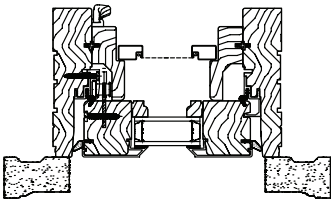
Primed 30° Bay Mull Horizontal Section



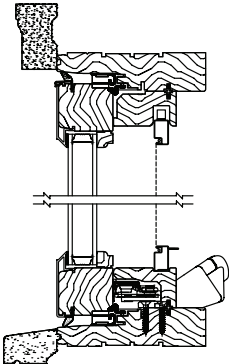
Primed 45° Bay Mull Horizontal Section

Casement

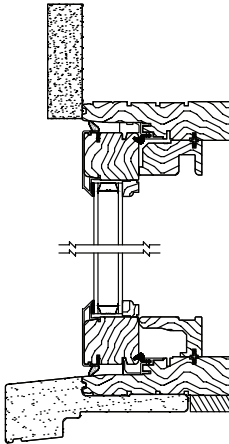
Scale: 2"=1' (all sections)



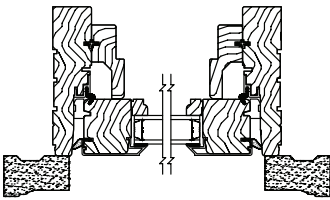
Hybrid with Clad Sash
Horizontal Section



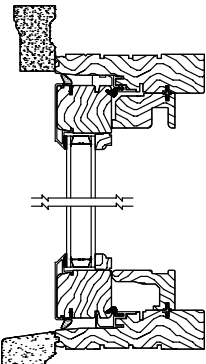
Hybrid with Clad Sash
Vertical Section



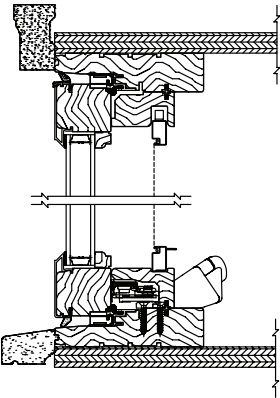
Hybrid with Clad Sash
and 2" Sill Nosing
Vertical Section



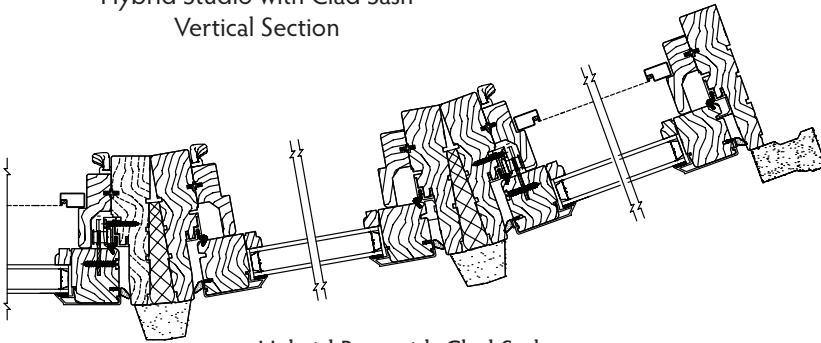
Hybrid Studio with Clad Sash
Horizontal Section



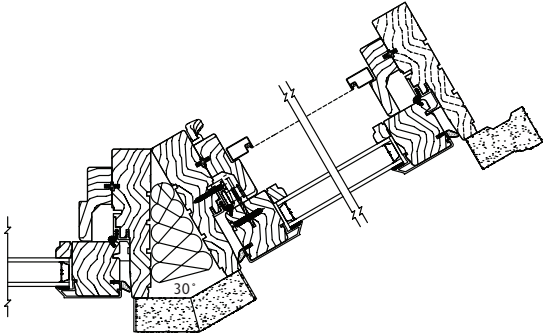
Hybrid Studio with Clad Sash
Vertical Section



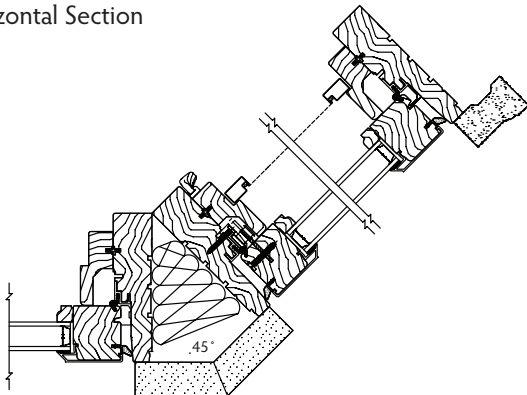
Hybrid Bow & Bay
with Clad Sash
Vertical Section



Hybrid Bow with Clad Sash
Horizontal Section



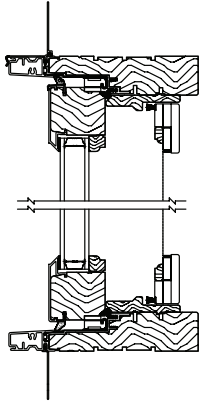
Hybrid 30° Bay Mull with Clad Sash
Horizontal Section



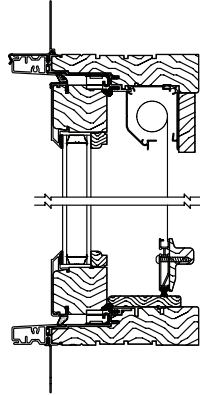
Hybrid 45° Bay Mull with Clad Sash
Horizontal Section

Casement - Push-Out Hardware

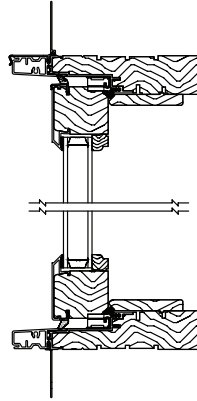
Scale: 2"=1' (all sections)



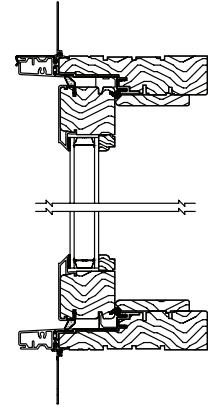
Clad Push-Out with
Wood Screen
Vertical Section



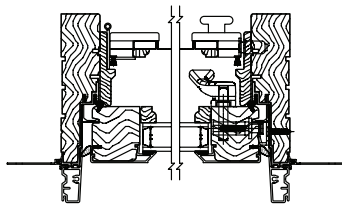
Clad Push-Out with
Retractable Screen
Vertical Section



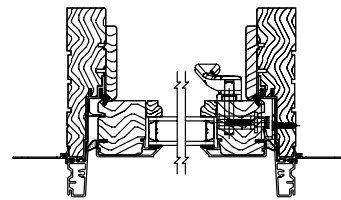
Clad Push-Out with
No Screen
Vertical Section



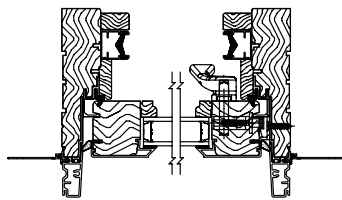
Clad Push-Out Studio
Vertical Section



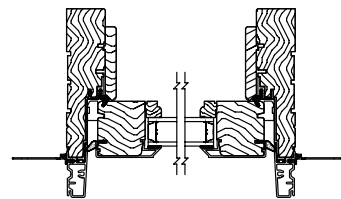
Clad Push-Out with
Wood Screen
Horizontal Section



Clad Push-Out with
No Screen
Horizontal Section



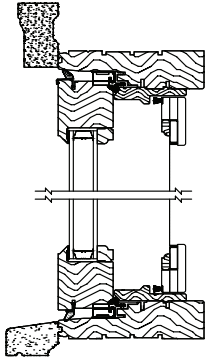
Clad Push-Out with
Retractable Screen
Horizontal Section



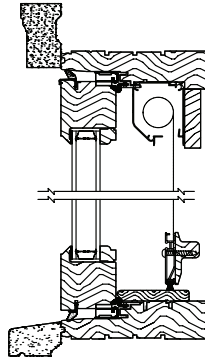
Clad Push-Out Studio
Horizontal Section

Casement - Push-Out Hardware

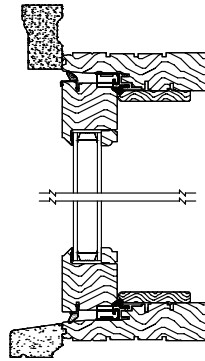
Scale: 2"=1' (all sections)



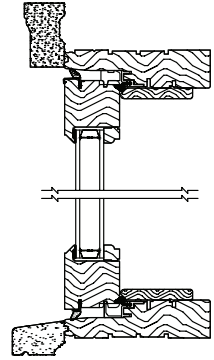
Primed Push-Out with Wood Screen Vertical Section



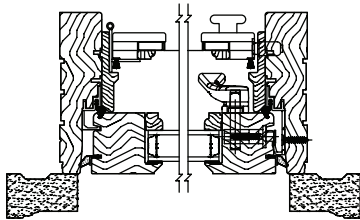
Primed Push-Out with Retractable Screen Vertical Section



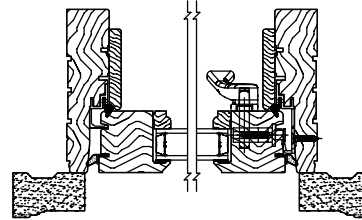
Primed Push-Out with No Screen Vertical Section



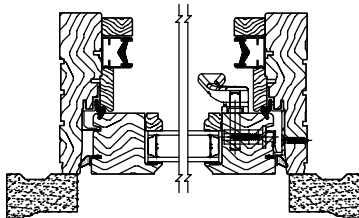
Primed Push-Out Studio Vertical Section



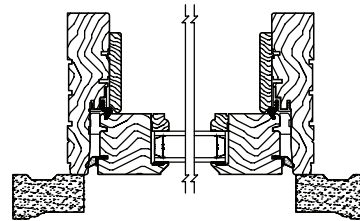
Primed Push-Out with Wood Screen Horizontal Section



Primed Push-Out with No Screen Horizontal Section



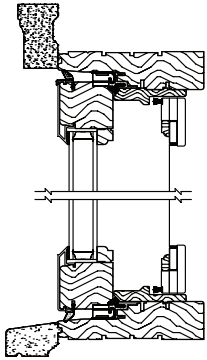
Primed Push-Out with Retractable Screen Horizontal Section



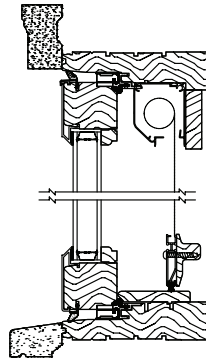
Primed Push-Out Studio Horizontal Section

Casement - Push-Out Hardware

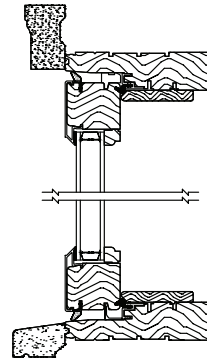
Scale: 2"=1' (all sections)



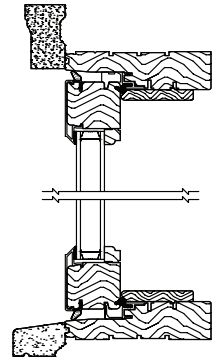
Hybrid Push-Out with
Clad Sash and Wood Screen
Vertical Section



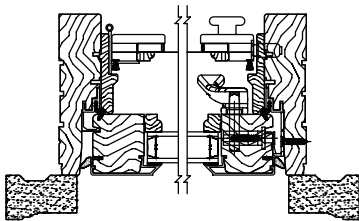
Hybrid Push-Out with
Clad Sash and Retractable Screen
Vertical Section



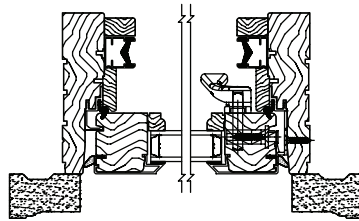
Hybrid Push-Out with
Clad Sash and No Screen
Vertical Section



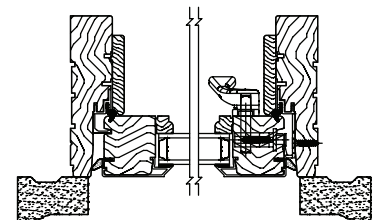
Hybrid Push-Out Studio
with Clad Sash
Vertical Section



Hybrid Push-Out with
Wood Screen
Horizontal Section



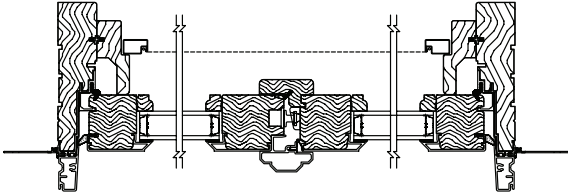
Hybrid Push-Out with
Retractable Screen
Horizontal Section



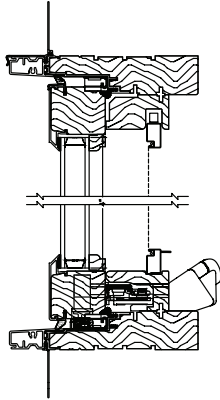
Hybrid Push-Out with
Clad Sash and No Screen
Horizontal Section

French Casement

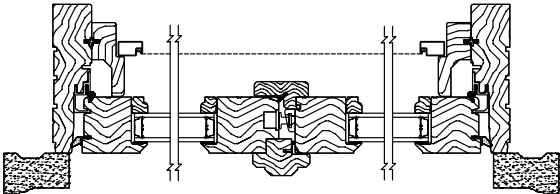
Scale: 2"=1' (all sections)



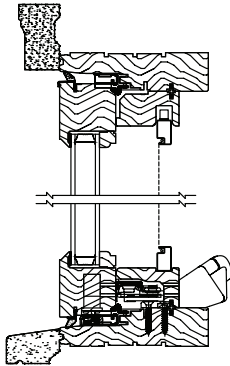
Clad French Casement
Horizontal Section



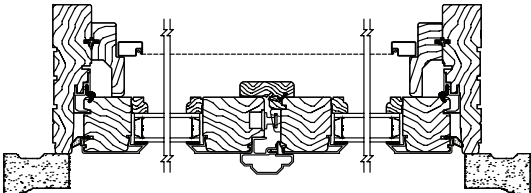
Clad French Casement
Vertical Section



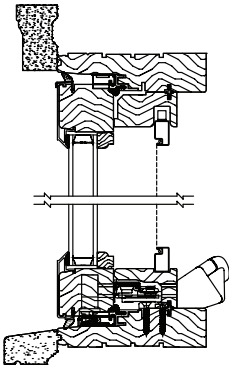
Primed French Casement
Horizontal Section



Primed French Casement
Vertical Section



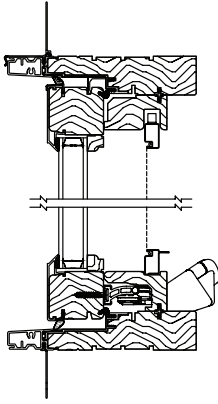
Hybrid French Casement
Horizontal Section



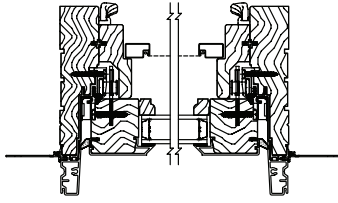
Hybrid French Casement
Vertical Section

Awning

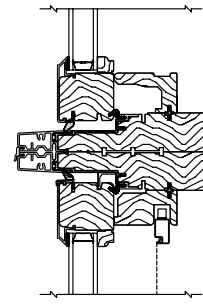
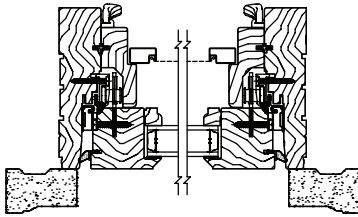
Scale: 2"=1' (all sections)



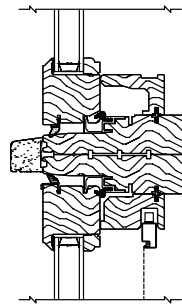
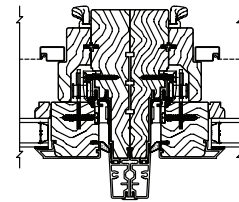
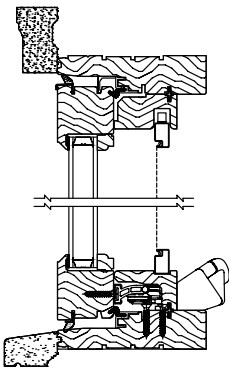
Clad Vertical Section



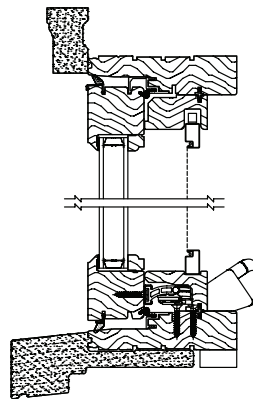
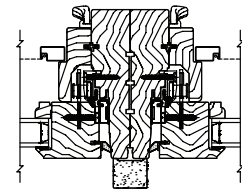
Clad Horizontal Section

Clad Horizontal Mull
Vertical Section

Primed Horizontal Section

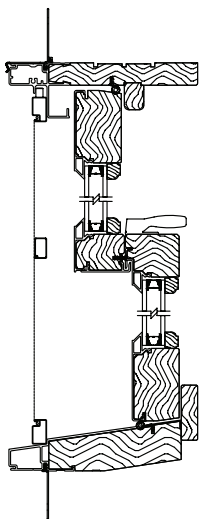
Primed Horizontal Mull
Vertical SectionClad Vertical Mull
Horizontal Section

Primed Vertical Section

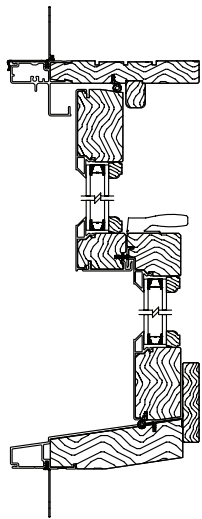
Primed w/ 2" Sill Nosing
Vertical SectionPrimed Vertical Mull
Horizontal Section

Double Hung

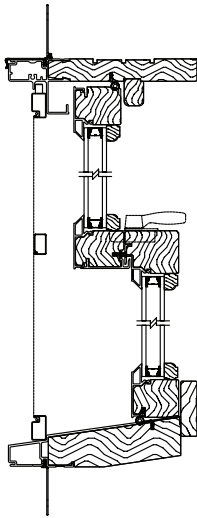
Scale: 2"=1' (all sections)



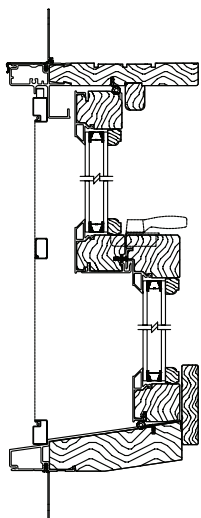
Clad DH - Wide Rails
Vertical Section



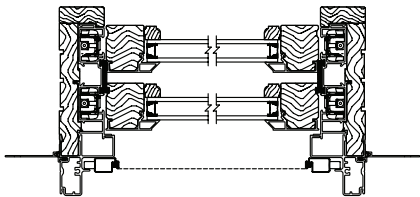
Clad DH - Wide Rails
PG50 Upgrade
Vertical Section



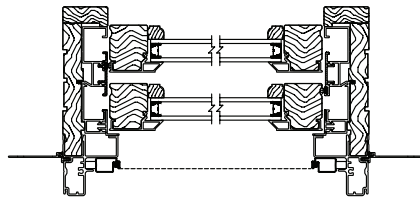
Clad DH - Narrow Rails
Vertical Section



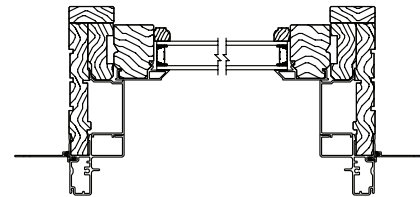
Clad DH - Narrow Rails
PG50 Upgrade
Vertical Section



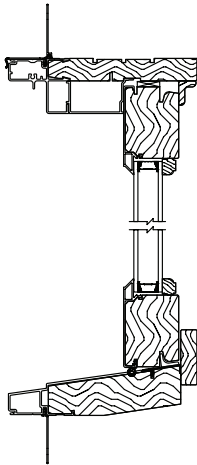
Clad DH w/ Standard Jamblers
Horizontal Section



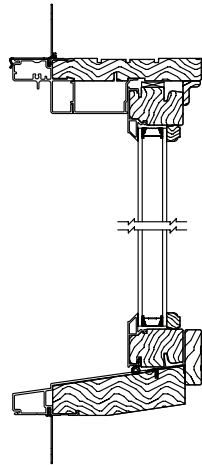
Clad DH w/ Concealed Jamblers
Horizontal Section



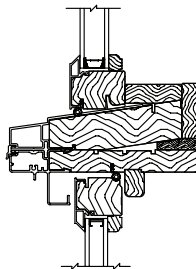
Clad DH Studio
Horizontal Section



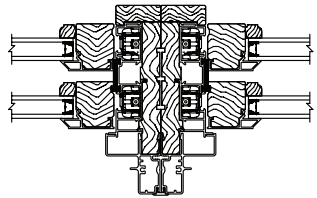
Clad DH Studio
Wide Rails
Vertical Section



Clad DH Studio
Narrow Rails
Vertical Section



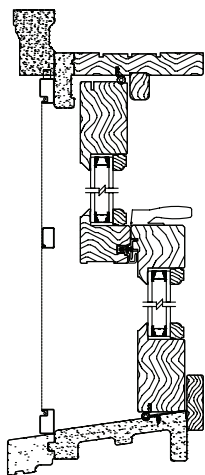
Clad Horizontal Transom
Mull Vertical Section



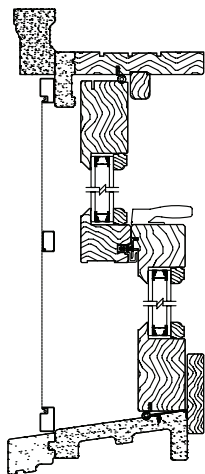
Clad Vertical Mull
Horizontal Section

Double Hung

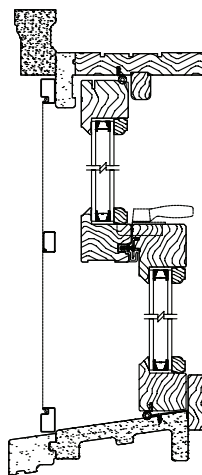
Scale: 2"=1' (all sections)



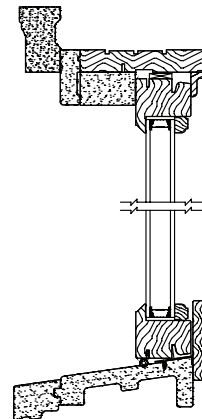
Primed DH - Wide Rails
Vertical Section



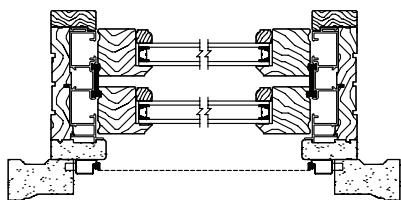
Primed DH - Wide Rails
PG50 Upgrade
Vertical Section



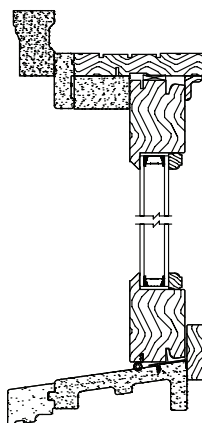
Primed DH - Narrow Rails
Vertical Section



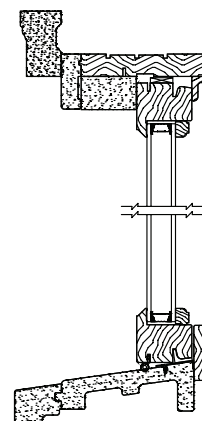
Primed DH - Narrow Rails
PG50 Upgrade
Vertical Section



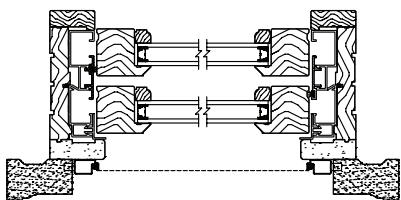
Primed DH w/ Standard
Jamb liners
Horizontal Section



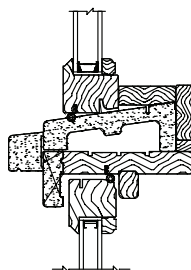
Primed DH Studio
Wide Rails
Vertical Section



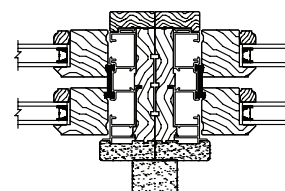
Primed DH Studio
Narrow Rails
Vertical Section



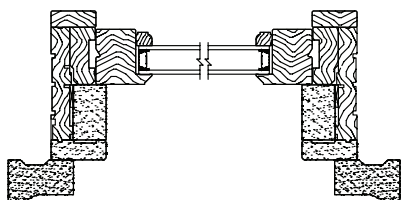
Primed DH w/ Concealed Jamb liners
Horizontal Section



Primed Horizontal Transom
Mull Vertical Section



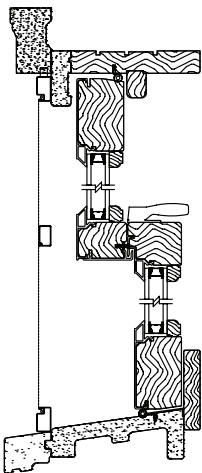
Primed Vertical Mull
Horizontal Section



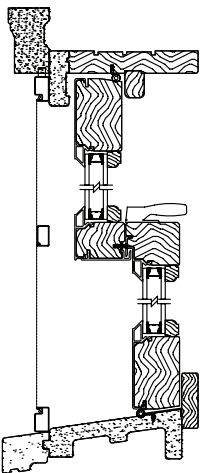
Primed DH Studio
Horizontal Section

Double Hung

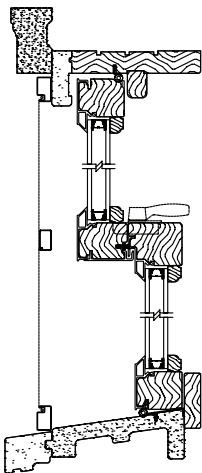
Scale: 2"=1' (all sections)



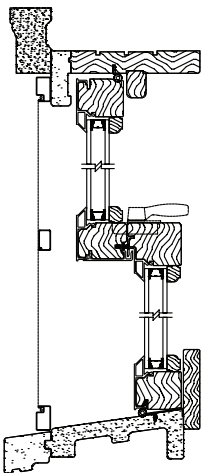
Hybrid Clad DH - Wide Rails
Vertical Section



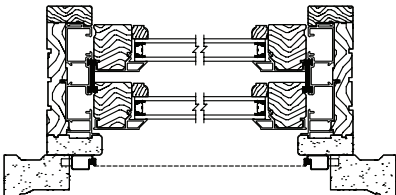
Hybrid Clad DH - Wide Rails
PG50 Upgrade
Vertical Section



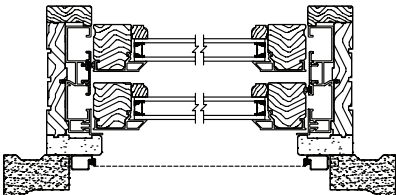
Hybrid Clad DH - Narrow Rails
Vertical Section



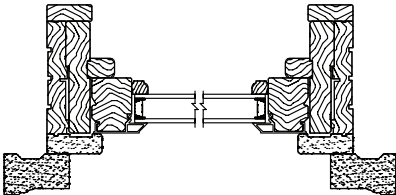
Hybrid Clad DH - Narrow Rails
PG50 Upgrade
Vertical Section



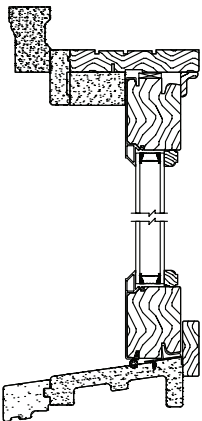
Hybrid Clad DH
w/ Standard Jamb liners
Horizontal Section



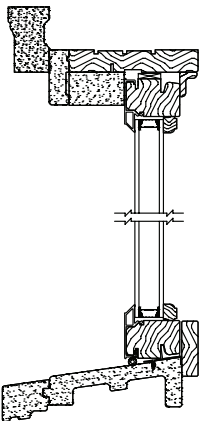
Hybrid Clad DH
w/ Concealed Jamb liners
Horizontal Section



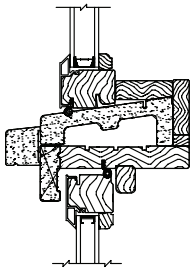
Hybrid Clad DH Studio
Horizontal Section



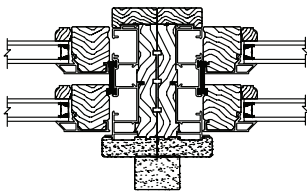
Hybrid Clad DH Studio
Wide Rails
Vertical Section



Hybrid Clad DH Studio
Narrow Rails
Vertical Section



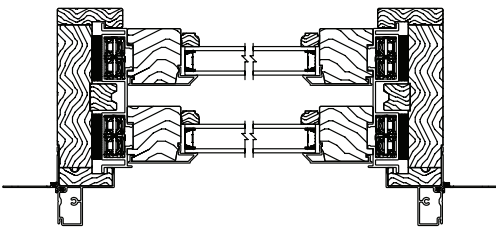
Hybrid Clad Horizontal Transom
Mull Vertical Section



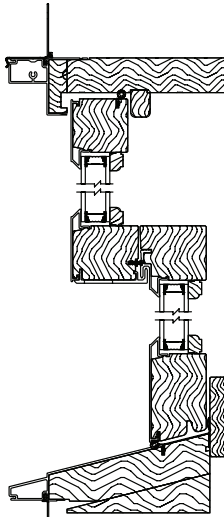
Hybrid Clad Vertical Mull
Horizontal Section

Quantum Double Hung

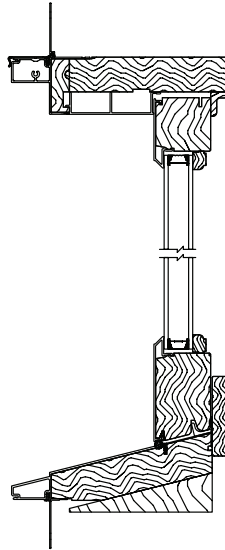
Scale: 2"=1' (all sections)



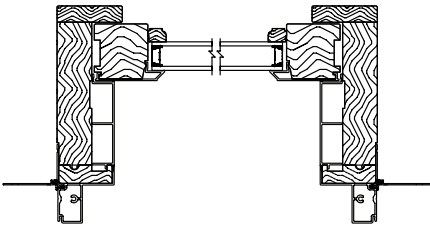
Clad Quantum
Horizontal Section



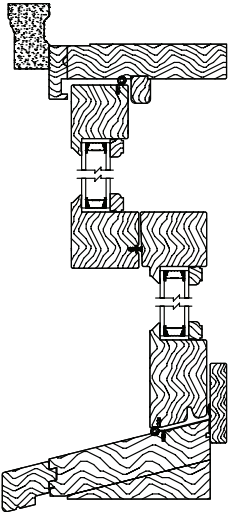
Clad Quantum
Vertical Section



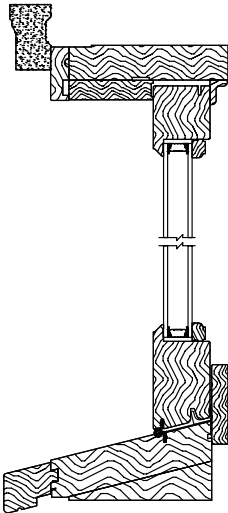
Clad Quantum Studio
Vertical Section



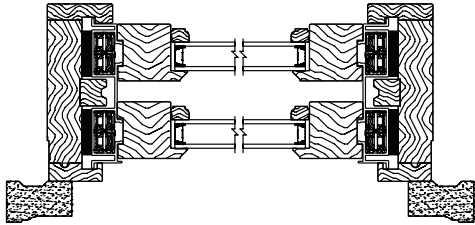
Clad Quantum Studio
Horizontal Section



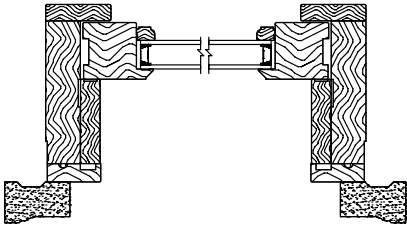
Primed Quantum
Vertical Section



Primed Quantum Studio
Vertical Section



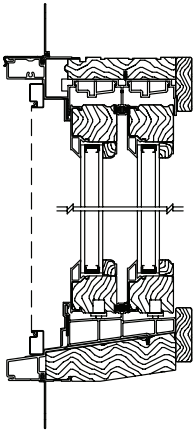
Primed Quantum
Horizontal Section



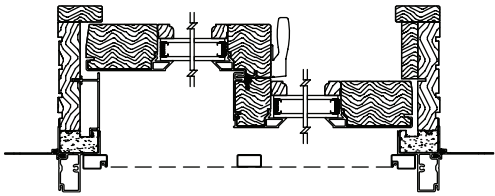
Primed Quantum Studio
Horizontal Section

Glider

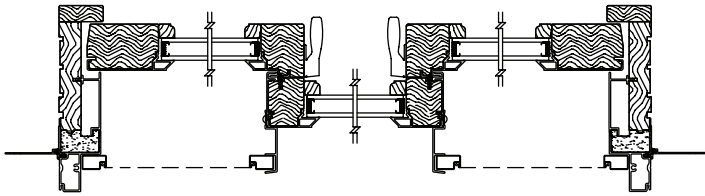
Scale: 2"=1' (all sections)



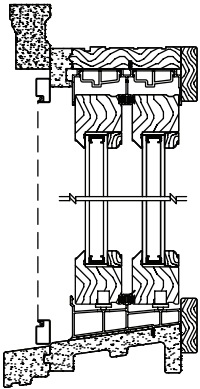
Clad Glider Vertical Section



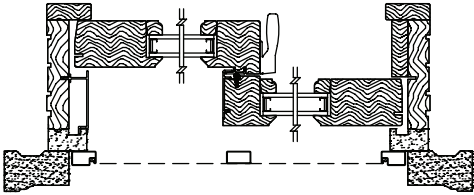
Clad Glider Horizontal Section



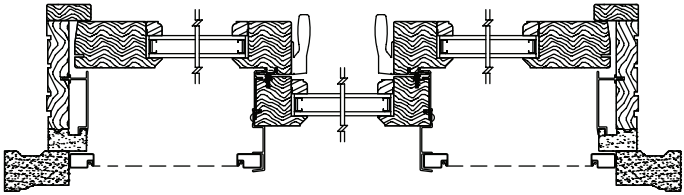
Clad Triple Glider Horizontal Section



Primed Glider Vertical Section



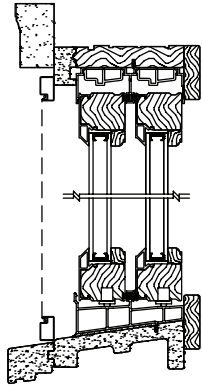
Primed Glider Horizontal Section



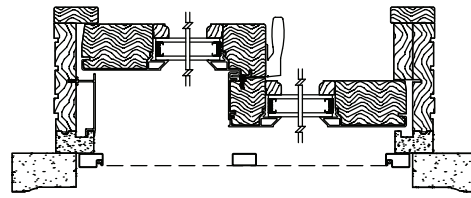
Primed Triple Glider Horizontal Section

Glider

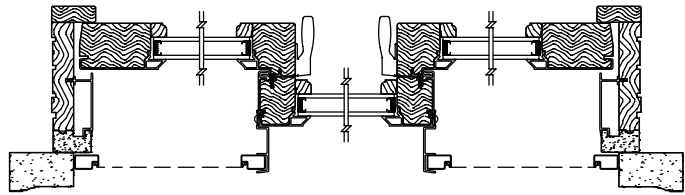
Scale: 2"=1' (all sections)



Hybrid Glider
With Clad Sash
Vertical Section



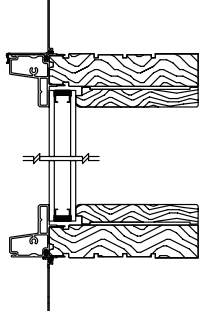
Hybrid Glider
With Clad Sash
Horizontal Section



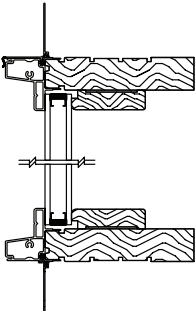
Hybrid Triple Glider
With Clad Sash
Horizontal Section

Specialty

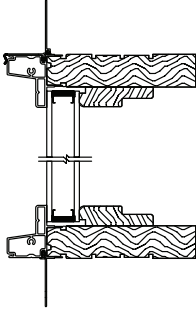
Scale: 2"=1' (all sections)



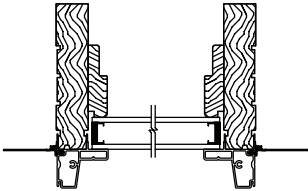
Clad Direct Set with Full Stop Option Vertical Section



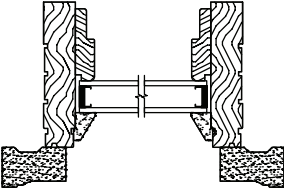
Clad Direct Set with Square Stop Option Vertical Section



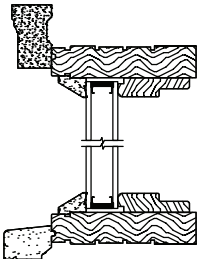
Clad Direct Set Vertical Section



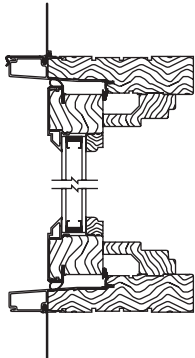
Clad Direct Set Horizontal Section



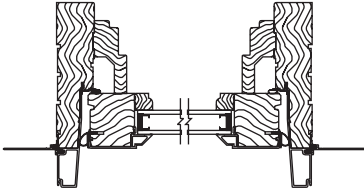
Primed Direct Set Horizontal Section



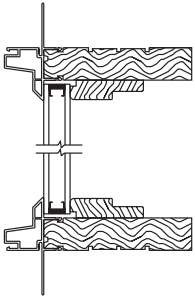
Primed Direct Set Vertical Section



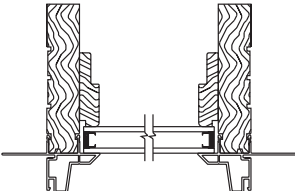
Clad Radius Sash Set Vertical Section



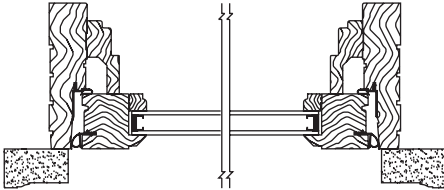
Clad Radius Sash Set Horizontal Section



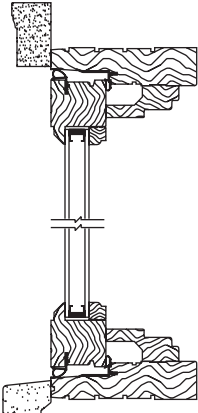
Vinyl Clad Direct Set Vertical Section



Vinyl Clad Direct Set Horizontal Section



Primed Radius Sash Set Horizontal Section



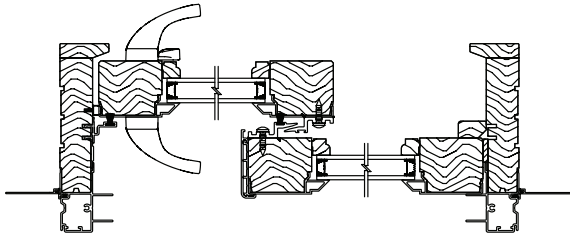
Primed Radius Sash Set Vertical Section

Note: The Square Stop and Full Stop option, shown only with the clad exterior, is available for all Direct Set units.

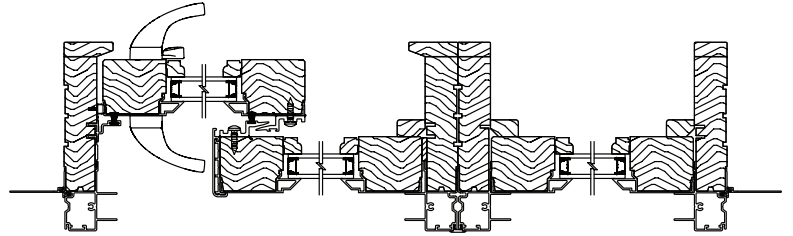
Slide Patio Doors

Scale: 2"=1' (all sections)

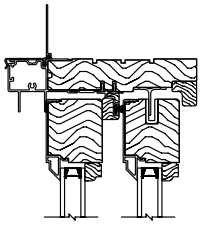
Narrow (2-1/2") Stiles



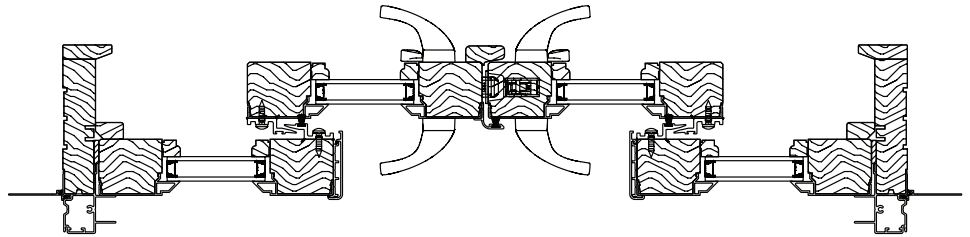
Clad Slide Patio Door
2-1/2" Stiles
Horizontal Section



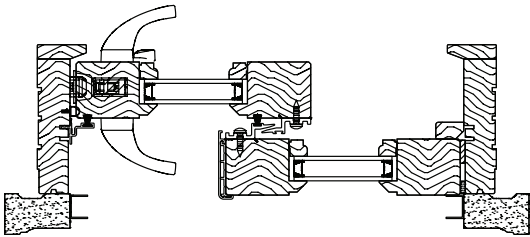
Clad Slide Patio Door with Side Lite Mull
2-1/2" Stiles
Horizontal Section



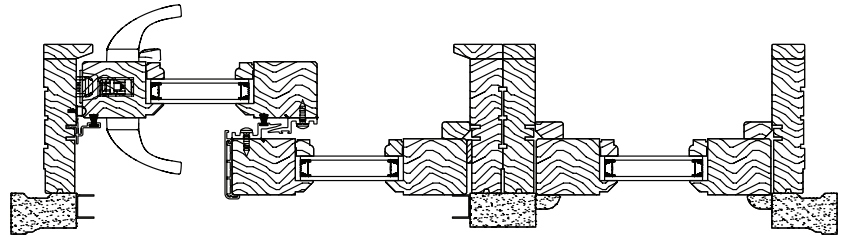
Clad Slide Patio Door
2-1/2" Stiles
Vertical Section



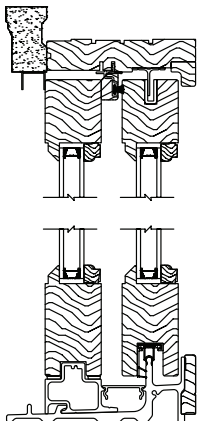
Clad Slide Patio Door OXXO
2-1/2" Stiles
Door Horizontal Section



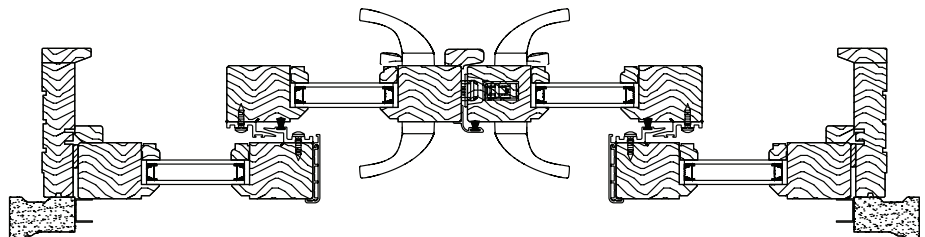
Primed Slide Patio Door
2-1/2" Stiles
Horizontal Section



Primed Slide Patio Door with Side Lite Mull
2-1/2" Stiles
Horizontal Section



Primed Slide Patio Door
2-1/2" Stiles
Vertical Section

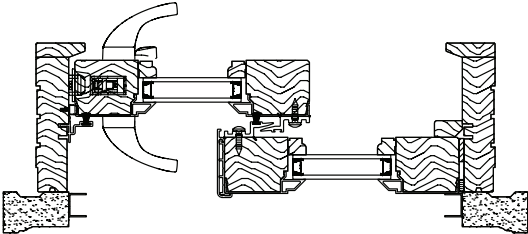


Primed Slide Patio Door OXXO
2-1/2" Stiles
Door Horizontal Section

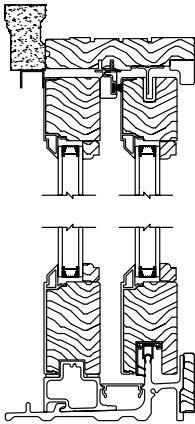
Slide Patio Doors

Scale: 2"=1' (all sections)

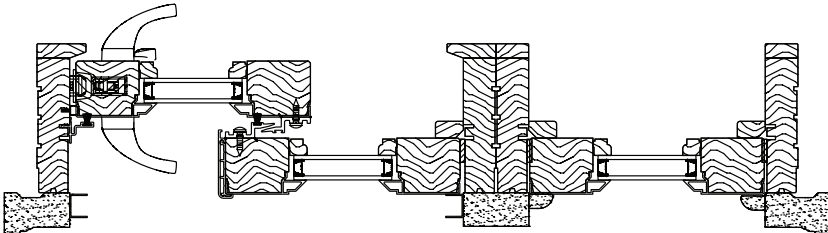
Narrow (2-1/2") Stiles



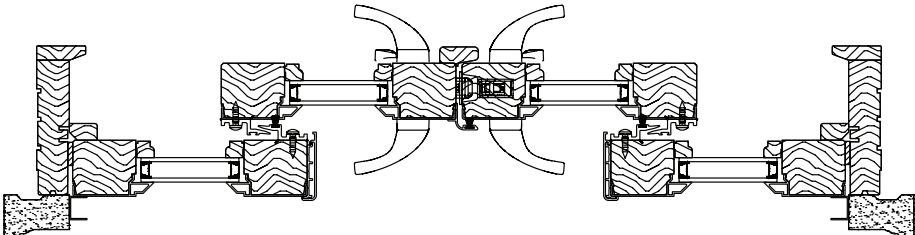
Hybrid Slide Patio Door
2-1/2" Stiles
Horizontal Section



Hybrid Slide Patio Door
2-1/2" Stiles
Low-Profile Stop
Vertical Section



Hybrid Slide Patio Door with Side Lite Mull
2-1/2" Stiles
Horizontal Section

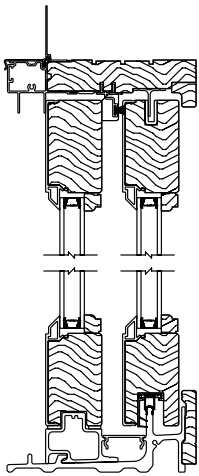


Hybrid Slide Patio Door OXXO
2-1/2" Stiles
Door Horizontal Section

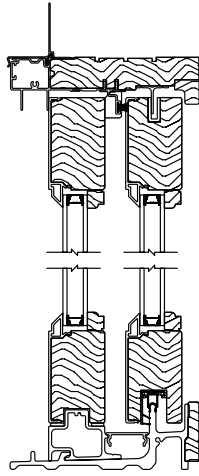
Slide Patio Doors

Scale: 2"=1' (all sections)

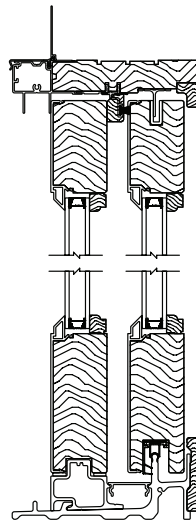
Lifestyle (3-3/8") Stiles



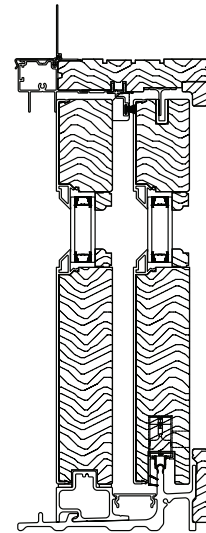
Clad Slide Patio Door
3-3/8" Stiles
High-Profile Sill Stop
Vertical Section



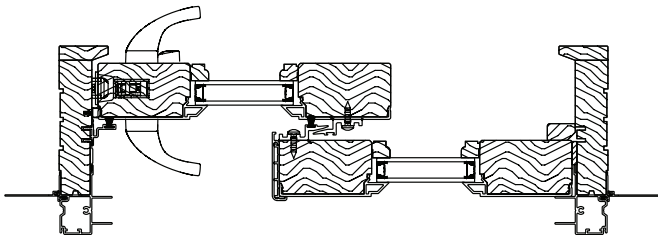
Clad Slide Patio Door
3-3/8" Stiles
Low-Profile Sill Stop
Vertical Section



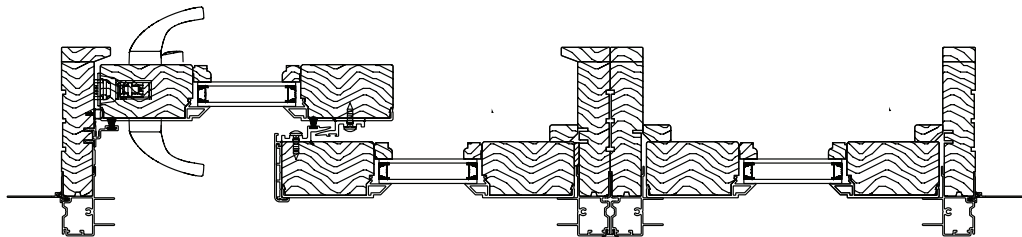
Clad Slide Patio Door
3-3/8" Stiles
4-13/16" Bottom Rail
High-Profile Sill Stop
Vertical Section



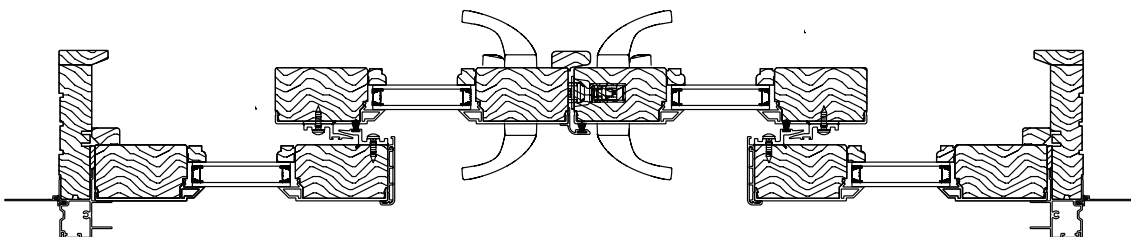
Clad Slide Patio Door
3-3/8" Stiles
7-3/16" Bottom Rail
High-Profile Sill Stop
Vertical Section



Clad Slide Patio Door
3-3/8" Stiles
Horizontal Section



Clad Slide Patio Door with Side Lite Mull
3-3/8" Stiles
Horizontal Section

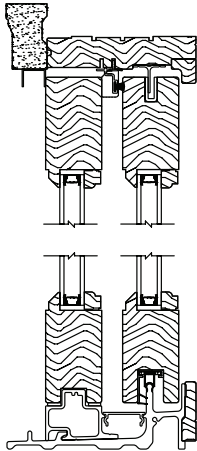


Clad Slide Patio Door OXXO
3-3/8" Stiles
Door Horizontal Section

Slide Patio Doors

Scale: 2"=1' (all sections)

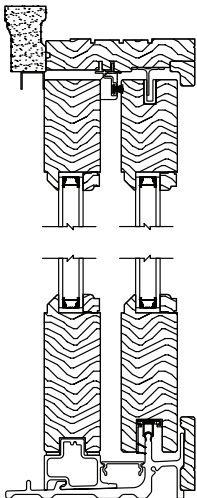
Lifestyle (3-3/8") Stiles



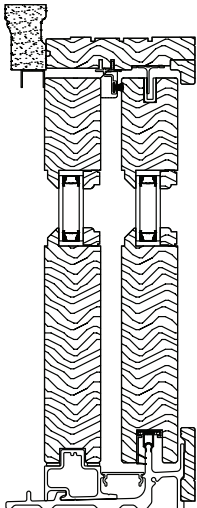
Primed Slide Patio Door
3-3/8" Stiles
Vertical Section



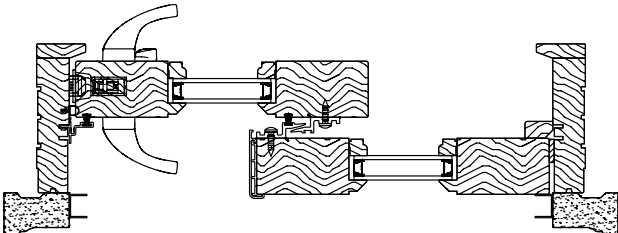
Primed Slide Patio Door
3-3/8" Stiles
Low Profile Sill
Vertical Section



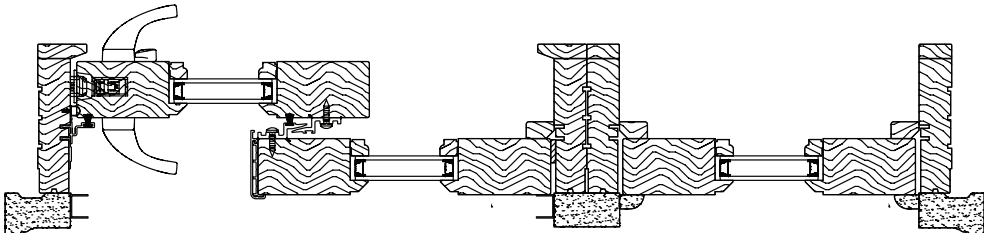
Primed Slide Patio Door
3-3/8" Stiles
4-13/16" Bottom Rail
Vertical Section



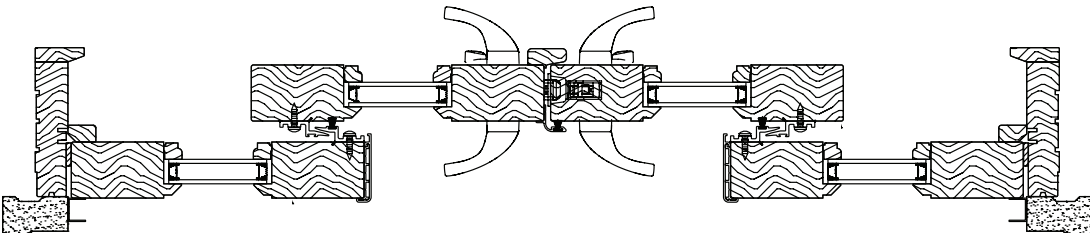
Primed Slide Patio Door
3-3/8" Stiles
7-3/16" Bottom Rail
Vertical Section



Primed Slide Patio Door
3-3/8" Stiles
Horizontal Section



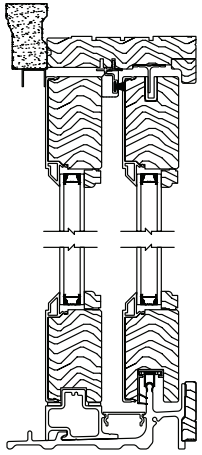
Primed Slide Patio Door with Side Lite Mull
3-3/8" Stiles
Horizontal Section



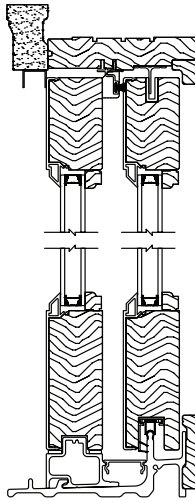
Primed Slide Patio Door OXXO
3-3/8" Stiles
Door Horizontal Section

Slide Patio Doors

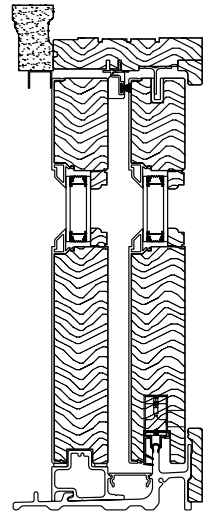
Scale: 2"=1' (all sections)



Hybrid Slide Patio Door
3-3/8" Stiles
Vertical Section

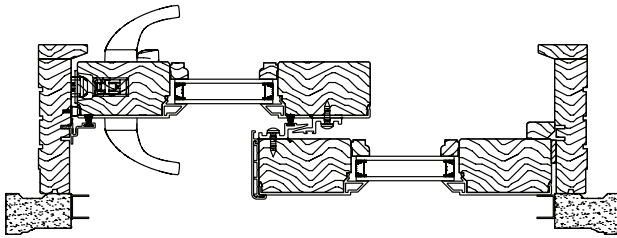


Hybrid Slide Patio Door
3-3/8" Stiles
Low Profile Sill
Vertical Section

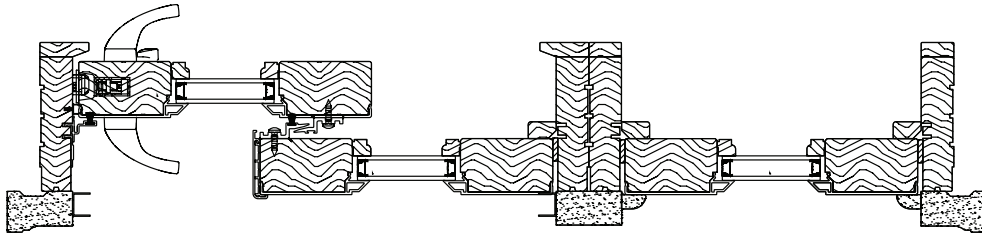


Hybrid Slide Patio Door
3-3/8" Stiles
7-3/16" Bottom Rail
Vertical Section

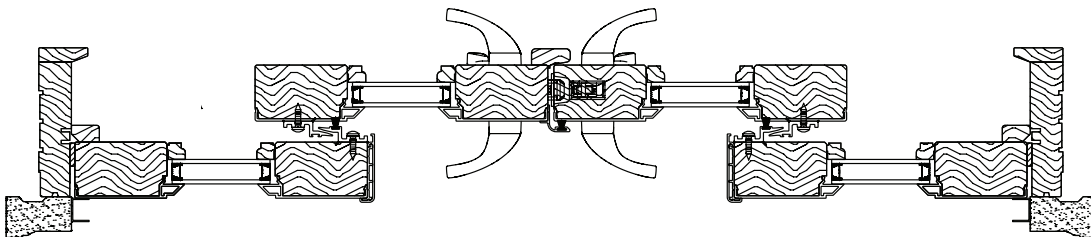
Hybrid Slide Patio Door
3-3/8" Stiles
4-13/16" Bottom Rail
Vertical Section



Hybrid Slide Patio Door
3-3/8" Stiles
Horizontal Section



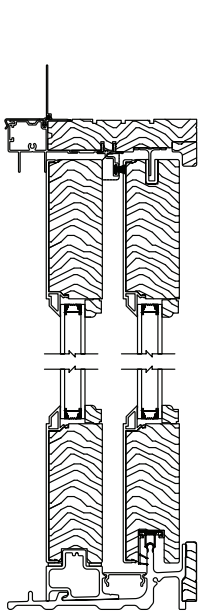
Hybrid Slide Patio Door with Side Lite Mull
3-3/8" Stiles
Horizontal Section



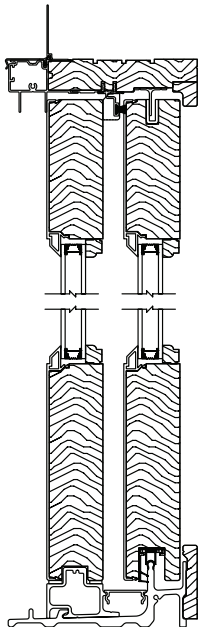
Hybrid Slide Patio Door OXXO
3-3/8" Stiles
Door Horizontal Section

Slide Patio Doors

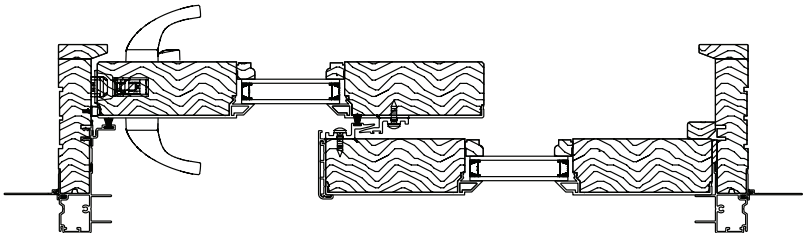
Scale: 2"=1' (all sections)



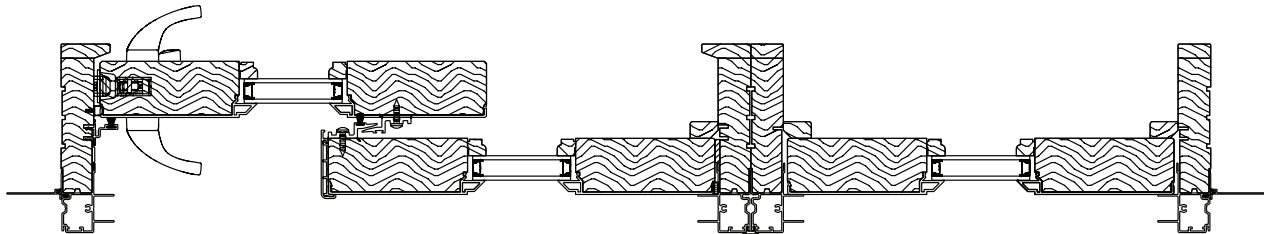
Clad Slide Patio Door
4-13/16" Stiles
4-13/16" Bottom Rail
Low-Profile Sill Stop
Vertical Section



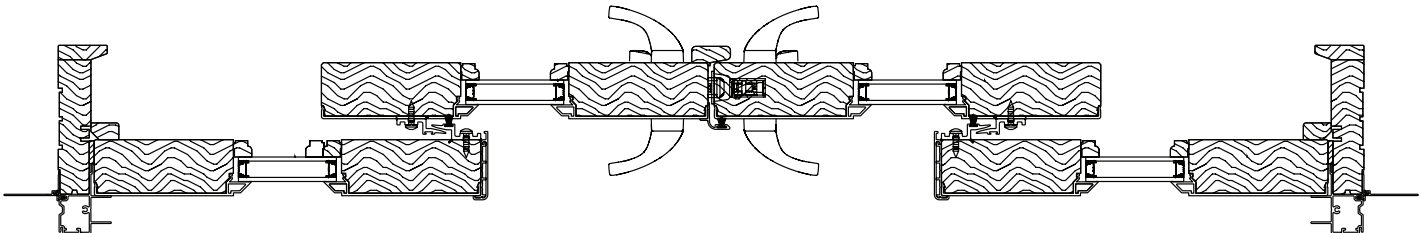
Clad Slide Patio Door
4-13/16" Stiles
7-3/16" Bottom Rail
High-Profile Sill Stop
Vertical Section



Clad Slide Patio Door
4-13/16" Stiles
Horizontal Section



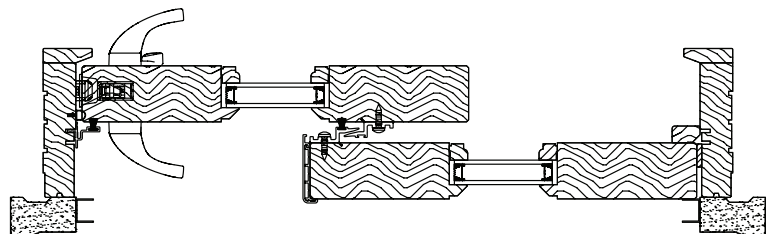
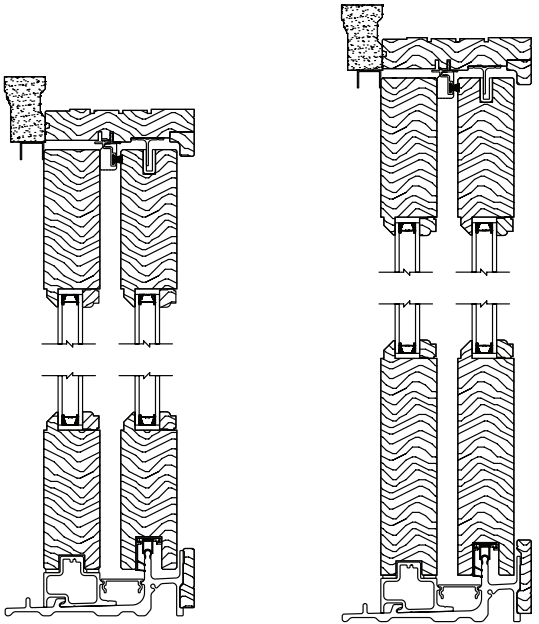
Clad Slide Patio Door with Side Lite Mull
4-13/16" Stiles
Horizontal Section



Clad Slide Patio Door OXXO
4-13/16" Stiles
Door Horizontal Section

Slide Patio Doors

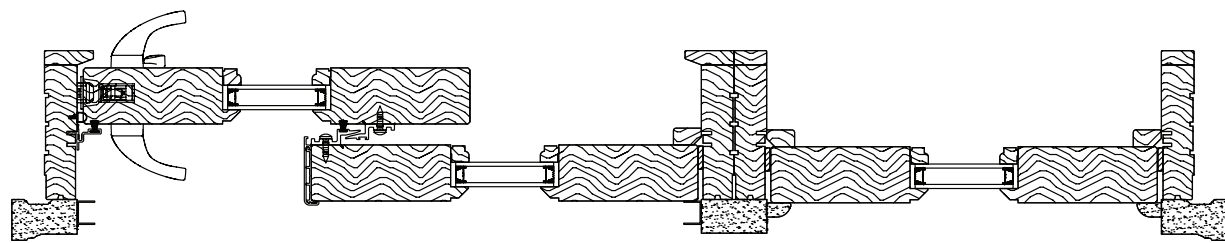
Scale: 2"=1' (all sections)



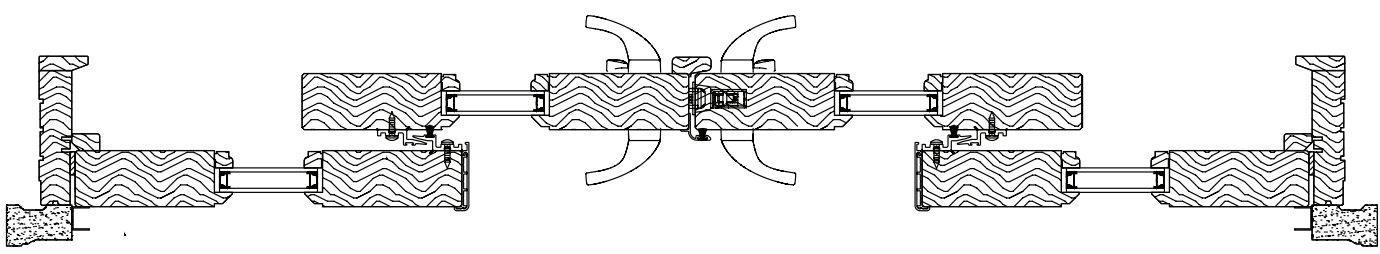
Primed Slide Patio Door
4-13/16" Stiles
Horizontal Section

Primed Slide Patio Door
4-13/16" Stiles
4-13/16" Bottom Rail
Low-Profile Sill Stop
Vertical Section

Primed Slide Patio Door
4-13/16" Stiles
7-3/16" Bottom Rail
High-Profile Sill Stop
Vertical Section



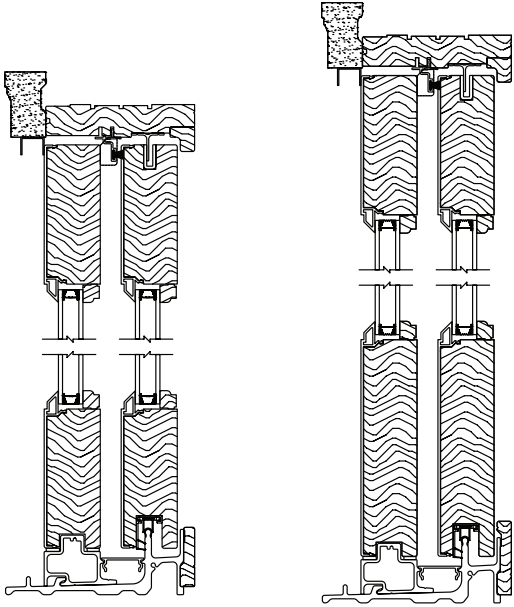
Primed Slide Patio Door with Side Lite Mull
4-13/16" Stiles
Horizontal Section



Primed Slide Patio Door OXXO
4-13/16" Stiles
Door Horizontal Section

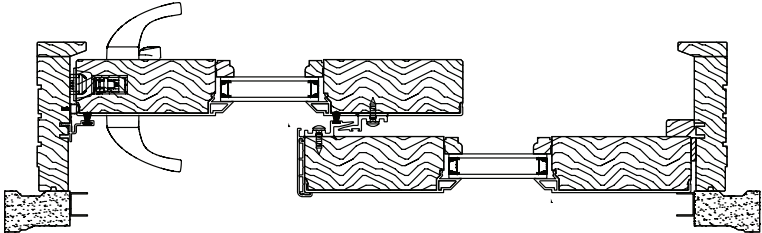
Slide Patio Doors

Scale: 2"=1' (all sections)

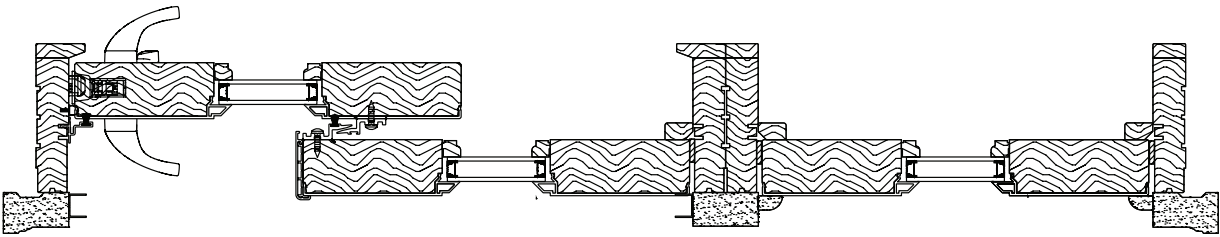


Hybrid Slide Patio Door
4-13/16" Stiles
4-13/16" Bottom Rail
Vertical Section

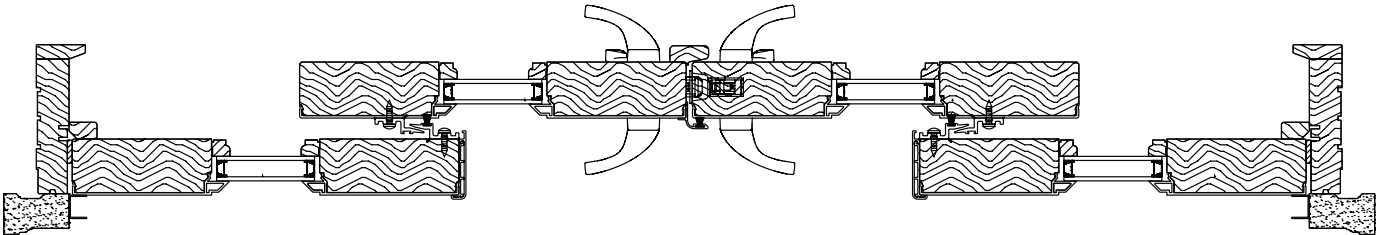
Hybrid Slide Patio Door
4-13/16" Stiles
7-3/16" Bottom Rail
Vertical Section



Hybrid Slide Patio Door
4-13/16" Stiles
Horizontal Section



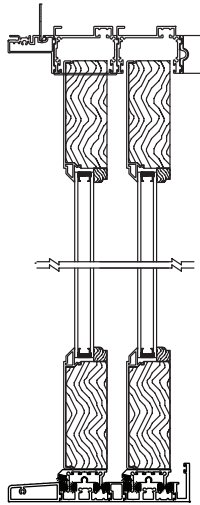
Hybrid Slide Patio Door with Side Lite Mull
4-13/16" Stiles
Horizontal Section



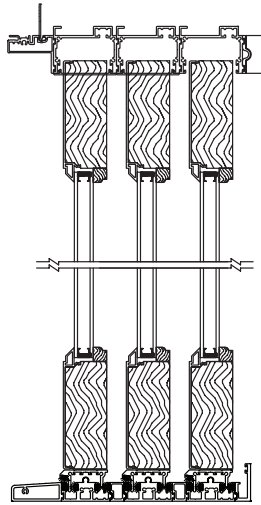
Hybrid Slide Patio Door OXXO
4-13/16" Stiles
Door Horizontal Section

Multi-Slide Patio Doors

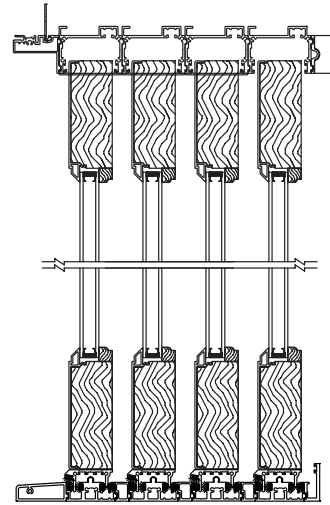
Scale: No Scale



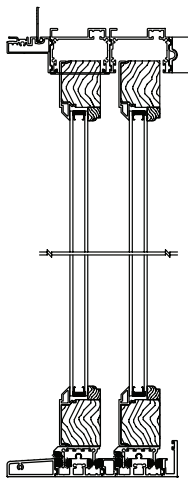
Clad 2-Panel Multi-Slide Patio Door
Wide Stile
Vertical Section



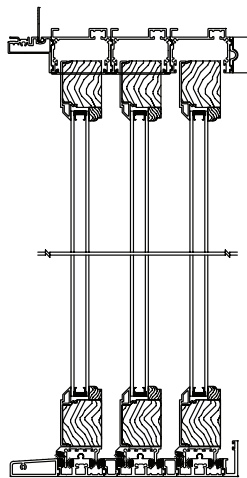
Clad 3-Panel Multi-Slide Patio Door
Wide Stile
Vertical Section



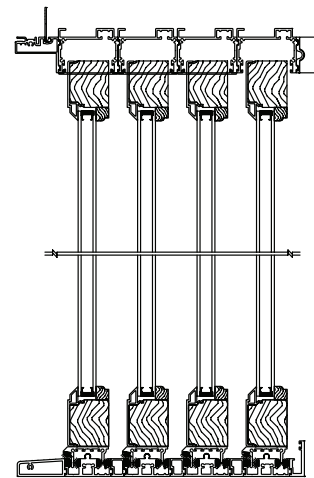
Clad 4-Panel Multi-Slide Patio Door
Wide Stile
Vertical Section



Clad 2-Panel Multi-Slide Patio Door
Narrow Stile
Vertical Section



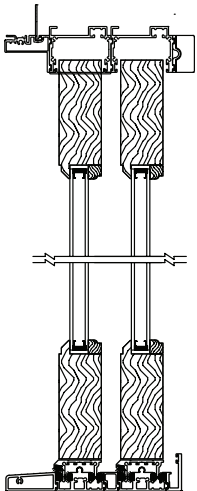
Clad 3-Panel Multi-Slide Patio Door
Narrow Stile
Vertical Section



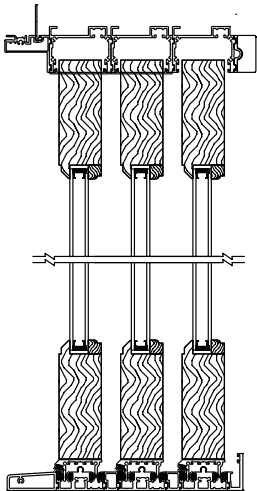
Clad 4-Panel Multi-Slide Patio Door
Narrow Stile
Vertical Section

Multi-Slide Patio Doors

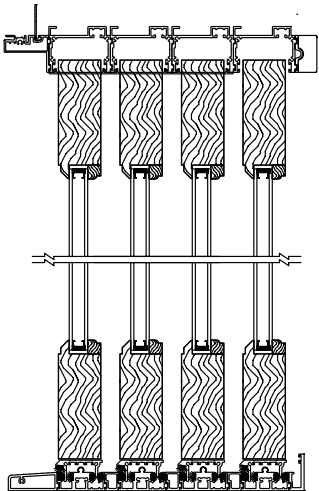
Scale:No Scale



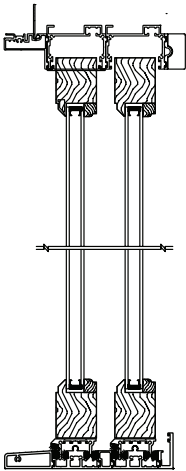
Wood 2-Panel Multi-Slide Patio Door
Wide Stile
Vertical Section



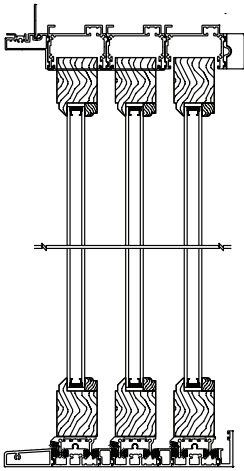
Wood 3-Panel Multi-Slide Patio Door
Wide Stile
Vertical Section



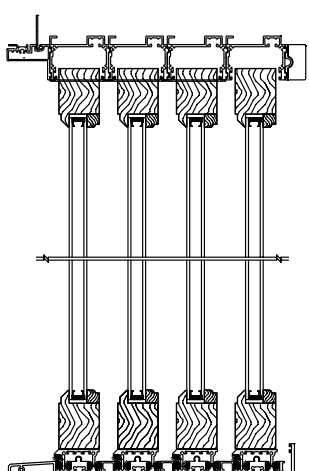
Wood 4-Panel Multi-Slide Patio Door
Wide Stile
Vertical Section



Wood 2-Panel Multi-Slide Patio Door
Narrow Stile
Vertical Section



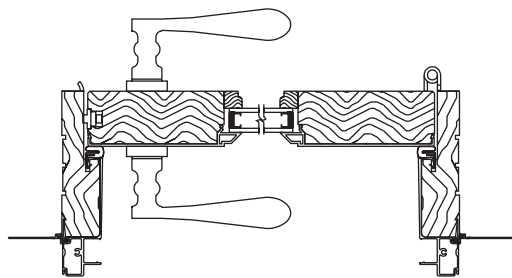
Wood 3-Panel Multi-Slide Patio Door
Narrow Stile
Vertical Section



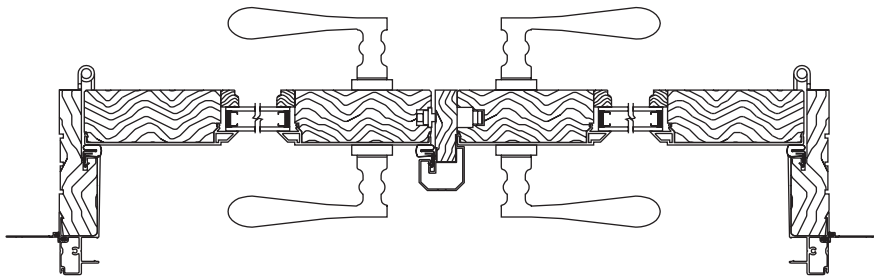
Wood 4-Panel Multi-Slide Patio Door
Narrow Stile
Vertical Section

Swing Patio Doors

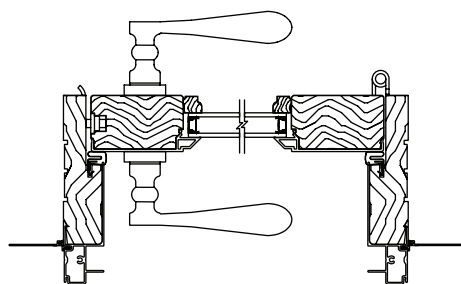
Scale: 2"=1' (all sections)



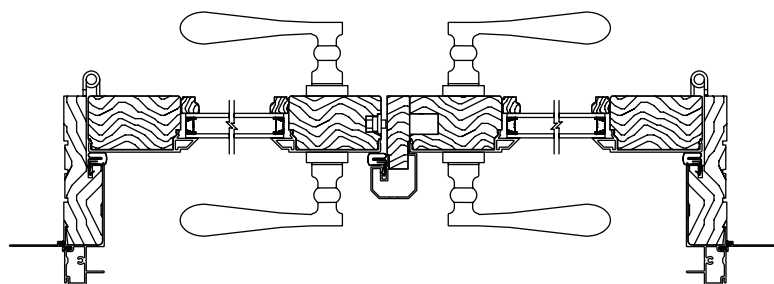
Clad In-Swing
4-13/16" Stiles
Horizontal Section



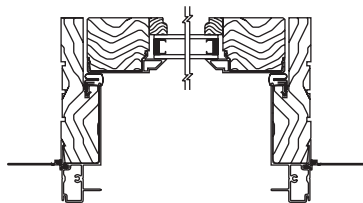
Clad French In-Swing
Horizontal Section



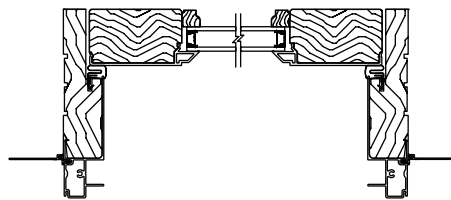
Clad In-Swing
3-3/8" Stiles
Horizontal Section



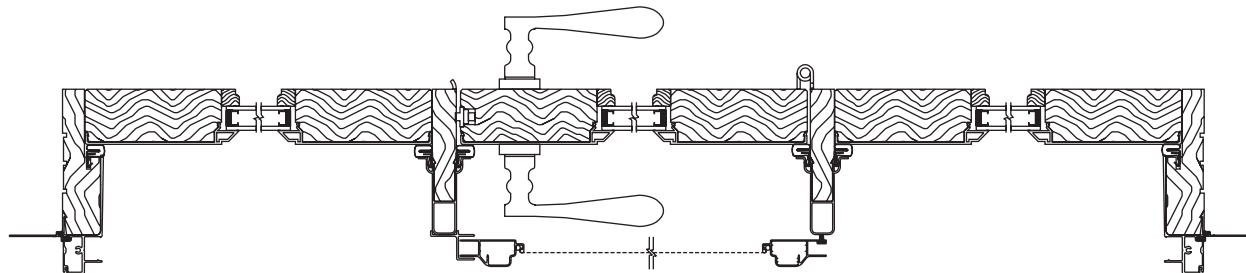
Clad French In-Swing
3-3/8" Stiles
Horizontal Section



Clad In-Swing Narrow Stile
Sidelite Horizontal Section



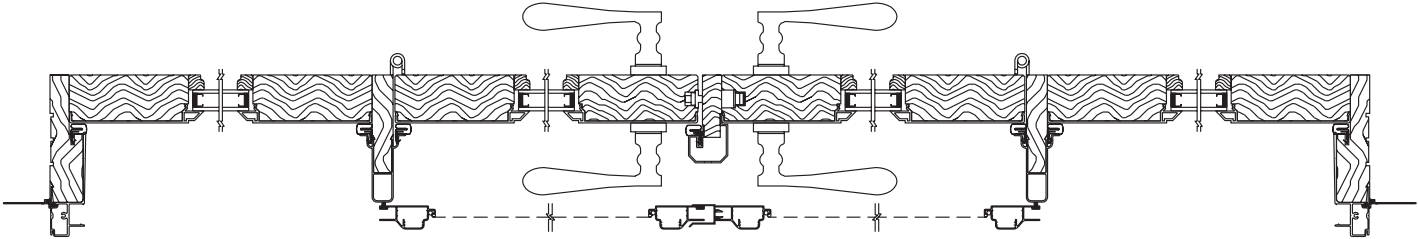
Clad In-Swing Sidelite
3-3/8" Stiles
Horizontal Section



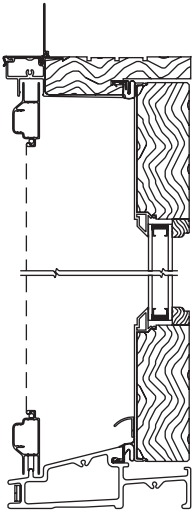
Clad In-Swing 3 Wide Door
4-13/16" Stiles
Horizontal Section

Swing Patio Doors

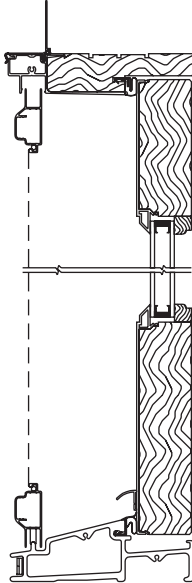
Scale: 2"=1' (all sections)



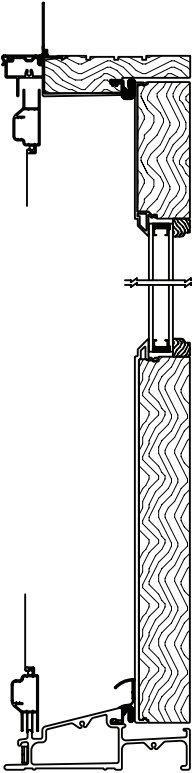
Clad In-Swing 4 Wide Door Continuous Head and Sill Horizontal Section
 4-13/16" Stiles
 (Drawing Not to scale)



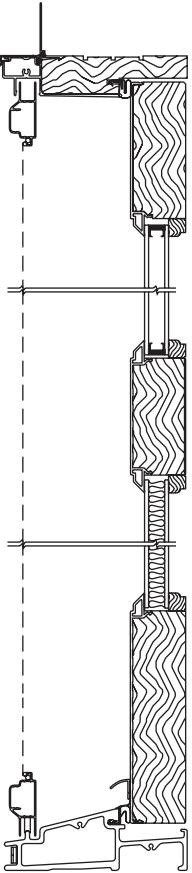
Clad In-Swing
 6/6 Height
 4-13/16" Bottom Rail
 Vertical Section



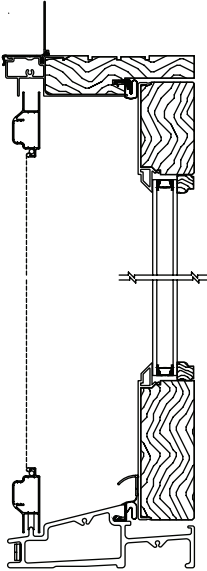
Clad In-Swing
 6/8, 7/0, 8/0 & 9/0 Heights
 7-13/16" Bottom Rail
 Vertical Section



Clad In-Swing
 12" Bottom Rail
 Vertical Section



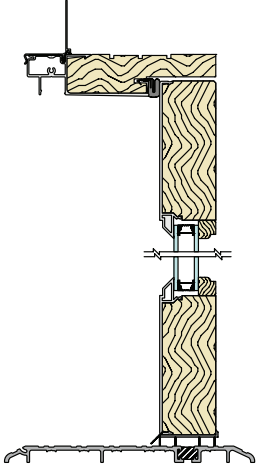
Clad In-Swing
 Mid-Rail Door
 7-13/16" Bottom Rail
 Vertical Section



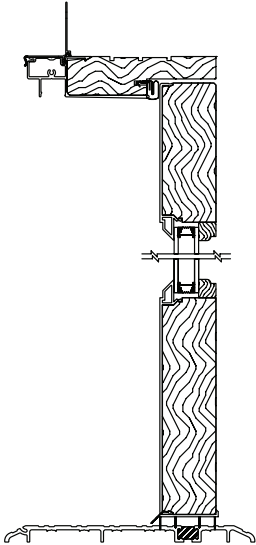
Clad In-Swing
 6/8, 7/0, 8/0 & 9/0 Heights
 4-13/16" Bottom Rail
 Vertical Section

Swing Patio Doors

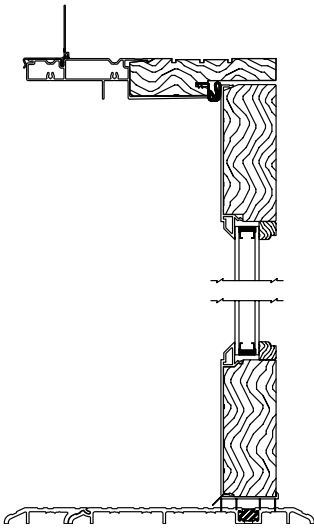
Scale: 2"=1' (all sections)



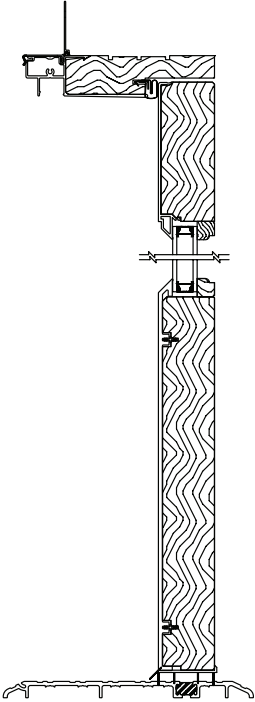
Clad In-Swing
4-13/16" Bottom Rail
ADA Sill Option



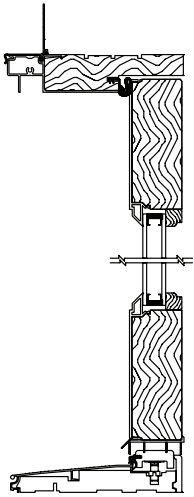
Clad In-Swing
7-13/16" Bottom Rail
ADA Sill Option



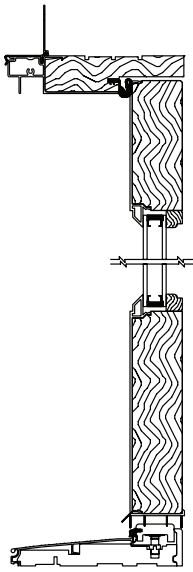
Clad In-Swing
4-13/16" Bottom Rail
6-9/16" Jamb
ADA Sill Option



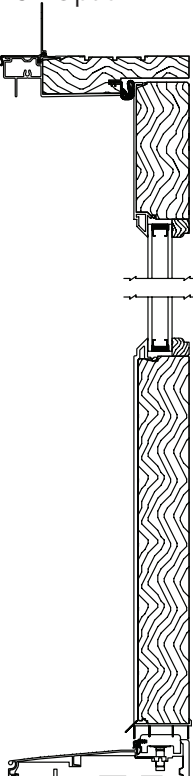
Clad In-Swing
12" Bottom Rail
ADA Sill Option



Clad In-Swing
4-13/16" Bottom Rail
Entry Sill Option



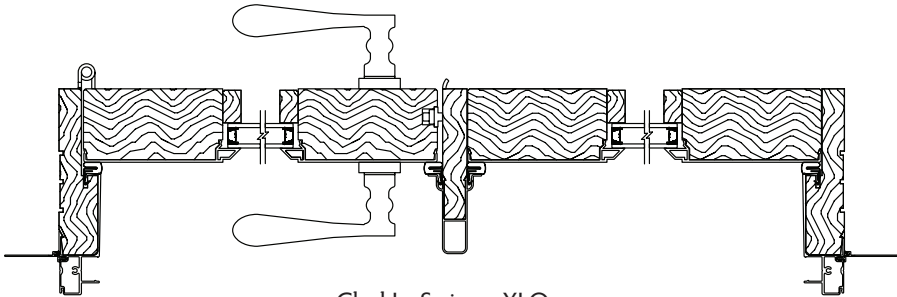
Clad In-Swing
7-13/16" Bottom Rail
Entry Sill Option



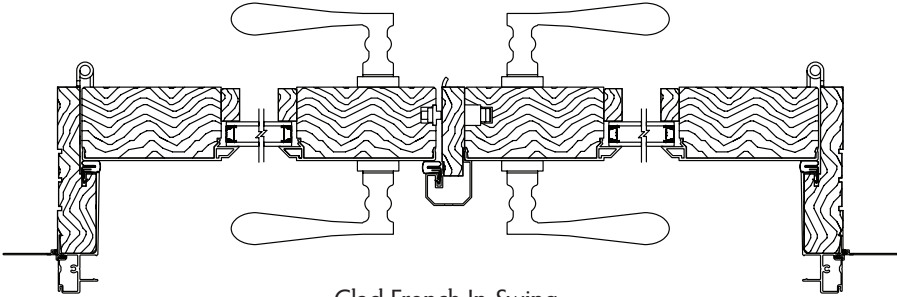
Clad In-Swing
12" Bottom Rail
Entry Sill Option

Swing Patio Doors

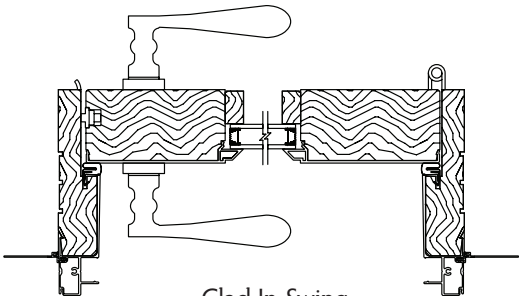
Scale: 2"=1' (all sections)



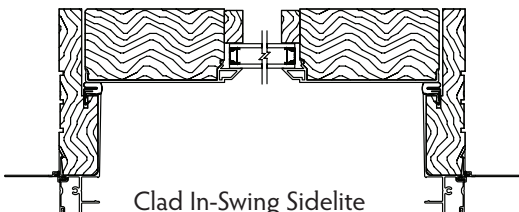
Clad In-Swing - XLO
2-1/4" Panel
4-13/16" Stiles
Horizontal Section



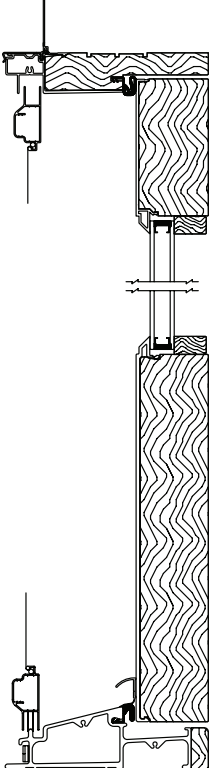
Clad French In-Swing
2-1/4" Panel
4-13/16" Stiles
Horizontal Section



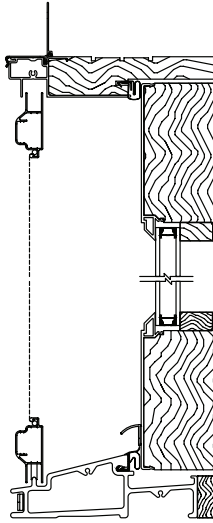
Clad In-Swing
2-1/4" Panel
4-13/16" Stiles
Horizontal Section



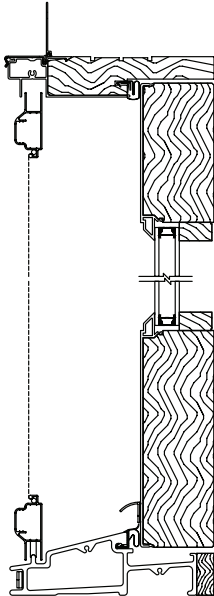
Clad In-Swing Sidelite
2-1/4" Panel
Horizontal Section



Clad In-Swing
2-1/4" Panel
12" Bottom Rail
Vertical Section



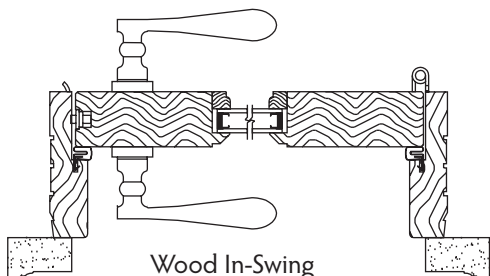
Clad In-Swing
2-1/4" Panel
4-13/16" Bottom Rail
Vertical Section



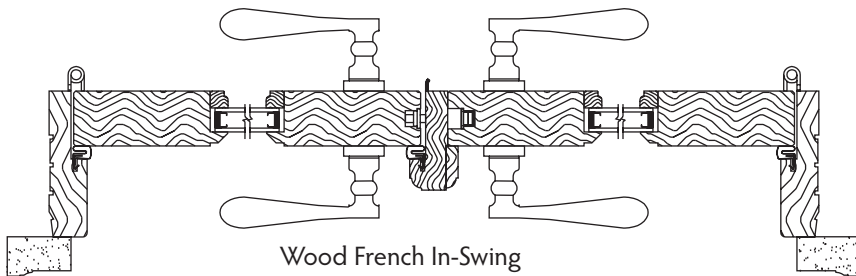
Clad In-Swing
2-1/4" Panel
7-13/16" Bottom Rail
Vertical Section

Swing Patio Doors

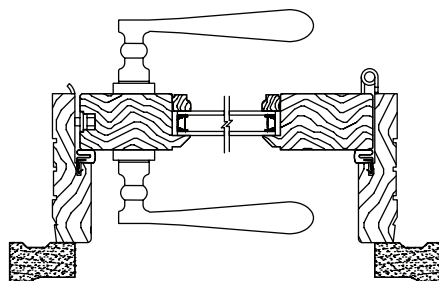
Scale: 2"=1' (all sections)



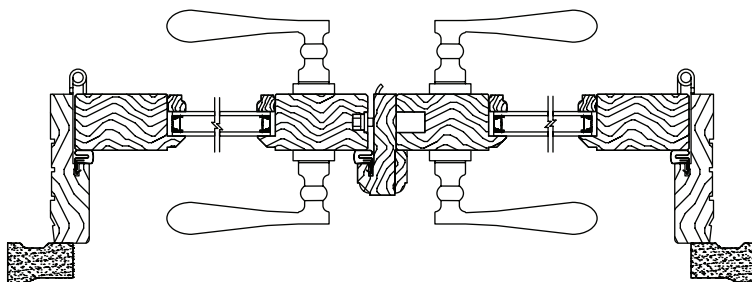
Wood In-Swing
4-13/16" Stiles
Horizontal Section



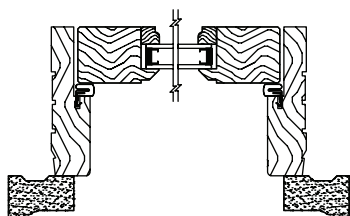
Wood French In-Swing
4-13/16" Stiles
Horizontal Section



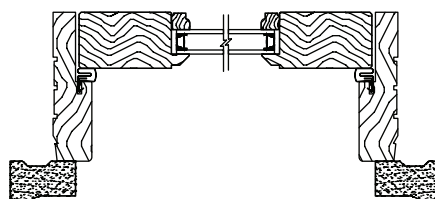
Wood In-Swing
3-3/8" Stiles
Horizontal Section



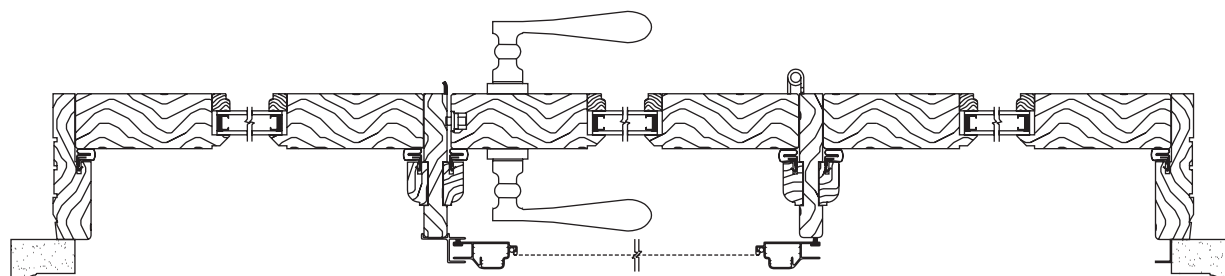
Wood French In-Swing
3-3/8" Stiles
Horizontal Section



Wood In-Swing Sidelite
Narrow Stile
Horizontal Section



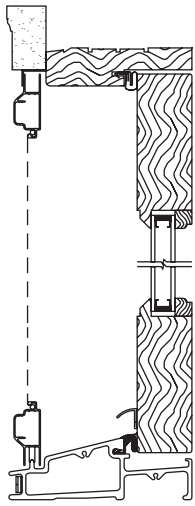
Wood In-Swing Sidelite
3-3/8" Stiles
Horizontal Section



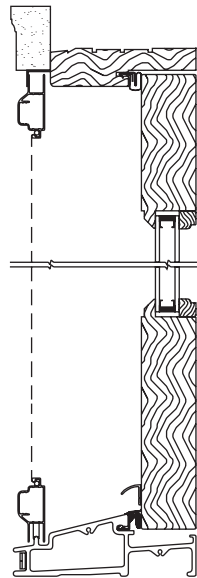
Wood In-Swing 3 Wide Door
4-13/16" Stiles
Horizontal Section

Swing Patio Doors

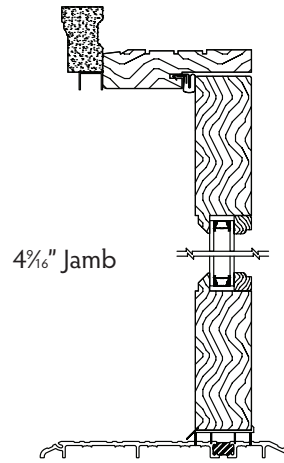
Scale: 2"=1' (all sections)



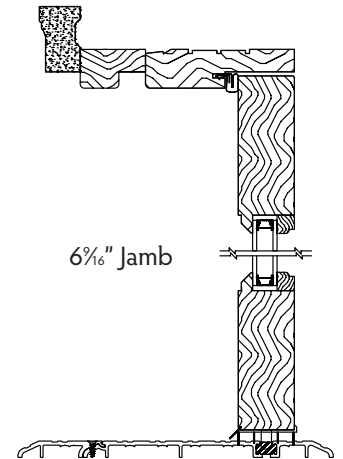
Wood In-Swing
6/6 Height
4-13/16" Bottom Rail
Vertical Section



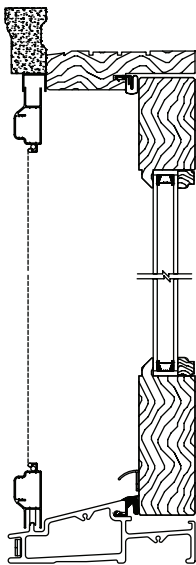
Wood In-Swing
6/8, 7/0, 8/0 & 9/0 Heights
7-13/16" Bottom Rail
Vertical Section



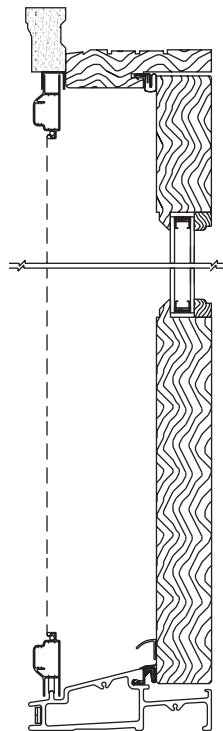
4 1/16" Jamb
Wood In-Swing
4-13/16" Bottom Rail
ADA Sill Option



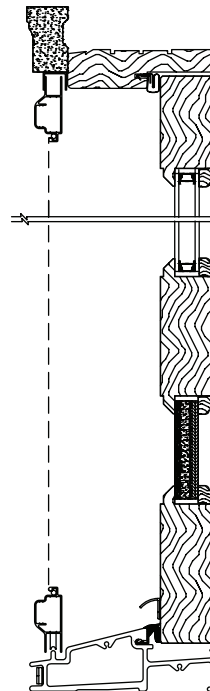
6 1/16" Jamb
Wood In-Swing
4-13/16" Bottom Rail
ADA Sill Option



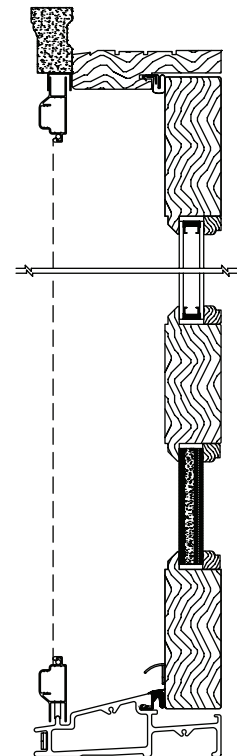
Clad In-Swing
6/8, 7/0, 8/0 & 9/0 Heights
4-13/16" Bottom Rail
Vertical Section



Wood In-Swing
12" Bottom Rail Option
Vertical Section



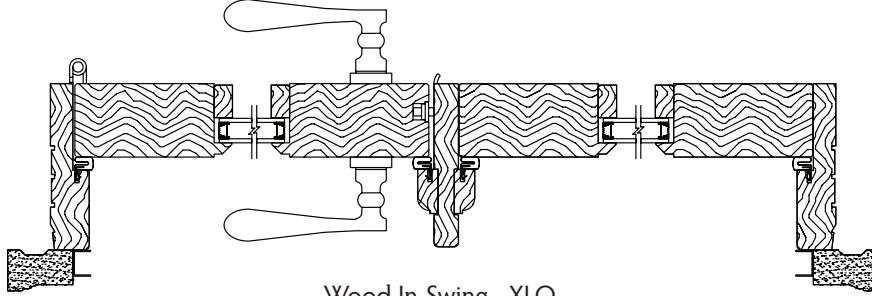
Wood In-Swing
Mid-Rail Door
4-13/16" Bottom Rail
Vertical Section



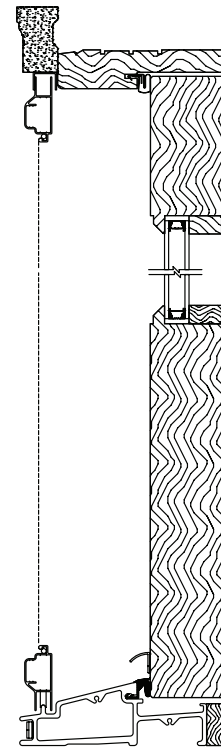
Wood In-Swing
Mid-Rail Door
7-13/16" Bottom Rail
Vertical Section

Swing Patio Doors

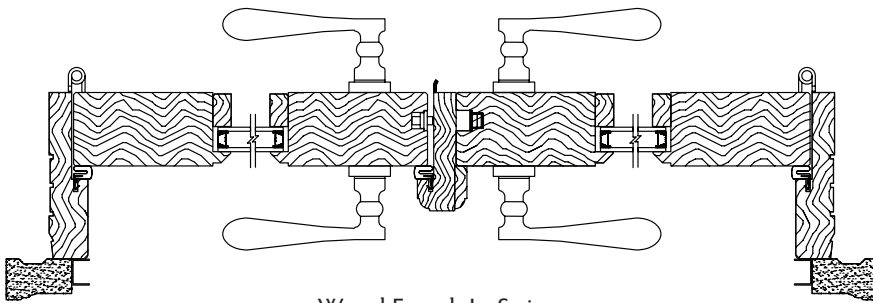
Scale: 2"=1' (all sections)



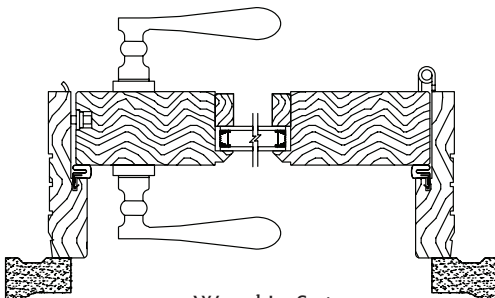
Wood In-Swing - XLO
 2-1/4" Panel
 4-13/16" Stiles
 Horizontal Section



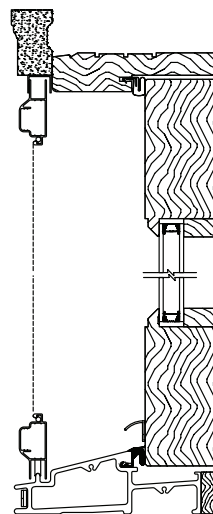
Wood In-Swing
 2-1/4" Panel
 12" Bottom Rail
 Vertical Section



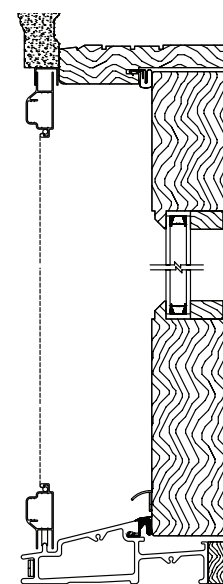
Wood French In-Swing
 2-1/4" Panel
 4-13/16" Stiles
 Horizontal Section



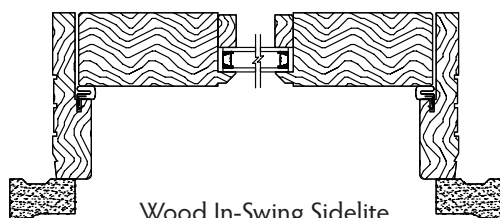
Wood In-Swing
 2-1/4" Panel
 4-13/16" Stiles
 Horizontal Section



Wood In-Swing
 2-1/4" Panel
 4-13/16" Bottom Rail
 Vertical Section



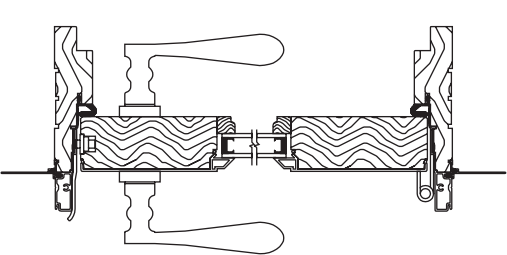
Wood In-Swing
 2-1/4" Panel
 7-13/16" Bottom Rail
 Vertical Section



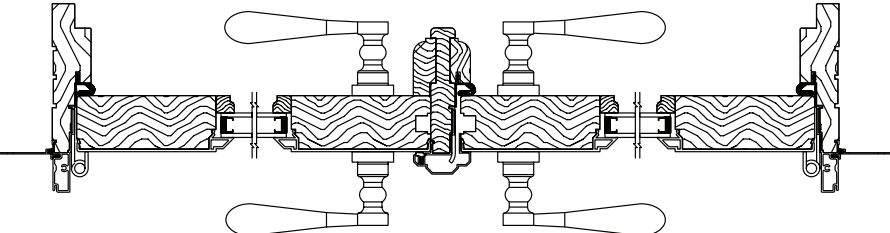
Wood In-Swing Sidelite
 2-1/4" Panel
 Horizontal Section

Swing Patio Doors

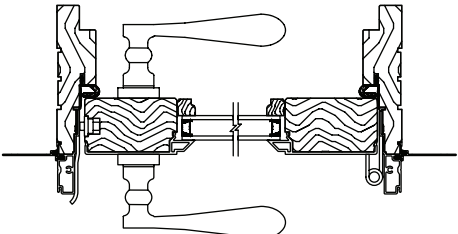
Scale: 2"=1' (all sections)



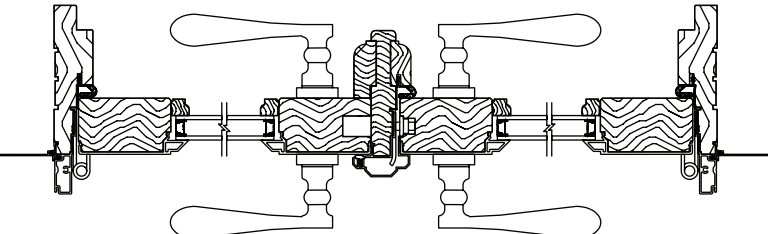
Clad Out-Swing
4-13/16" Stiles
Horizontal Section



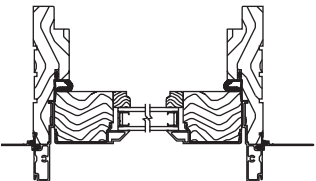
Clad French Out-Swing
4-13/16" Stiles
Horizontal Section



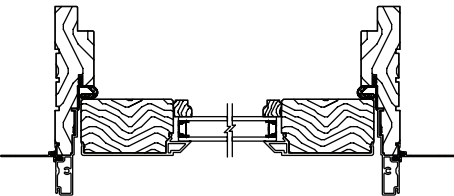
Clad Out-Swing
3-3/8" Stiles
Horizontal Section



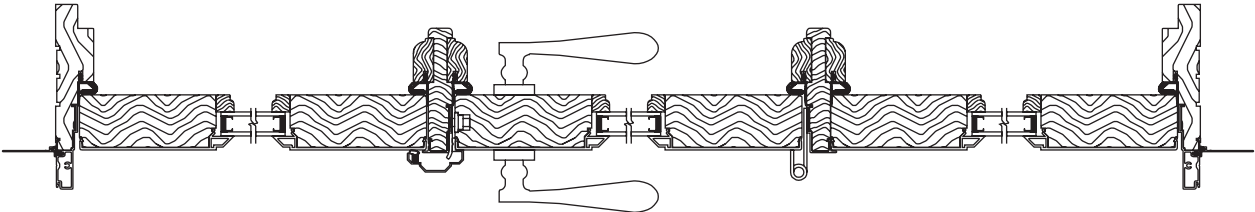
Clad French Out-Swing
3-3/8" Stiles
Horizontal Section



Clad Out-Swing Side Lite
Narrow Stile
Horizontal Section



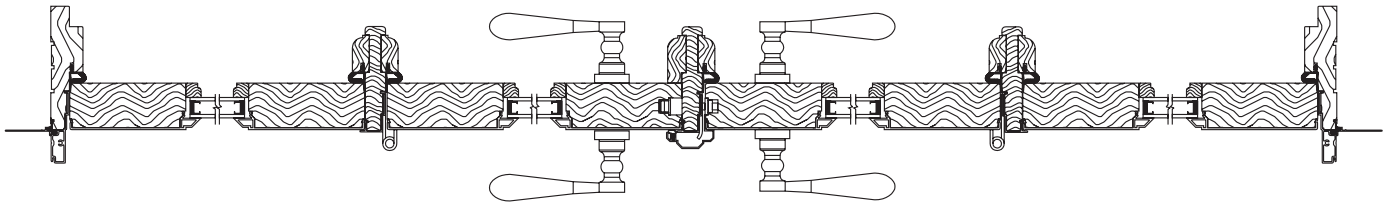
Clad Out-Swing Sidelite
3-3/8" Stiles
Horizontal Section



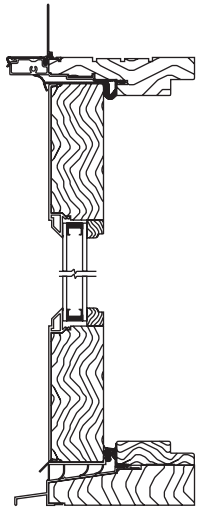
Clad Out-Swing 3-Wide Door - Continuous Head & Sill
4-13/16" Stiles
Horizontal Section

Swing Patio Doors

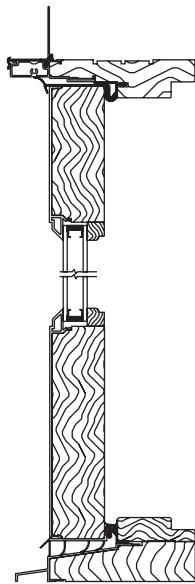
Scale: 2"=1' (all sections)



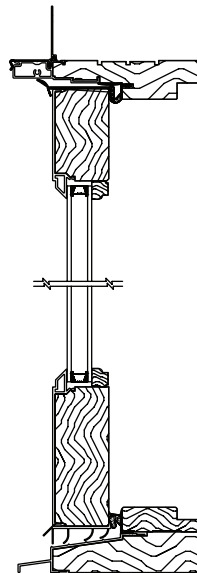
Clad Out-Swing 4-Wide Door Continuous Head and Sill - Horizontal Section
(Drawing Not to scale)



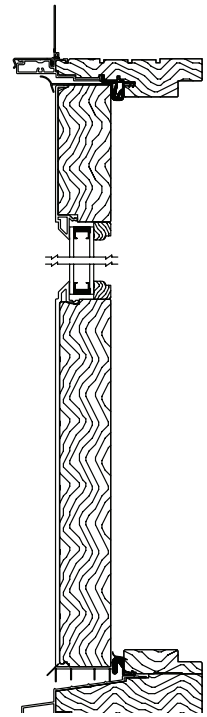
Clad Out-Swing
6/6 Height
4-13/16" Bottom Rail
Vertical Section



Clad Out-Swing
6/8, 7/0, 8/0 & 9/0 Heights
7-13/16" Bottom Rail
Vertical Section



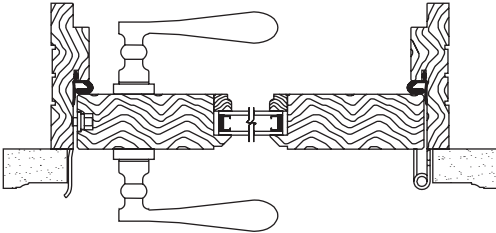
Clad Out-Swing
6/8, 7/0, 8/0 & 9/0 Heights
4-13/16" Bottom Rail
Vertical Section



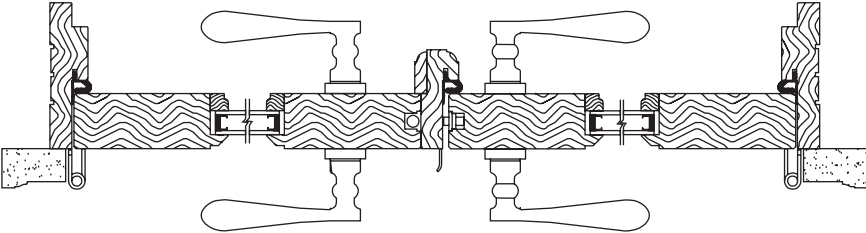
Clad Out-Swing
12" Bottom Rail Option
Vertical Section

Swing Patio Doors

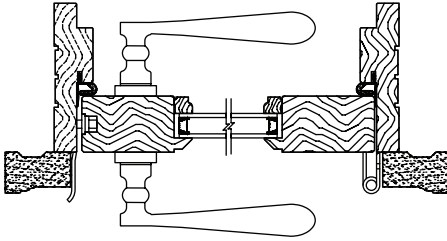
Scale: 2"=1' (all sections)



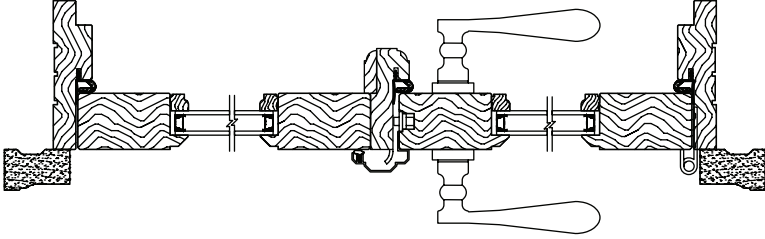
Wood Out-Swing
Horizontal Section



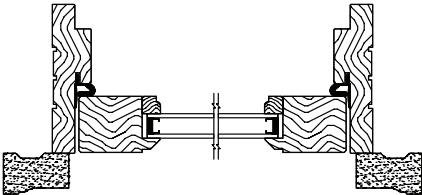
Wood Out-Swing French Door
Horizontal Section



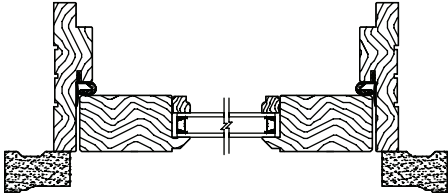
Wood Out-Swing
3-3/8" Stiles
Horizontal Section



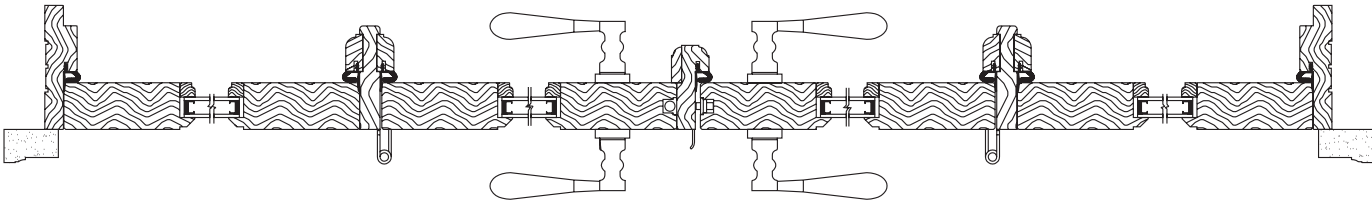
Wood Out-Swing OXR Door
3-3/8" Stiles
Horizontal Section



Wood Out-Swing Side Lite
Narrow Stile
Horizontal Section



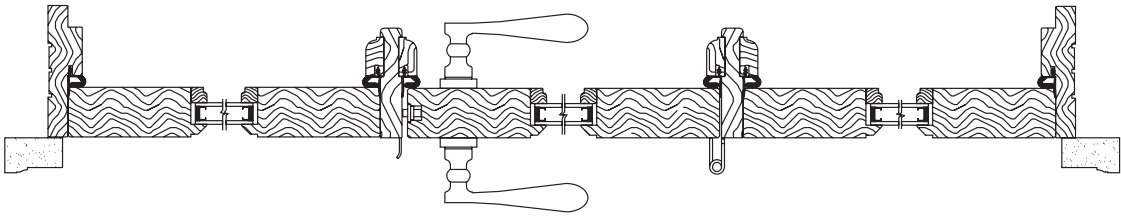
Wood Out-Swing Side Lite
3-3/8" Stiles
Horizontal Section



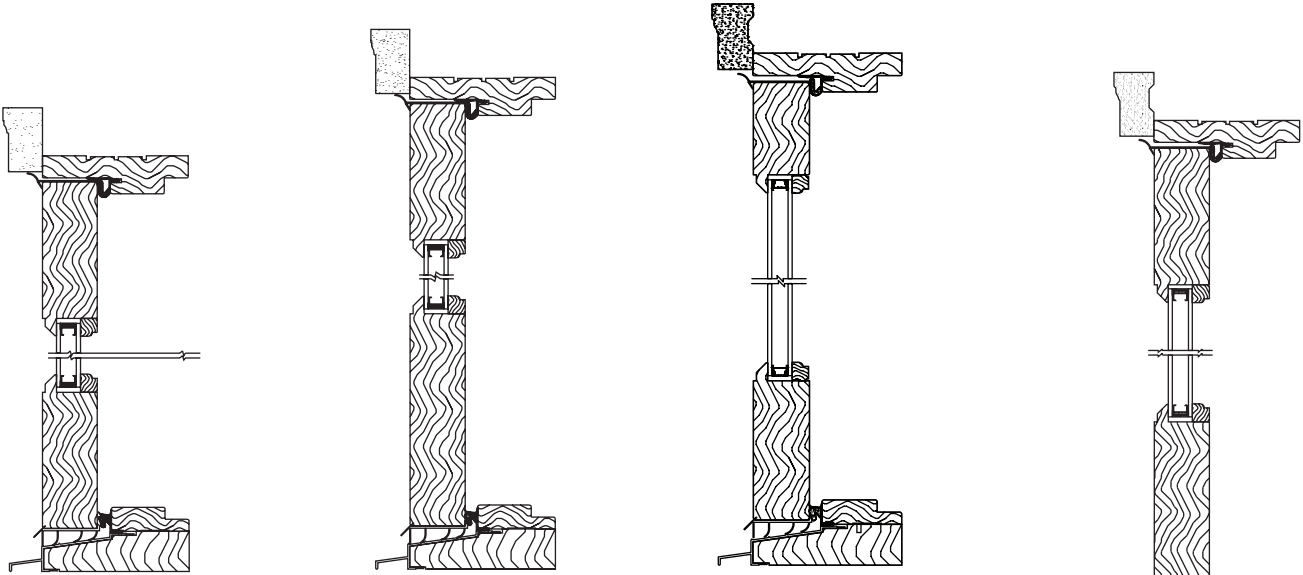
Wood Out-Swing 4-Wide Door Continuous Head and Sill
Horizontal Section

Swing Patio Doors

Scale: 2"=1' (all sections)



Wood Out-Swing 3-Wide Door Horizontal Section - Continuous Head & Sill
(Drawing Not to scale)

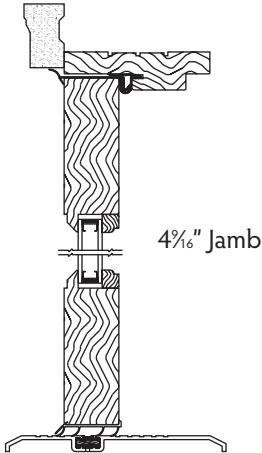


Wood Out-Swing
6/6 Height
4-13/16" Bottom Rail
Vertical Section

Wood Out-Swing
6/8, 7/0, 8/0 & 9/0 Heights
7-13/16" Bottom Rail
Vertical Section

Wood Out-Swing
6/8, 7/0, 8/0 & 9/0 Heights
4-13/16" Bottom Rail
Vertical Section

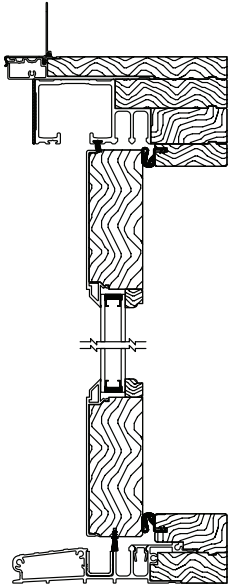
Wood Out-Swing
12" Bottom Rail Option
Vertical Section



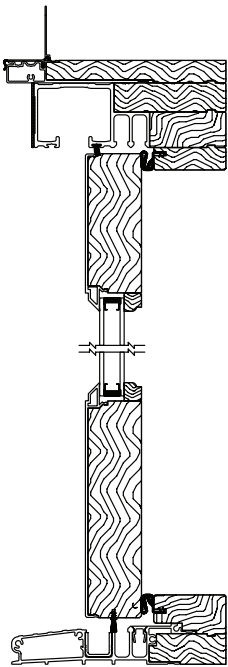
Wood Out-Swing
6/6 Height ADA Sill Option
4-13/16" Bottom Rail
Vertical Section

Fold-A-Way Patio Doors

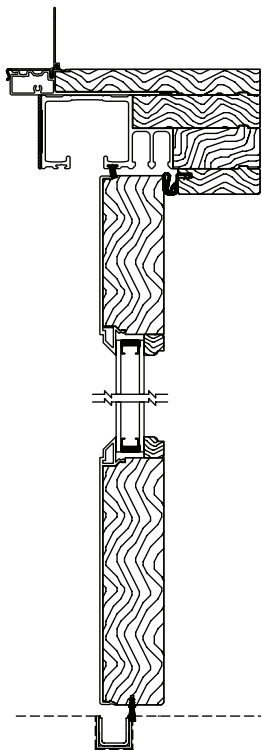
Scale: 2"=1' (all sections)



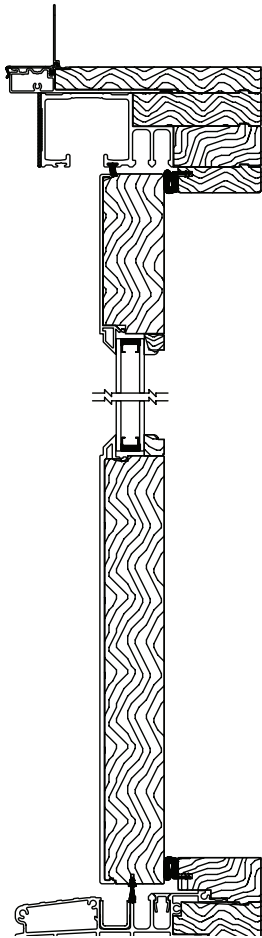
Clad Fold-A-Way
6/6 Height
4-13/16" Bottom Rail
Vertical Section



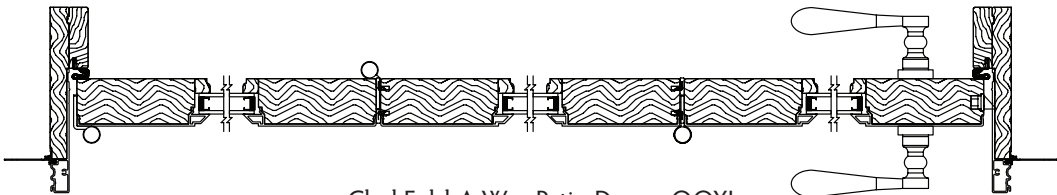
Clad Fold-A-Way
6/8, 7/0 & 8/0 Height
7-13/16" Bottom Rail
Vertical Section



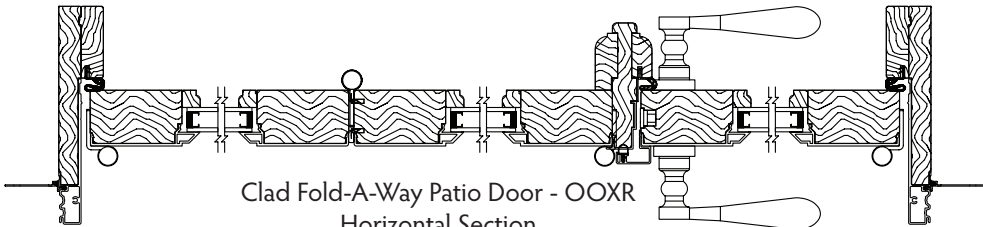
Clad Fold-A-Way
Floor Channel Application
6/8, 7/0 & 8/0 Height
7-13/16" Bottom Rail
Vertical Section



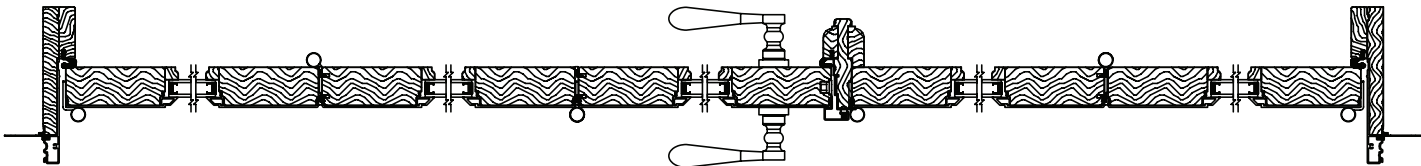
Clad Fold-A-Way
12" Bottom Rail Option
Vertical Section



Clad Fold-A-Way Patio Door - OOXL
Horizontal Section
(Drawing Not to scale)



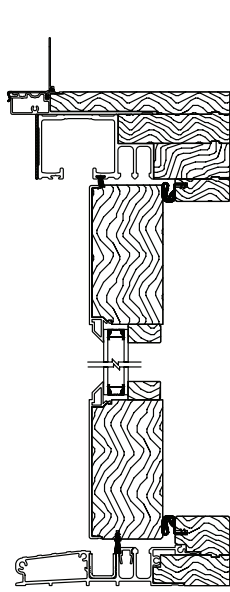
Clad Fold-A-Way Patio Door - OOXR
Horizontal Section
(Drawing Not to scale)



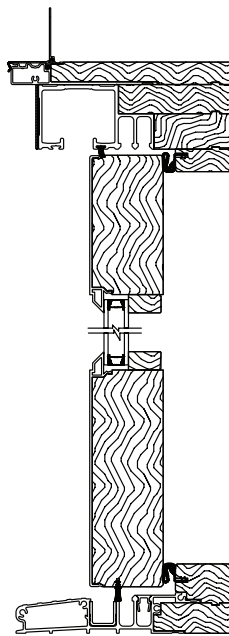
Clad Fold-A-Way Patio Door - OOXLO
(Drawing Not to scale)

Fold-A-Way Patio Doors

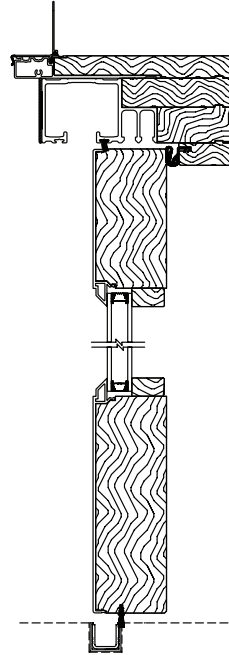
Scale: 2"=1' (all sections)



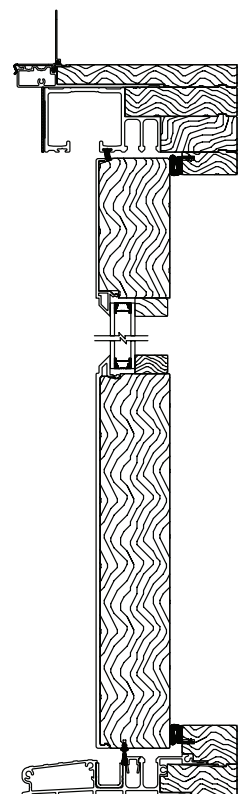
Clad Fold-A-Way
2-1/4" Panel
6/6 Height
4-13/16" Bottom Rail
Vertical Section



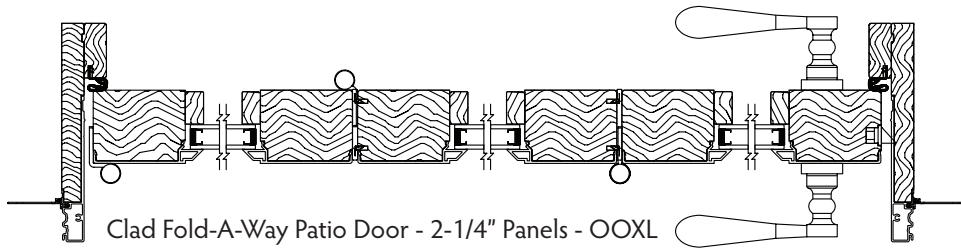
Clad Fold-A-Way
2-1/4" Panel
6/8, 7/0 & 8/0 Height
7-13/16" Bottom Rail
Vertical Section



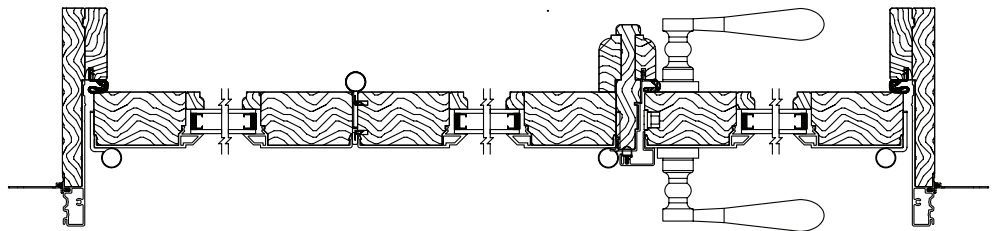
Clad Fold-A-Way
2-1/4" Panel
Floor Channel Application
6/8, 7/0 & 8/0 Height
7-13/16" Bottom Rail
Vertical Section



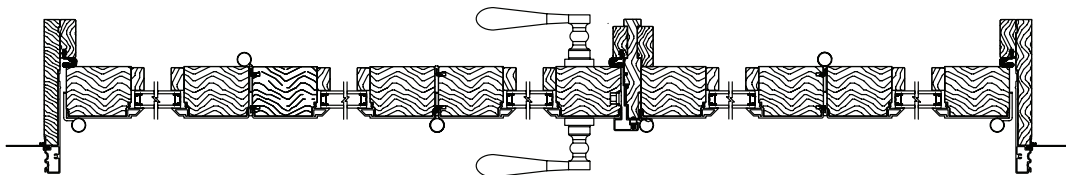
Clad Fold-A-Way
2-1/4" Panel
12" Bottom Rail Option
Vertical Section



Clad Fold-A-Way Patio Door - 2-1/4" Panels - OOXL
Horizontal Section
(Drawing Not to scale)



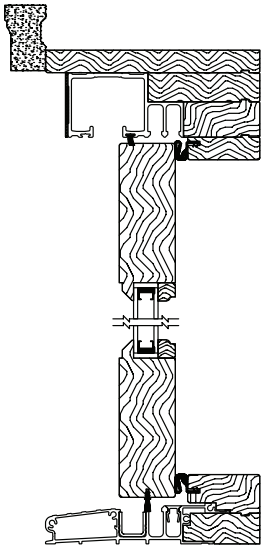
Clad Fold-A-Way Patio Door - 2-1/4" Panels - OOXR
Horizontal Section
(Drawing Not to scale)



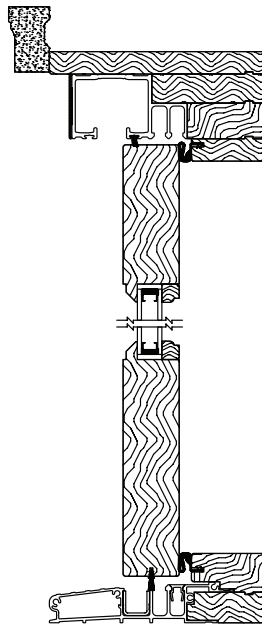
Clad Fold-A-Way Patio Door - 2-1/4" Panels - OOXLOO
(Drawing Not to scale)

Fold-A-Way Patio Doors

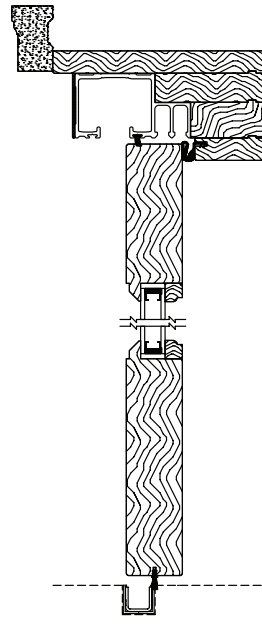
Scale: 2" = 1' (all sections)



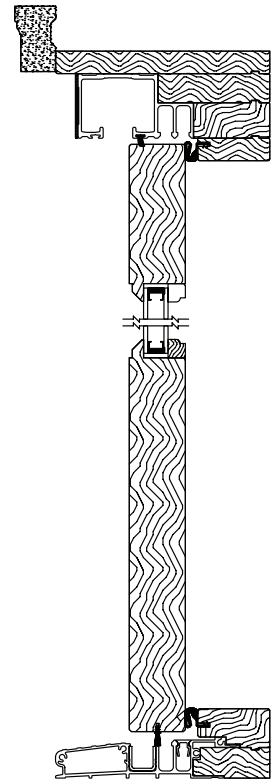
Wood Fold-A-Way
6/6 Height
4-13/16" Bottom Rail
Vertical Section



Wood Fold-A-Way
6/8, 7/0 & 8/0 Height
7-13/16" Bottom Rail
Vertical Section



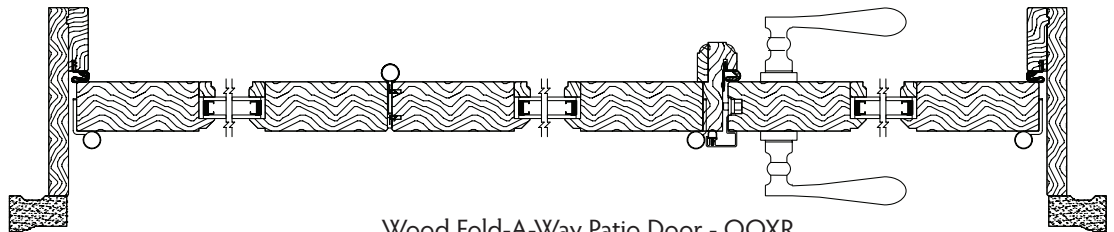
Wood Fold-A-Way
Floor Channel Application
6/8, 7/0 & 8/0 Height
Vertical Section



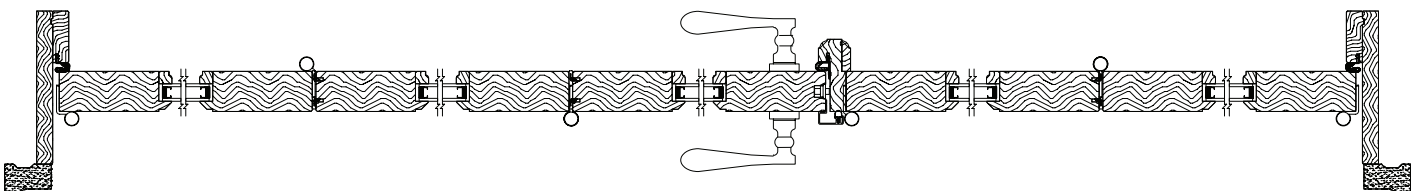
Wood Fold-A-Way
12" Bottom Rail Option
Vertical Section



Wood Fold-A-Way Patio Door - OOXL
Horizontal Section
(Drawing Not to scale)



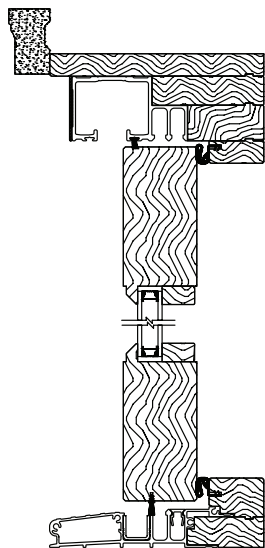
Wood Fold-A-Way Patio Door - OOXR
Horizontal Section
(Drawing Not to scale)



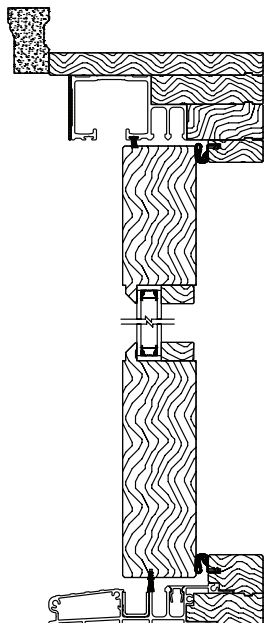
Wood Fold-A-Way Patio Door - OOXLOO
(Drawing Not to scale)

Fold-A-Way Patio Doors

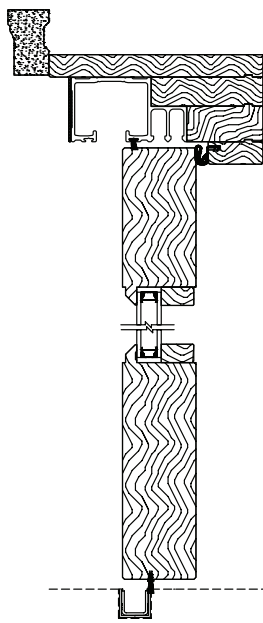
Scale: 2"=1' (all sections)



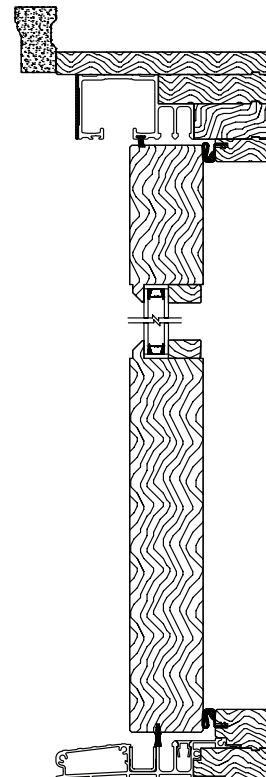
Wood Fold-A-Way
2-1/4" Panel
6/6 Height
4-13/16" Bottom Rail
Vertical Section



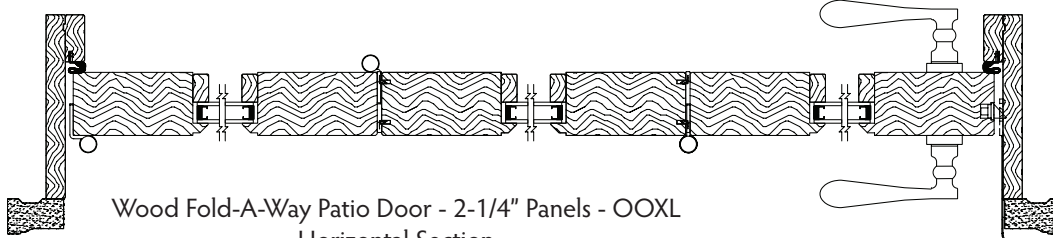
Wood Fold-A-Way
2-1/4" Panel
6/8, 7/0 & 8/0 Height
7-13/16" Bottom Rail
Vertical Section



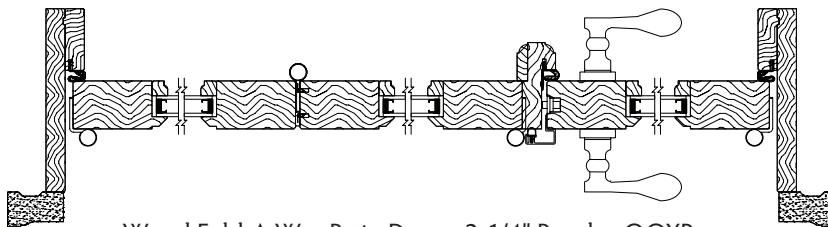
Wood Fold-A-Way
2-1/4" Panel
Floor Channel Application
6/8, 7/0 & 8/0 Height
Vertical Section



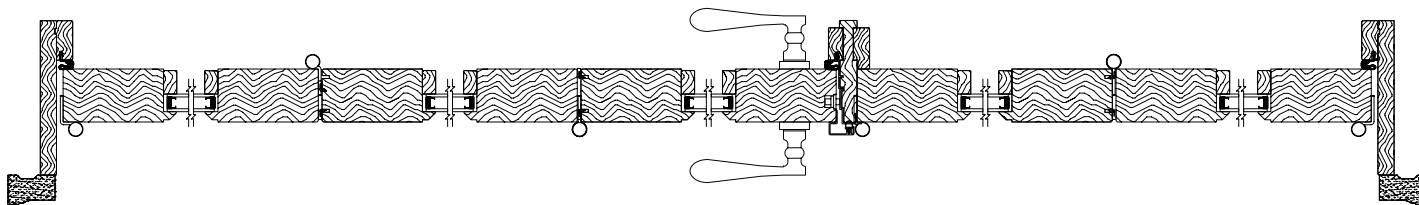
Wood Fold-A-Way
2-1/4" Panel
12" Bottom Rail Option
Vertical Section



Wood Fold-A-Way Patio Door - 2-1/4" Panels - OOXL
Horizontal Section
(Drawing Not to scale)



Wood Fold-A-Way Patio Door - 2-1/4" Panels - OOXR
Horizontal Section
(Drawing Not to scale)

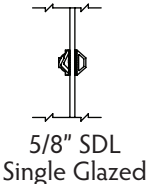


Wood Fold-A-Way Patio Door - 2-1/4" Panels - OOXLO
(Drawing Not to scale)

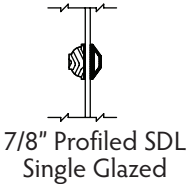
Grille Options

Not Scaled

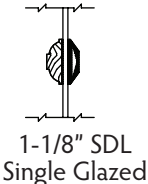
Simulated Divided Lites



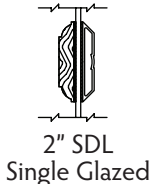
5/8" SDL
Single Glazed



7/8" Profiled SDL
Single Glazed



1-1/8" SDL
Single Glazed



2" SDL
Single Glazed



5/8" SDL
w/o Internal Grille



7/8" SDL
w/o Internal Grille



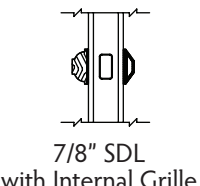
1-1/8" SDL
w/o Internal Grille



2" SDL
w/o Internal Grille



5/8" SDL
with Internal Grille



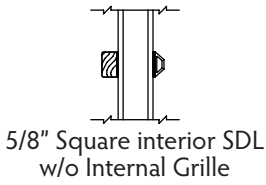
7/8" SDL
with Internal Grille



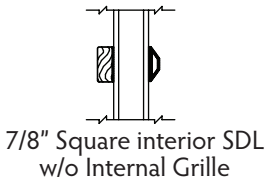
1-1/8" SDL
with Internal Grille



2" SDL
with Internal Grille



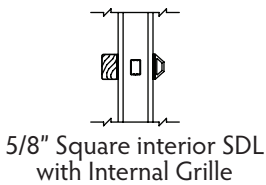
5/8" Square interior SDL
w/o Internal Grille



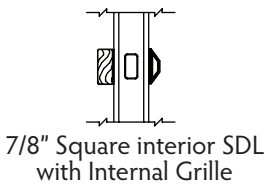
7/8" Square interior SDL
w/o Internal Grille



1-1/8" Square interior SDL
w/o Internal Grille



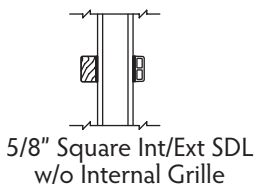
5/8" Square interior SDL
with Internal Grille



7/8" Square interior SDL
with Internal Grille



1-1/8" Square interior SDL
with Internal Grille



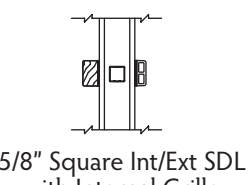
5/8" Square Int/Ext SDL
w/o Internal Grille



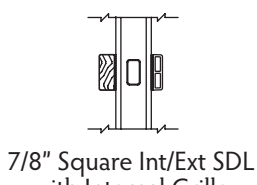
7/8" Square Int/Ext SDL
w/o Internal Grille



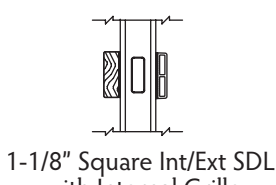
1-1/8" Square Int/Ext SDL
w/o Internal Grille



5/8" Square Int/Ext SDL
with Internal Grille

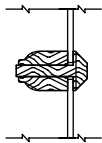


7/8" Square Int/Ext SDL
with Internal Grille

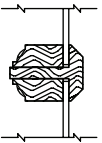


1-1/8" Square Int/Ext SDL
with Internal Grille

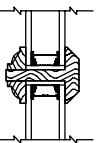
True Divided Lites



7/8" True Divided Lite
Single Glazed



1-1/4" True Divided Lite
Single Glazed



1-1/4" True Divided Lite

Trim Options

Not Scaled

Interior Trim



WM-376



Princeton



WP-442



WP-444



Colonial



Ranch



F-131



GR-499



WM-356

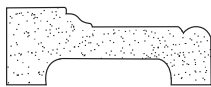


WP-445

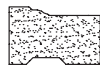


RB3-Rowell

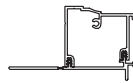
Exterior Trim



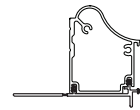
Williamsburg Exterior
Colonial - PVC



2" Brickmould



2" Brickmould
Aluminum



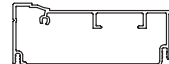
Bullnose Casing
Aluminum



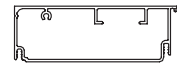
Backband Casing - PVC



Backband Add-On
For Flat Casing



4" Brickmould
Aluminum



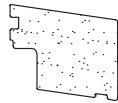
4" Flat Casing
Aluminum



1" x 3-1/2" PVC
Flat Casing



Double Hung
Sill Nosing



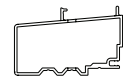
2" Double Hung
Sill Nosing



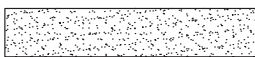
1/4" Sill Nosing
Aluminum



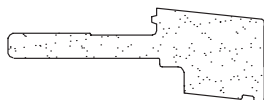
7/8" Sill Nosing
Aluminum



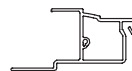
1" Box Sill
Aluminum



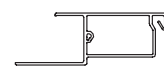
1" x 5-1/2" PVC
Flat Casing



2" Casement
Sill Nosing
(adds 1/2" to rough opening height)



2" Brickmould
Vinyl Clad



Flat Casing
Vinyl Clad

Casement Single Unit Elevations

Primed Unit Dimension	Class								
	19"	21"	23"	27"	31"	33"	35"	39"	45"
Rough Opening	16½"	18½"	20½"	24½"	28½"	30½"	32½"	36½"	42½"
Box Size	16"	18"	20"	24"	28"	30"	32"	36"	42"
Class	11"	13"	15"	19"	23"	25"	27"	31"	37"
20"									
18½"									
18"									
13"									
22"									
20½"									
20"									
15"									
26"									
24½"									
24"									
19"									

Unit Dimension given for primed units only

Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus ¼"

Shaded units meet UBC egress codes (5.7 sq. ft., 20" width, 24" height minimum)

Note: 2" Sill Nosing Option adds 1/2" to Rough Opening Height.

Casement Single Unit Elevations

Class	Primed Unit Dimension									
	19"	21"	23"	27"	31"	33"	35"	39"	45"	
Box Size	Rough Opening									
	16½"	18½"	20½"	24½"	28½"	30½"	32½"	36½"	42½"	
62"										
	1660	1860	2060	2460	2860	3060	3260	3660	4260	
68"										
	1666	1866	2066	2466	2866	3066	3266	3666	4266	
74"										
	1672	1872	2072	2472	2872	3072	3272	3672	4272	
80"										
	1678	1878	2078	2478	2878	3078	3278	3678	4278	
86"										
	1684	1884	2084	2484	2884	3084	3284	3684	4284	

Unit Dimension given for primed units only

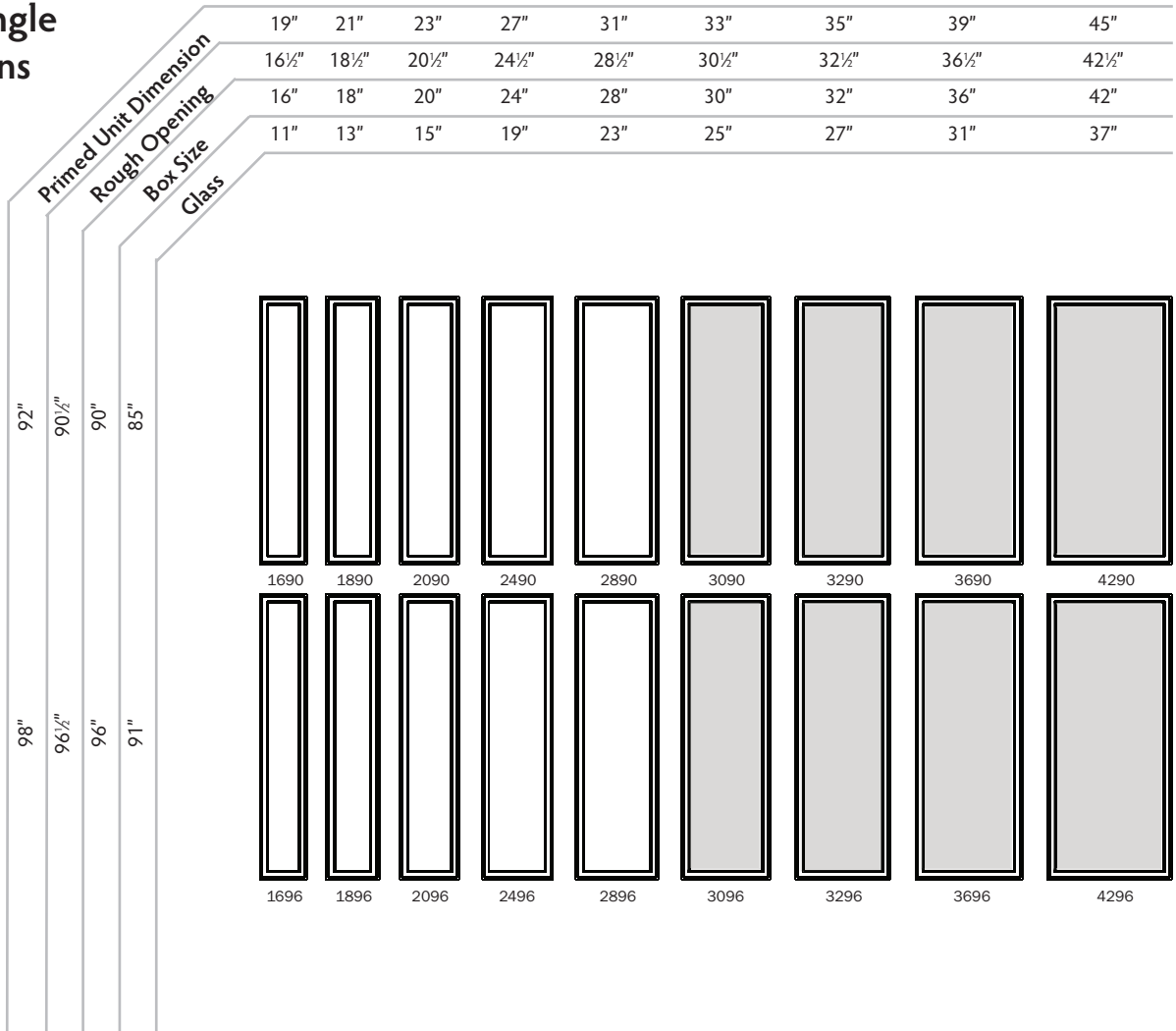
Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus ¼"

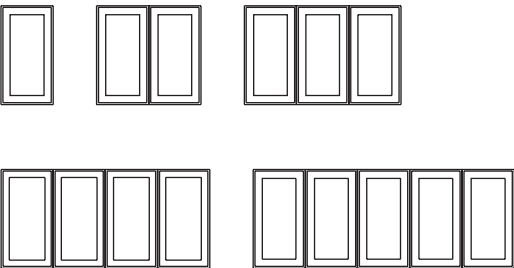
Shaded units meet UBC egress codes (5.7 sq. ft., 20" width, 24" height minimum)

Note: 2" Sill Nosing Option adds 1/2" to Rough Opening Height.

Casement Single Unit Elevations



Casement Multiple Unit Elevations



CASEMENT MULTIPLE UNIT FORMULA

Multiple unit Frame Dimension equals the sum of the individual Frame Dimension

Multiple unit Rough Opening equals the sum of the individual Frame Dimension plus ½"

Clad Unit Dimension – Same as Multiple Unit Frame Dimension

Primed multiple Unit Dimension equals the sum of the total rough opening plus 2½" in width and the total rough opening plus 1½" in height

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus ¼"

Casement Studio Unit Elevations

	51"	57"	59"	63"	67"	75"	81"	87"	93"	99"
Primed Unit Dimension	48 1/2"	54 1/2"	56 1/2"	60 1/2"	64 1/2"	72 1/2"	78 1/2"	84 1/2"	90 1/2"	96 1/2"
Rough Opening	48"	54"	56"	60"	64"	72"	78"	84"	90"	96"
Box Size	43"	49"	51"	55"	59"	67"	73"	79"	85"	91"
Class										

20"	18 1/2"	4818	5418	5618	6018	6418	7218	7818	8418	9018	9618
22"	20 1/2"	4820	5420	5620	6020	6420	7220	7820	8420	9020	9620
26"	24"	4824	5424	5624	6024	6424	7224	7824	8424	9024	9624
30"	28"	4828	5428	5628	6028	6428	7228	7828	8428	9028	9628
32"	30"	4830	5430	5630	6030	6430	7230	7830	8430	9030	9630
34"	32"	4832	5432	5632	6032	6432	7232	7832	8432	9032	9632
38"	36"	4836	5436	5636	6036	6436	7236	7836	8436	9036	9636
42"	40"	4840	5440	5640	6040	6440	7240	7840	8440	9040	9640
44"	42"	4842	5442	5642	6042	6442	7242	7842	8442	9042	9642
50"	48"	4848	5448	5648	6048	6448	7248	7848	8448	9048	9648
56"	54"	4854	5454	5654	6054	6454	7254	7854	8454	9054	9654
66"	60"	4860	5460	5660	6060	6460	7260	7860	8460	9060	9660
68"	66"	4866	5466	5666	6066	6466	7266	7866	8466	9066	9666
74"	72"	4872	5472	5672	6072	6472	7272	7872	8472	9072	9672

Unit Dimension given for primed units only

Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Units 48" x 48" or larger use 1" insulated glass.

Casement Studio Unit Elevations

Primed Unit Dimension Rough Opening Box Glass	80"	51"	57"	59"	63"	67"	75"	81"	87"	93"	99"
	78½"	48½"	54½"	56½"	60½"	64½"	72½"	78½"	84½"	90½"	96½"
	78"	48"	54"	56"	60"	64"	72"	78"	84"	90"	96"
	73"	43"	49"	51"	55"	59"	67"	73"	79"	85"	91"
86"	86"	4878	5478	5678	6078	6478	7278	7878	8478	9078	9678
84½"	84½"	4884	5484	5684	6084	6484	7284	7884	8484	9084	9684
84"	84"	4890	5490	5690	6090	6490	7290	7890	8490	9090	9690
79"	79"	4896	5496	5696	6096	6496	7296	7896	8496	9096	9696
92"	92"										
90½"	90½"										
90"	90"										
85"	85"										
98"	98"										
96½"	96½"										
96"	96"										
91"	91"										

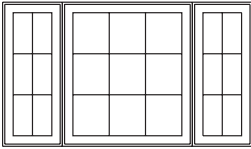
Unit Dimension given for primed units only

Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus ¼"

Units 48" x 48" or larger use 1" insulated glass.

Casement Triple Picture Unit



Casement Triple Picture Units consist of a Studio Unit Center with two single casement flankers

Triple Picture Frame dimensions equal the sum of the individual boxes.

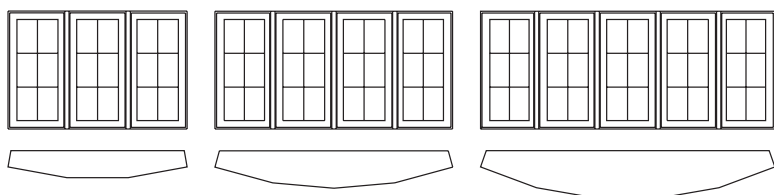
Triple Picture Rough Opening Dimension equals the complete frame dimension plus ½"

Clad Triple Picture Unit Dimension – Same as Triple Picture Frame Dimension

Primed Triple Picture Unit Dimension equals the sum of the Total Rough Opening plus 2½" width and 1½" height

Masonry Opening: Recommended Minimum of Unit Dimension plus ¼"

Casement Bow Unit



20" Box Widths		3 Wide	4 Wide	5 Wide
Rough Opening	Clad	62"	81 ¹ / ₆ "	101 ¹ / ₆ "
	Primed	61 ¹ / ₆ "	81 ⁵ / ₆ "	100 ¹ / ₂ "
Projection	Clad	4 ¹ / ₆ "	8 ¹ / ₆ "	11 ¹ / ₆ "
	Primed	4 ¹ / ₆ "	8 ¹ / ₆ "	11 ¹ / ₆ "

24" Box Widths		3 Wide	4 Wide	5 Wide
Rough Opening	Clad	73 ⁷ / ₈ "	97 ³ / ₂ "	120 ⁵ / ₈ "
	Primed	73 ⁵ / ₆ "	97"	119 ¹⁵ / ₆ "
Projection	Clad	5 ³ / ₆ "	9 ³ / ₄ "	13 ³ / ₈ "
	Primed	5 ¹⁷ / ₃₂ "	9 ¹ / ₆ "	13 ¹⁵ / ₆ "

28" Box Widths		3 Wide	4 Wide	5 Wide
Rough Opening	Clad	85 ³ / ₄ "	113 ³ / ₈ "	140 ¹ / ₆ "
	Primed	85 ¹ / ₄ "	112 ³ / ₄ "	139 ¹ / ₆ "
Projection	Clad	5 ¹³ / ₆ "	10 ¹³ / ₆ "	15 ⁵ / ₈ "
	Primed	6 ¹ / ₄ "	11"	15 ¹⁵ / ₆ "

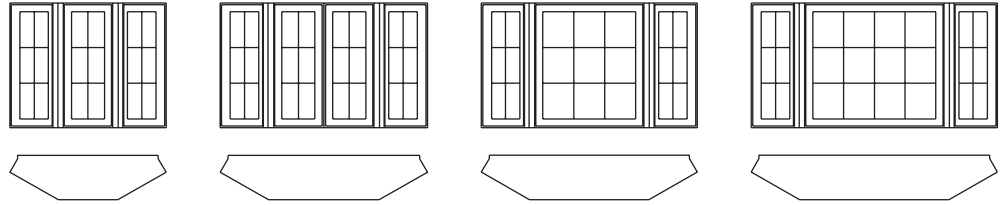
32" Box Widths		3 Wide	4 Wide
Rough Opening	Clad	97 ¹ / ₆ "	129 ¹ / ₆ "
	Primed	97 ¹ / ₆ "	128 ¹ / ₂ "
Projection	Clad	6 ¹ / ₂ "	12 ¹ / ₆ "
	Primed	6 ¹⁵ / ₆ "	12 ¹ / ₆ "

Glass Heights	Box Sizes Clad/Primed Heights	Rough Opening Heights
27"	33 ¹ / ₄ "	33 ³ / ₄ "
31"	37 ¹ / ₄ "	37 ³ / ₄ "
35"	41 ¹ / ₄ "	41 ¹ / ₄ "
37"	43 ¹ / ₄ "	43 ³ / ₄ "
43"	49 ¹ / ₄ "	49 ³ / ₄ "
49"	55 ¹ / ₄ "	55 ³ / ₄ "
55"	61 ¹ / ₄ "	61 ¹ / ₄ "
61"	67 ¹ / ₄ "	67 ³ / ₄ "
67"	73 ¹ / ₄ "	73 ³ / ₄ "
73"	79 ¹ / ₄ "	79 ³ / ₄ "
79"	85 ¹ / ₄ "	85 ³ / ₄ "
85"	91 ¹ / ₄ "	91 ³ / ₄ "
91"	97 ¹ / ₄ "	97 ³ / ₄ "

Vertical rough openings indicated are standard unit heights with 1¹/₄" added for head and seat boards – deduct for walk out bow

Vertical unit dimensions reflect clad to clad and brickmould to sill nosing. The use of head and seat boards will add an additional 1¹/₄" to the overall frame height.

Casement Bay Window (30°)



	Box	20/20/20"	20/20/20/20"	20/54/20"	20/64/20"
Unit Dimension	Clad	60 ³ / ₁₆ "	80 ³ / ₁₆ "	94 ³ / ₁₆ "	104 ³ / ₁₆ "
	Primed	63 ³ / ₁₆ "	83 ³ / ₁₆ "	97 ³ / ₁₆ "	107 ³ / ₁₆ "
Rough Opening	Clad	60 ³ / ₁₆ "	80 ³ / ₁₆ "	94 ³ / ₁₆ "	104 ³ / ₁₆ "
	Primed	58 ¹³ / ₁₆ "	78 ¹³ / ₁₆ "	92 ¹³ / ₁₆ "	102 ¹³ / ₁₆ "
Projection	Clad	11 ⁷ / ₈ "	11 ⁷ / ₈ "	11 ⁷ / ₈ "	11 ⁷ / ₈ "
	Primed	12 ³ / ₈ "	12 ³ / ₈ "	12 ³ / ₈ "	12 ³ / ₈ "

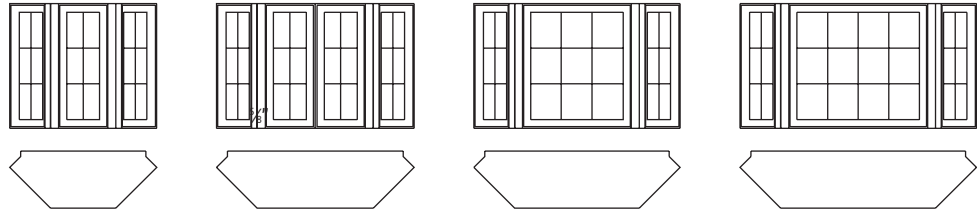
	Box	24/24/24"	24/24/24/24"	24/48/24"	24/60/24"
Unit Dimension	Clad	71 ¹ / ₄ "	95 ¹ / ₄ "	95 ¹ / ₄ "	107 ¹ / ₄ "
	Primed	74"	98"	98"	110"
Rough Opening	Clad	71 ¹ / ₁₆ "	95 ¹ / ₁₆ "	95 ¹ / ₁₆ "	107 ¹ / ₁₆ "
	Primed	69 ³ / ₄ "	93 ³ / ₄ "	93 ³ / ₄ "	105 ³ / ₄ "
Projection	Clad	13 ³ / ₈ "	13 ³ / ₈ "	13 ³ / ₈ "	13 ³ / ₈ "
	Primed	14 ³ / ₈ "	14 ³ / ₈ "	14 ³ / ₈ "	14 ³ / ₈ "

Glass Heights	Box Sizes Clad/Primed Heights	Rough Opening Heights
27"	33 ³ / ₄ "	33 ³ / ₄ "
31"	37 ¹ / ₄ "	37 ³ / ₄ "
35"	41 ¹ / ₄ "	41 ³ / ₄ "
37"	43 ³ / ₄ "	43 ³ / ₄ "
43"	49 ¹ / ₄ "	49 ³ / ₄ "
49"	55 ¹ / ₄ "	55 ³ / ₄ "
55"	61 ¹ / ₄ "	61 ³ / ₄ "
61"	67 ¹ / ₄ "	67 ³ / ₄ "
67"	73 ³ / ₄ "	73 ³ / ₄ "
73"	79 ¹ / ₄ "	79 ³ / ₄ "
79"	85 ¹ / ₄ "	85 ³ / ₄ "
85"	91 ¹ / ₄ "	91 ³ / ₄ "
91"	97 ¹ / ₄ "	97 ³ / ₄ "

Vertical rough openings indicated are standard unit heights with 1/4" added for head and seat boards – deduct for walk out unit

Vertical unit dimensions reflect clad to clad and brickmould to sill nosing. The use of head and seat boards will add an additional 1/4" to the overall frame height.

Casement Bay Window (45°)



	Box	20/20/20"	20/20/20/20"	20/54/20"	20/64/20"
Unit Dimension	Clad	56 ⁵ / ₁₆ "	76 ⁵ / ₁₆ "	90 ⁵ / ₁₆ "	100 ⁵ / ₁₆ "
	Primed	58 ⁵ / ₁₆ "	78 ⁵ / ₁₆ "	92 ⁵ / ₁₆ "	102 ¹ / ₂ "
Rough Opening	Clad	55 ³ / ₄ "	75 ³ / ₄ "	89 ³ / ₄ "	99 ³ / ₄ "
	Primed	53"	73"	87"	97"
Projection	Clad	16 ³ / ₄ "	16 ³ / ₄ "	16 ³ / ₄ "	16 ³ / ₄ "
	Primed	17 ⁹ / ₁₆ "	17 ⁹ / ₁₆ "	17 ⁹ / ₁₆ "	17 ⁹ / ₁₆ "







































































	Box	24/24/24"	24/24/24/24"	24/48/24"	24/60/24"
Unit Dimension	Clad	66"	90"	90"	102"
	Primed	68 ⁵ / ₁₆ "	92 ⁵ / ₁₆ "	98 ⁵ / ₁₆ "	104 ⁵ / ₁₆ "
Rough Opening	Clad	63 ³ / ₄ "	89 ³ / ₄ "	89 ³ / ₄ "	101 ³ / ₈ "
	Primed	62 ¹ / ₁₆ "	86 ¹ / ₁₆ "	86 ¹ / ₁₆ "	98 ¹ / ₁₆ "
Projection	Clad	19 ⁵ / ₈ "	19 ⁵ / ₈ "	19 ⁵ / ₈ "	19 ⁵ / ₈ "
	Primed	20 ³ / ₈ "	20 ³ / ₈ "	20 ³ / ₈ "	20 ³ / ₈ "

Glass Heights	Box Sizes Clad/Primed Heights	Rough Opening Heights
27"	33 ³ / ₄ "	33 ³ / ₄ "
31"	37 ¹ / ₄ "	37 ¹ / ₄ "
35"	41 ¹ / ₄ "	41 ¹ / ₄ "
37"	43 ³ / ₄ "	43 ³ / ₄ "
43"	49 ¹ / ₄ "	49 ¹ / ₄ "
49"	55 ¹ / ₄ "	55 ¹ / ₄ "
55"	61 ¹ / ₄ "	61 ¹ / ₄ "
61"	67 ¹ / ₄ "	67 ¹ / ₄ "
67"	73 ¹ / ₄ "	73 ¹ / ₄ "
73"	79 ¹ / ₄ "	79 ¹ / ₄ "
79"	85 ¹ / ₄ "	85 ¹ / ₄ "
85"	91 ¹ / ₄ "	91 ¹ / ₄ "
91"	97 ¹ / ₄ "	97 ¹ / ₄ "

Vertical rough openings indicated are standard unit heights with 1¹/₄" added for head and seat boards – deduct for walk out unit

Vertical unit dimensions reflect clad to clad and brickmould to sill nosing. The use of head and seat boards will add an additional 1¹/₄" to the overall frame height.

French Push-Out Casement Elevations

	33"	35"	39"	43"	51"	59"	63"
	30½"	32½"	36½"	40½"	48½"	56½"	60½"
	30"	32"	36"	40"	48"	56"	60"
	10⅞"	11⅞"	13⅞"	15⅞"	19⅞"	23⅞"	25⅞"
Primed Unit Dimension							
Rough Opening							
Frame							
Glass							
22"							
	3020	3220	3620	4020	4820	5620	6020
26"							
	3024	3224	3624	4024	4824	5624	6024
30"							
	3028	3228	3628	4028	4828	5628	6028
32"							
	3030	3230	3630	4030	4830	5630	6030
34"							
	3032	3232	3632	4032	4832	5632	6032
38"							
	3036	3236	3636	4036	4836	5636	6036
42"							
	3040	3240	3640	4040	4840	5640	6040
44"							
	3042	3242	3642	4042	4842	5642	6042
50"							
	3048	3248	3648	4048	4848	5648	6048
56"							
	3054	3254	3654	4054	4854	5654	6054

Clad Unit Dimension is identical to Frame Size.





































































































































French Push-Out Casement Elevations

	33"	35"	39"	43"	51"	59"	63"
Primed Unit Dimension	30½"	32½"	36½"	40½"	48½"	56½"	60½"
Rough Opening	30"	32"	36"	40"	48"	56"	60"
Frame	10⅞"	11⅞"	13⅞"	15⅞"	19⅞"	23⅞"	25⅞"
Glass							

62"							
	3066	3266	3666	4066	4866	5666	6066
68"							
	3072	3272	3672	4072	4872	5672	6072
74"							
	3078	3278	3678	4078	4878	5678	6078
80"							
	3084	3284	3684	4084	4884	5684	6084

Clad Unit Dimension is identical to Frame Size.

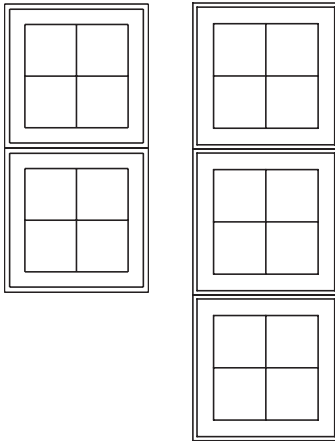
Awning Single Unit Elevations

Primed Unit Dimension Rough Opening Box Size Class	21"	23"	27"	31"	33"	35"	39"	45"	51"	57"	63"
	18½"	20½"	24½"	28½"	30½"	32½"	36½"	42½"	48½"	54½"	60½"
	18"	20"	24"	28"	30"	32"	36"	42"	48"	54"	60"
	13"	15"	19"	23"	25"	28"	31"	37"	43"	49"	55"
20"	 1818	 2018	 2418	 2818	 3018	 3218	 3618	 4218	 4818	 5418	 6018
22"	 1820	 2020	 2420	 2820	 3020	 3220	 3620	 4220	 4820	 5420	 6020
26"	 1824	 2024	 2424	 2824	 3024	 3224	 3624	 4224	 4824	 5424	 6024
30"	 1828	 2028	 2428	 2828	 3028	 3228	 3628	 4228	 4828	 5428	 6028
32"	 1830	 2030	 2430	 2830	 3030	 3230	 3630	 4230	 4830	 5430	 6030
34"	 1832	 2032	 2432	 2832	 3032	 3232	 3632	 4232	 4832	 5432	 6032
38"	 1836	 2036	 2436	 2836	 3036	 3236	 3636	 4236	 4836	 5436	 6036
42"	 1840	 2040	 2440	 2840	 3040	 3240	 3640	 4240	 4840	 5440	 6040
44"	 1842	 2042	 2442	 2842	 3042	 3242	 3642	 4242	 4842	 5442	 6042
50"	 1848	 2048	 2448	 2848	 3048	 3248	 3648	 4248	 4848	 5448	 6048
56"	 1854	 2054	 2454	 2854	 3054	 3254	 3654	 4254	 4854	 5454	 6054
62"	 1860	 2060	 2460	 2860	 3060	 3260	 3660	 4260	 4860	 5460	 6060

Unit Dimension given for primed units only.

Clad Unit Dimension is identical to Frame Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus ¼"



AWNING MULTIPLE UNIT FORMULA

These formulas apply to mulled and stacked standard units as well as Awning Studio Units

Awning windows may be mulled in width as well as height. Calculate the rough opening and unit dimension as follows:

Multiple unit Frame Dimension equals the sum of the individual frame boxes

Multiple unit Rough Opening equals the sum of the individual boxes plus $\frac{1}{2}$ "

Clad Unit Dimension – Same as Multiple Unit Frame Dimension

Primed multiple Unit Dimension equals the total Rough Opening plus $2\frac{1}{2}$ " width and the Rough Opening plus $1\frac{1}{2}$ " height.

Masonry Opening: Recommended minimum of Unit Dimension plus $\frac{3}{4}$ " or Frame Dimension

Double Hung Unit Elevations

WIDERAILS	NARROW RAILS	Class	Sash Opening								
			16"	20"	24"	26"	28"	30"	32"	36"	40"
		Frame	Rough Opening								
			1' 8"	2' 0"	2' 4"	2' 6"	2' 8"	2' 10"	3' 0"	3' 4"	3' 8"
		Primed Unit Dimension	Class								
			24"	28"	32"	34"	36"	38"	40"	44"	48"
74 1/4"	32"	33 1/2"	21 3/8" x 72 1/2"	25 3/8" x 72 1/2"	29 3/8" x 72 1/2"	31 3/8" x 72 1/2"	33 3/8" x 72 1/2"	35 3/8" x 72 1/2"	37 3/8" x 72 1/2"	41 3/8" x 72 1/2"	45 3/8" x 72 1/2"
73"	30"	31 1/2"	21 3/8" x 68 1/2"	25 3/8" x 68 1/2"	29 3/8" x 68 1/2"	31 3/8" x 68 1/2"	33 3/8" x 68 1/2"	35 3/8" x 68 1/2"	37 3/8" x 68 1/2"	41 3/8" x 68 1/2"	45 3/8" x 68 1/2"
72 1/2"	28"	29 1/2"	21 3/8" x 64 1/2"	25 3/8" x 64 1/2"	29 3/8" x 64 1/2"	31 3/8" x 64 1/2"	33 3/8" x 64 1/2"	35 3/8" x 64 1/2"	37 3/8" x 64 1/2"	41 3/8" x 64 1/2"	45 3/8" x 64 1/2"
70 1/4"	26"	27 1/2"	21 3/8" x 60 1/2"	25 3/8" x 60 1/2"	29 3/8" x 60 1/2"	31 3/8" x 60 1/2"	33 3/8" x 60 1/2"	35 3/8" x 60 1/2"	37 3/8" x 60 1/2"	41 3/8" x 60 1/2"	45 3/8" x 60 1/2"
66 1/4"	24"	25 1/2"	21 3/8" x 56 1/2"	25 3/8" x 56 1/2"	29 3/8" x 56 1/2"	31 3/8" x 56 1/2"	33 3/8" x 56 1/2"	35 3/8" x 56 1/2"	37 3/8" x 56 1/2"	41 3/8" x 56 1/2"	45 3/8" x 56 1/2"
58 1/4"	22"	23 1/2"	21 3/8" x 52 1/2"	25 3/8" x 52 1/2"	29 3/8" x 52 1/2"	31 3/8" x 52 1/2"	33 3/8" x 52 1/2"	35 3/8" x 52 1/2"	37 3/8" x 52 1/2"	41 3/8" x 52 1/2"	45 3/8" x 52 1/2"
54 1/4"	20"	21 1/2"	21 3/8" x 48 1/2"	25 3/8" x 48 1/2"	29 3/8" x 48 1/2"	31 3/8" x 48 1/2"	33 3/8" x 48 1/2"	35 3/8" x 48 1/2"	37 3/8" x 48 1/2"	41 3/8" x 48 1/2"	45 3/8" x 48 1/2"
50 1/4"	18"	19 1/2"	21 3/8" x 44 1/2"	25 3/8" x 44 1/2"	29 3/8" x 44 1/2"	31 3/8" x 44 1/2"	33 3/8" x 44 1/2"	35 3/8" x 44 1/2"	37 3/8" x 44 1/2"	41 3/8" x 44 1/2"	45 3/8" x 44 1/2"
46 1/4"	16"	17 1/2"	21 3/8" x 40 1/2"	25 3/8" x 40 1/2"	29 3/8" x 40 1/2"	31 3/8" x 40 1/2"	33 3/8" x 40 1/2"	35 3/8" x 40 1/2"	37 3/8" x 40 1/2"	41 3/8" x 40 1/2"	45 3/8" x 40 1/2"
42 1/4"	14"	15 1/2"	21 3/8" x 36 1/2"	25 3/8" x 36 1/2"	29 3/8" x 36 1/2"	31 3/8" x 36 1/2"	33 3/8" x 36 1/2"	35 3/8" x 36 1/2"	37 3/8" x 36 1/2"	41 3/8" x 36 1/2"	45 3/8" x 36 1/2"
38 1/4"	12"	13 1/2"	21 3/8" x 32 1/2"	25 3/8" x 32 1/2"	29 3/8" x 32 1/2"	31 3/8" x 32 1/2"	33 3/8" x 32 1/2"	35 3/8" x 32 1/2"	37 3/8" x 32 1/2"	41 3/8" x 32 1/2"	45 3/8" x 32 1/2"
34 1/4"	10"	11 1/2"	21 3/8" x 28 1/2"	25 3/8" x 28 1/2"	29 3/8" x 28 1/2"	31 3/8" x 28 1/2"	33 3/8" x 28 1/2"	35 3/8" x 28 1/2"	37 3/8" x 28 1/2"	41 3/8" x 28 1/2"	45 3/8" x 28 1/2"

Shaded units meet UBC egress codes

- **Ground Floor*** (5.0 sq. ft., 20" width, 24" height minimum) in standard 6'10" header application
- **Above Ground Floor** (5.7 sq. ft., 20" width, 24" height minimum) in standard 6'10" header application

Double Hung Unit Elevations

	24"	28"	32"	34"	36"	38"	40"	44"	48"
Primed Unit Dimension	21 ¹ / ₈ "	25 ¹ / ₈ "	29 ¹ / ₈ "	31 ¹ / ₈ "	33 ⁷ / ₈ "	35 ⁷ / ₈ "	37 ⁷ / ₈ "	41 ⁷ / ₈ "	45 ⁷ / ₈ "
Rough Opening	21 ¹ / ₈ "	25 ¹ / ₈ "	29 ¹ / ₈ "	31 ¹ / ₈ "	33 ³ / ₈ "	35 ³ / ₈ "	37 ³ / ₈ "	41 ³ / ₈ "	45 ³ / ₈ "
Frame	1' 8"	2' 0"	2' 4"	2' 6"	2' 8"	2' 10"	3' 0"	3' 4"	3' 8"
Sash Opening	16"	20"	24"	26"	28"	30"	32"	36"	40"
Glass									
WIDE RAILS	78 ¹ / ₄ "	77"	76 ¹ / ₂ "	6' 2 ¹ / ₂ "	34"	35 ¹ / ₈ "			
NARROW RAILS	82 ¹ / ₄ "	81"	80 ¹ / ₂ "	6' 6 ¹ / ₂ "	36"	37 ¹ / ₈ "			
	86 ¹ / ₄ "	89"	88 ¹ / ₂ "	7' 2 ¹ / ₂ "	40"	41 ¹ / ₈ "			
	90 ¹ / ₄ "	93"	92 ¹ / ₂ "	7' 6 ¹ / ₂ "	42"	43 ¹ / ₈ "			
	21 ³ / ₈ x 76 ¹ / ₂	25 ³ / ₈ x 76 ¹ / ₂	29 ³ / ₈ x 76 ¹ / ₂	31 ³ / ₈ x 76 ¹ / ₂	33 ³ / ₈ x 76 ¹ / ₂	35 ³ / ₈ x 76 ¹ / ₂	37 ³ / ₈ x 76 ¹ / ₂	41 ³ / ₈ x 76 ¹ / ₂	45 ³ / ₈ x 76 ¹ / ₂
	21 ³ / ₈ x 80 ¹ / ₂	25 ³ / ₈ x 80 ¹ / ₂	29 ³ / ₈ x 80 ¹ / ₂	31 ³ / ₈ x 80 ¹ / ₂	33 ³ / ₈ x 80 ¹ / ₂	35 ³ / ₈ x 80 ¹ / ₂	37 ³ / ₈ x 80 ¹ / ₂	41 ³ / ₈ x 80 ¹ / ₂	45 ³ / ₈ x 80 ¹ / ₂
	21 ³ / ₈ x 88 ¹ / ₂	25 ³ / ₈ x 88 ¹ / ₂	29 ³ / ₈ x 88 ¹ / ₂	31 ³ / ₈ x 88 ¹ / ₂	33 ³ / ₈ x 88 ¹ / ₂	35 ³ / ₈ x 88 ¹ / ₂	37 ³ / ₈ x 88 ¹ / ₂	41 ³ / ₈ x 88 ¹ / ₂	45 ³ / ₈ x 88 ¹ / ₂
	21 ³ / ₈ x 92 ¹ / ₂	25 ³ / ₈ x 92 ¹ / ₂	29 ³ / ₈ x 92 ¹ / ₂	31 ³ / ₈ x 92 ¹ / ₂	33 ³ / ₈ x 92 ¹ / ₂	35 ³ / ₈ x 92 ¹ / ₂	37 ³ / ₈ x 92 ¹ / ₂	41 ³ / ₈ x 92 ¹ / ₂	45 ³ / ₈ x 92 ¹ / ₂

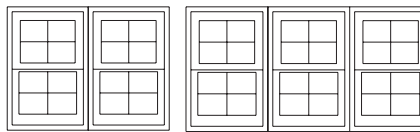
Unit Dimension given for primed units only

Clad Unit Dimension is identical to Frame Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Shaded units meet UBC egress codes

- **Ground Floor** * (5.0 sq. ft., 20" width, 24" height minimum) in standard 6'10" header application
- **Above Ground Floor** (5.7 sq. ft., 20" width, 24" height minimum) in standard 6'10" header application



**DOUBLE HUNG
MULTIPLE UNIT FORMULA**

Multiple unit Frame Dimension equals the sum of the individual boxes

Multiple unit Rough Opening equals the sum of the individual boxes plus 1/2"


























































































































































Clad Unit Dimension – Same as Multiple Unit Frame Dimension

Primed multiple Unit Dimension equals the total rough opening plus 2 1/8" in width and the total rough opening plus 1 1/4" in height

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Double Hung Studio Unit Elevations

	44"	52"	56"	64"	68"	76"	80"	88"	104"
Primed Unit Dimension	44"	52"	56"	64"	68"	76"	80"	88"	104"
Rough Opening	41 ⁷ / ₈ "	49 ⁷ / ₈ "	53 ⁷ / ₈ "	61 ⁷ / ₈ "	65 ⁷ / ₈ "	73 ⁷ / ₈ "	77 ⁷ / ₈ "	85 ⁷ / ₈ "	101 ⁷ / ₈ "
Frame	41 ³ / ₈ "	49 ³ / ₈ "	53 ³ / ₈ "	61 ³ / ₈ "	65 ³ / ₈ "	73 ³ / ₈ "	77 ³ / ₈ "	85 ³ / ₈ "	101 ³ / ₈ "
Sash Opening	3' 4"	4' 0"	4' 4"	5' 0"	5' 4"	6' 0"	6' 4"	7' 0"	8' 4"
Glass	36"	44"	48"	56"	60"	68"	72"	80"	96"

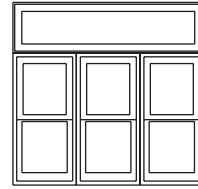
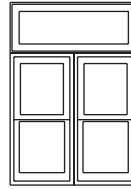
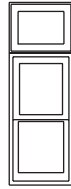
Unit Dimension	44"	52"	56"	64"	68"	76"	80"	88"	104"
50 ¹ / ₄ "									
54 ¹ / ₄ "									
58"									
62 ¹ / ₄ "									
66 ¹ / ₄ "									
70"									
74 ¹ / ₄ "									
78 ¹ / ₄ "									
82 ¹ / ₄ "									
86 ¹ / ₄ "									
90"									
94 ¹ / ₄ "									
98 ¹ / ₄ "									
102 ¹ / ₄ "									
106 ¹ / ₄ "									
110 ¹ / ₄ "									
114 ¹ / ₄ "									

Unit Dimension given for primed units only

Clad Unit Dimension is identical to Frame Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Double Hung Transom Unit Charts



Frame Height	Width	21 ³ / ₈ "	42 ³ / ₄ "	64 ¹ / ₈ "
		Glass	1 - 16	2 - 16
1' 1"	8"	DT1-16/08-1	DT2-16/08-1	DT3-16/08-1
1' 5"	12"	DT1-16/12-1	DT2-16/12-1	DT3-16/12-1
1' 9"	16"	DT1-16/16-1	DT2-16/16-1	DT3-16/16-1
2' 1"	20"	DT1-16/20-1	DT2-16/20-1	DT3-16/20-1

Frame Height	Width	25 ³ / ₈ "	50 ³ / ₄ "	76 ¹ / ₄ "
		Glass	1 - 20	2 - 20
1' 1"	8"	DT1-20/08-1	DT2-20/08-1	DT3-20/08-1
1' 5"	12"	DT1-20/12-1	DT2-20/12-1	DT3-20/12-1
1' 9"	16"	DT1-20/16-1	DT2-20/16-1	DT3-20/16-1
2' 1"	20"	DT1-20/20-1	DT2-20/20-1	DT3-20/20-1

Frame Height	Width	29 ³ / ₈ "	58 ³ / ₄ "	88 ¹ / ₈ "
		Glass	1 - 24	2 - 24
1' 1"	8"	DT1-24/08-1	DT2-24/08-1	DT3-24/08-1
1'-5"	12"	DT1-24/12-1	DT2-24/12-1	DT3-24/12-1
1'-9"	16"	DT1-24/16-1	DT2-24/16-1	DT3-24/16-1
2'-1"	20"	DT1-24/20-1	DT2-24/20-1	DT3-24/20-1

Frame Height	Width	33 ³ / ₈ "	66 ³ / ₄ "	88 ¹ / ₈ "
		Glass	1 - 28	2 - 28
1' 1"	8"	DT1-28/08-1	DT2-28/08-1	DT3-28/08-1
1' 5"	12"	DT1-28/12-1	DT2-28/12-1	DT3-28/12-1
1' 9"	16"	DT1-28/16-1	DT2-28/16-1	DT3-28/16-1
2' 1"	20"	DT1-28/20-1	DT2-28/20-1	DT3-28/20-1

Frame Height	Width	37 ³ / ₈ "	74 ³ / ₄ "	112 ¹ / ₈ "
		Glass	1 - 32	2 - 32
1' 1"	8"	DT1-32/08-1	DT2-32/08-1	DT3-32/08-1
1' 5"	12"	DT1-32/12-1	DT2-32/12-1	DT3-32/12-1
1' 9"	16"	DT1-32/16-1	DT2-32/16-1	DT3-32/16-1
2' 1"	20"	DT1-32/20-1	DT2-32/20-1	DT3-32/20-1

Frame Height	Width	41 ³ / ₈ "	82 ³ / ₄ "	124 ¹ / ₈ "
		Glass	1 - 36	2 - 36
1' 1"	8"	DT1-36/08-1	DT2-36/08-1	DT3-36/08-1
1' 5"	12"	DT1-36/12-1	DT2-36/12-1	DT3-36/12-1
1' 9"	16"	DT1-36/16-1	DT2-36/16-1	DT3-36/16-1
2' 1"	20"	DT1-36/20-1	DT2-36/20-1	DT3-36/20-1

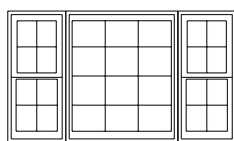
Frame Height	Width	45 ³ / ₈ "	90 ³ / ₄ "	136 ¹ / ₈ "
		Glass	1 - 40	2 - 40
1' 1"	8"	DT1-40/08-1	DT2-40/08-1	DT3-40/08-1
1' 5"	12"	DT1-40/12-1	DT2-40/12-1	DT3-40/12-1
1' 9"	16"	DT1-40/16-1	DT2-40/16-1	DT3-40/16-1
2' 1"	20"	DT1-40/20-1	DT2-40/20-1	DT3-40/20-1

Double Hung Studio Sidelites Unit Elevations

	50 1/4"	54 1/4"	58 1/4"	62 1/4"	66 1/4"		16"	22"	28"
	49"	53"	57"	61"	65"		13 7/8"	19 7/8"	25 7/8"
	48 1/2"	52 1/2"	56 1/2"	60 1/2"	64 1/2"		13 3/8"	19 3/8"	24 3/8"
	3' 10 1/2"	4' 2 1/2"	4' 6 1/2"	4' 10 1/2"	5' 2 1/2"		12"	18"	24"
	41 1/8"	45 1/8"	49 1/8"	53 1/8"	57 1/8"		8"	14"	20"
	43 5/8"	47 5/8"	51 5/8"	55 5/8"	59 5/8"				
WIDE RAILS									
NARROW RAILS									
	8" x 41 9/16"	8" x 45 9/16"	8" x 49 9/16"	8" x 53 9/16"	8" x 57 9/16"				
	14" x 41 9/16"	14" x 45 9/16"	14" x 49 9/16"	14" x 53 9/16"	14" x 57 9/16"				
	20" x 41 9/16"	20 3/8" x 45 9/16"	20" x 49 9/16"	20" x 53 9/16"	20" x 57 9/16"				

	70"	74 1/4"	78 1/4"	82 1/4"		16"	22"	28"
	69"	73"	77"	81"		13 7/8"	19 7/8"	25 7/8"
	68 1/2"	72 1/2"	76 1/2"	80 1/2"		13 3/8"	19 3/8"	24 3/8"
	5' 6 1/2"	5' 10 1/2"	6' 2 1/2"	6' 6 1/2"		12"	18"	24"
	61 1/8"	65 1/8"	69 1/8"	73 1/8"		8"	14"	20"
	63 5/8"	67 5/8"	71 5/8"	75 5/8"				
WIDE RAILS								
NARROW RAILS								
	8" x 61 9/16"	8" x 65 9/16"	8" x 69 9/16"	8" x 73 9/16"				
	14" x 61 9/16"	14" x 65 9/16"	14" x 69 9/16"	14" x 73 9/16"				
	20" x 61 9/16"	20" x 65 9/16"	20" x 69 9/16"	20" x 73 9/16"				

Double Hung Triple Picture Unit



Double Hung Triple Picture Units consist of a Studio Unit Center with two single double hung flankers

Triple Picture Frame dimensions equal the sum of the individual boxes

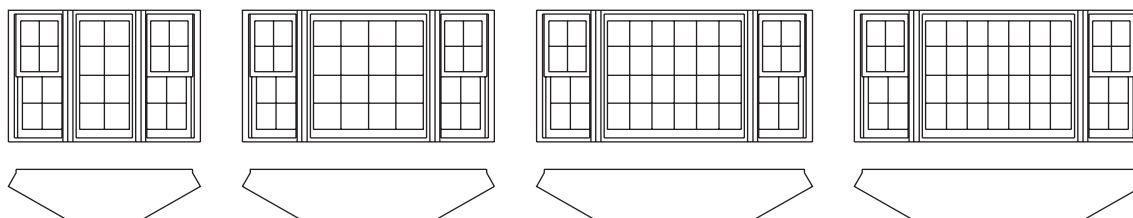
Triple Picture Rough Opening Dimension equals the complete frame dimension plus 1/2"

Clad Triple Picture Unit Dimension – Same as Triple Picture Frame Dimension

Primed Triple Picture Unit Dimension equals the total Rough Opening plus 2 1/2" in width and the Rough Opening plus 1 1/4" in height

Masonry Opening: Recommended Minimum of Unit or Frame Dimension plus 1/4"

Double Hung Bay Windows (30°)



	Glass	16/32/16"	16/44/16"	16/48/16"	16/56/16"
Unit Dimension	Clad	80"	92"	96"	104"
	Primed	82 3/8"	94 3/8"	98 3/8"	106 3/8"
Rough Opening	Clad	79 7/8"	91 7/8"	95 7/8"	103 7/8"
	Primed	78 1 1/16"	90 1 1/16"	94 1 1/16"	102 1 1/16"
Projection	Clad	12 5/8"	12 5/8"	12 5/8"	12 5/8"
	Primed	13"	13"	13"	13"

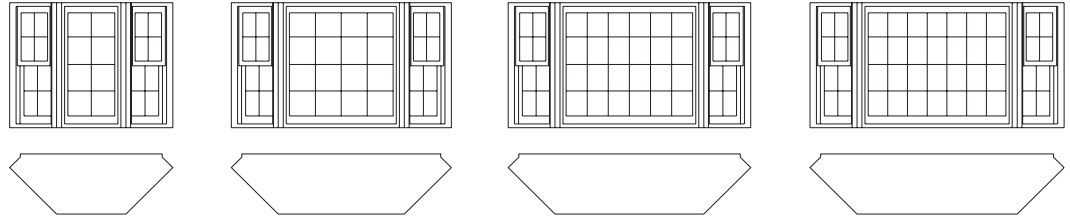
	Glass	20/32/20"	20/44/20"	20/48/20"	20/56/20"
Unit Dimension	Clad	87"	99"	103"	111"
	Primed	89 5/8"	101 5/8"	105 5/8"	113 5/8"
Rough Opening	Clad	86 3/8"	98 3/8"	102 3/8"	110 3/8"
	Primed	85 3/8"	97 3/8"	101 3/8"	109 3/8"
Projection	Clad	14 3/8"	14 3/8"	14 3/8"	14 3/8"
	Primed	15"	15"	15"	15"

Vertical rough openings indicated are standard unit heights with 1 1/4" added for head and seat boards – deduct for walk out unit

Vertical unit dimensions reflect clad to clad and brickmould to sill nosing. The use of head and seat boards will add an additional 1 1/4" to the overall frame height.

Glass Heights	Unit Dimension Clad/Primed Heights	Rough Opening Heights
20"	48 1/2" / 50 1/4"	50 1/4"
22"	52 1/2" / 54 1/4"	54 1/4"
24"	56 1/2" / 58 1/4"	58 1/4"
28"	64 1/2" / 66 1/4"	66 1/4"
30"	68 1/2" / 70 1/4"	70 1/4"

Double Hung Bay Windows (45°)



	Glass	16/33 ³ / ₁₆ "	16/45 ³ / ₁₆ "	16/49 ³ / ₁₆ "	16/57 ³ / ₁₆ "
Unit Dimension	Clad	75 ⁵ / ₈ "	87 ⁵ / ₈ "	91 ⁵ / ₈ "	99 ⁵ / ₈ "
	Primed	77 ⁷ / ₁₆ "	89 ⁹ / ₁₆ "	93 ³ / ₁₆ "	101 ¹ / ₁₆ "
Rough Opening	Clad	75"	87"	91"	99"
	Primed	72 ³ / ₈ "	84 ⁵ / ₈ "	88 ⁵ / ₈ "	96 ⁵ / ₈ "
Projection	Clad	17 ³ / ₄ "	17 ³ / ₄ "	17 ³ / ₄ "	17 ³ / ₄ "
	Primed	18 ⁷ / ₁₆ "	18 ⁷ / ₁₆ "	18 ¹ / ₁₆ "	18 ⁷ / ₁₆ "

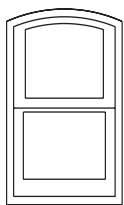
	Glass	20/33 ³ / ₂₀ "	20/45 ³ / ₂₀ "	20/49 ³ / ₂₀ "	20/57 ³ / ₂₀ "
Unit Dimension	Clad	81 ¹ / ₄ "	93 ³ / ₄ "	97 ¹ / ₄ "	105 ¹ / ₄ "
	Primed	83 ³ / ₁₆ "	95 ³ / ₁₆ "	99 ³ / ₁₆ "	107 ³ / ₁₆ "
Rough Opening	Clad	80 ⁵ / ₈ "	92 ⁵ / ₈ "	96 ⁵ / ₈ "	104 ⁵ / ₈ "
	Primed	78 ³ / ₁₆ "	90 ³ / ₁₆ "	94 ³ / ₁₆ "	102 ³ / ₁₆ "
Projection	Clad	20 ⁵ / ₁₆ "	20 ⁵ / ₁₆ "	20 ⁵ / ₁₆ "	20 ⁵ / ₁₆ "
	Primed	21 ¹ / ₄ "	21 ¹ / ₄ "	21 ¹ / ₄ "	21 ¹ / ₄ "

Vertical rough openings indicated are standard unit heights with 1/4" added for head and seat boards – deduct for walk out unit

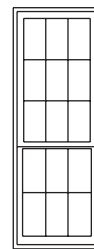
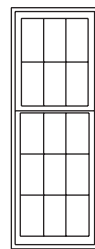
Vertical unit dimensions reflect clad to clad and brickmould to sill nosing. The use of head and seat boards will add an additional 1/4" to the overall frame height.

Glass Heights	Unit Dimension Clad/Primed Heights	Rough Opening Heights
20"	48 ¹ / ₂ "/50 ¹ / ₄ "	50 ¹ / ₄ "
22"	52 ¹ / ₂ "/54 ¹ / ₄ "	54 ¹ / ₄ "
24"	56 ¹ / ₂ "/58 ¹ / ₄ "	58 ¹ / ₄ "
28"	64 ¹ / ₂ "/66 ³ / ₄ "	66 ³ / ₄ "
30"	68 ¹ / ₂ "/70 ¹ / ₄ "	70 ¹ / ₄ "

Double Hung Segment Head



Segment head single hungs are available as aluminum clad and primed wood units only. Glass sizes 20 through 32 inch width have a standard radius. As a custom unit it may be ordered with a custom radius to include a true extended leg half round top sash. The unit offers a half screen.



Double Hung Cottage & Oriel

Cottage and Oriel style double hung windows are available in all exterior options. Standard units are comprised of all standard widths and a 5'-6" sash opening height. Custom sizing is available. Maximum size may not exceed a 40" glass width or a 36" glass height.

Glider Unit Elevations

	42½"	50½"	58½"	66½"	74½"
Primed Unit Dimension	40⅞"	48⅞"	56⅞"	64⅞"	72⅞"
Rough Opening	39⅞"	47⅞"	55⅞"	63⅞"	71⅞"
Frame	16"	20"	24"	28"	32"
Glass					

23⅞"					
27⅞"					
31⅞"					
35⅞"					
39⅞"					
43⅞"					
47⅞"					
55⅞"					
61⅞"					

Unit Dimension given for primed units only

Clad unit dimension width is identical to frame width. Clad unit dimension height is ¼" less than frame height.

Masonry Opening: Recommended minimum of Unit Dimension plus ¼". Due to the side jamb sill wedges, the clad vertical exterior unit dimension is ¼" smaller than the frame height. This may affect masonry framing.

Shaded units meet UBC egress codes (5.7 sq. ft., 20" width, 24" height minimum).

Triple Glider Picture Unit Elevations

	76 ¹ / ₁₆ "	88 ¹ / ₁₆ "	92 ¹ / ₁₆ "	108 ¹ / ₁₆ "
Primed Unit Dimension	76 ¹ / ₁₆ "	88 ¹ / ₁₆ "	92 ¹ / ₁₆ "	108 ¹ / ₁₆ "
Rough Opening	73 ³ / ₈ "	85 ³ / ₈ "	89 ⁷ / ₈ "	105 ³ / ₈ "
Frame	73 ³ / ₈ "	85 ³ / ₈ "	89 ³ / ₈ "	105 ³ / ₈ "
Class	16/32/16	20/36/20	20/40/20	24/48/24

31 ¹ / ₈ "				
39 ³ / ₈ "				
43 ³ / ₈ "				
47 ¹ / ₈ "				
55 ¹ / ₈ "				
61 ¹ / ₈ "				

Unit Dimension given for primed units only

Clad unit dimension width is identical to frame width. Clad unit dimension height is 1/4" less than frame height.

Masonry Opening: Recommended minimum of Unit Dimension plus 1/4". Due to the side jamb sill wedges, the clad vertical exterior unit dimension is 1/4" smaller than the frame height. This may affect masonry opening.

Shaded units meet UBC egress codes (5.7 sq. ft., 20" width, 24" height minimum).

Slide Patio Doors - Narrow (2-1/2")Stiles

2-1/2" STILES, TOP RAIL & 3-3/8" BOTTOM RAIL

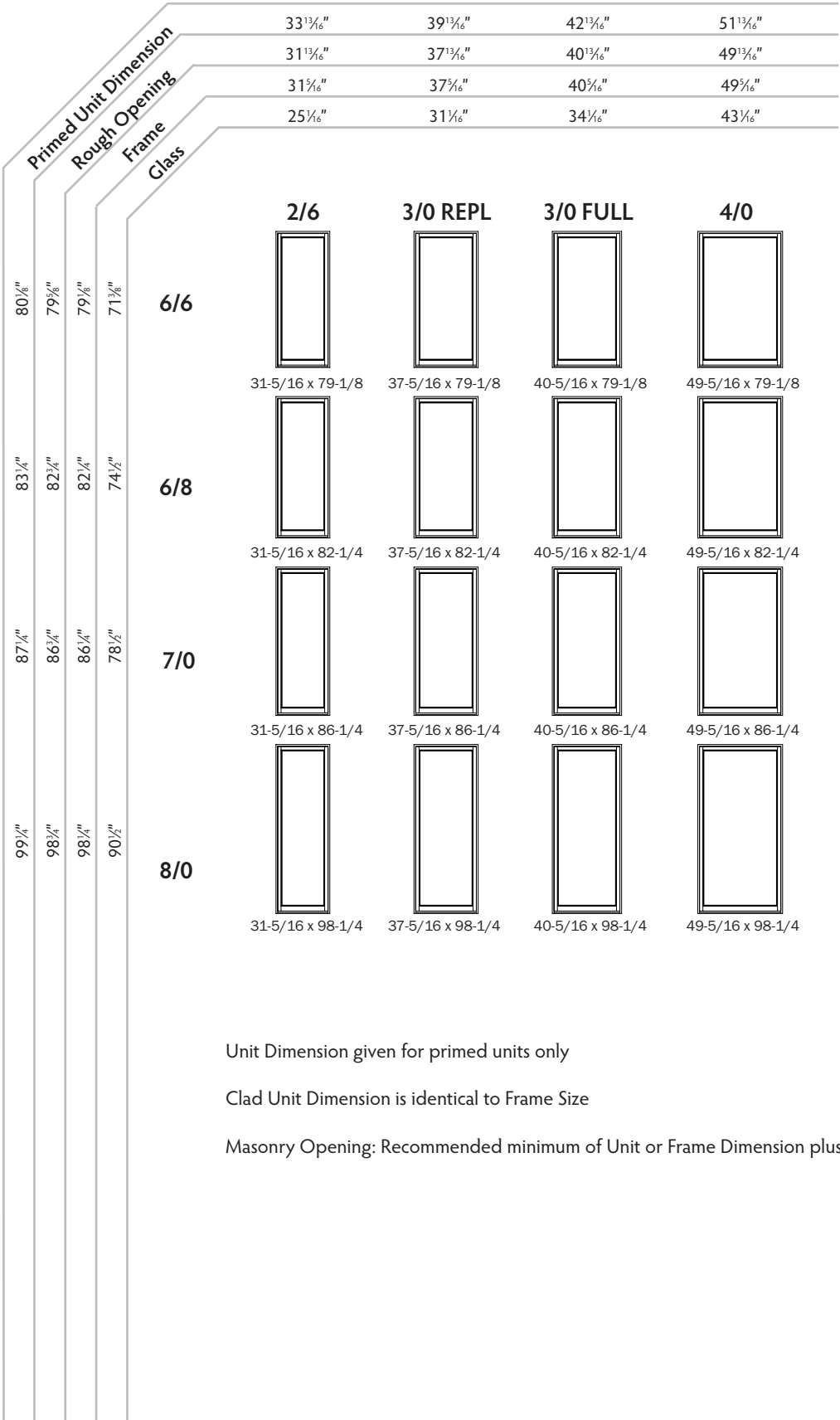
		Primed Unit Dimension			
		Rough Opening			
		Frame			
		Class			
		60 ³ / ₁₆ "	72 ³ / ₁₆ "	78 ³ / ₁₆ "	96 ³ / ₁₆ "
		58 ¹ / ₁₆ "	70 ¹ / ₁₆ "	76 ¹ / ₁₆ "	94 ¹ / ₁₆ "
		58 ³ / ₁₆ "	70 ³ / ₁₆ "	76 ³ / ₁₆ "	94 ³ / ₁₆ "
		25 ¹ / ₁₆ "	31 ¹ / ₁₆ "	37 ¹ / ₁₆ "	43 ¹ / ₁₆ "
		5/0	6/0 REPL	6/0 FULL	8/0
80 ¹ / ₈ "	6/6				
		58-3/16 x 79-1/8	70-3/16 x 79-1/8	76-3/16 x 79-1/8	94-3/16 x 79-1/8
83 ³ / ₄ "	6/8				
		58-3/16 x 82-1/4	70-3/16 x 82-1/4	76-3/16 x 82-1/4	94-3/16 x 82-1/4
87 ¹ / ₄ "	7/0				
		58-3/16 x 86-1/4	70-3/16 x 86-1/4	76-3/16 x 86-1/4	94-3/16 x 86-1/4
99 ¹ / ₄ "	8/0				
		58-3/16 x 98-1/4	70-3/16 x 98-1/4	76-3/16 x 98-1/4	94-3/16 x 98-1/4

Unit Dimension given for primed units only

Clad Unit Dimension is identical to Frame Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

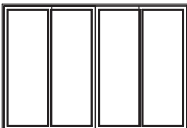

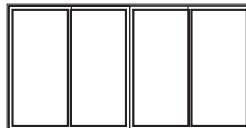




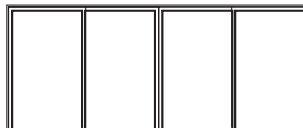



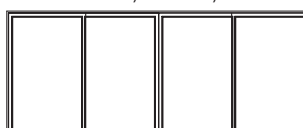

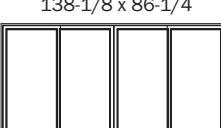
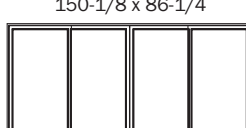
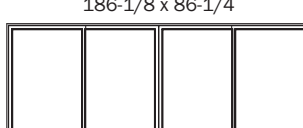
Slide Patio Doors Single Panel Sidelites - Narrow (2-1/2") Stiles 2-1/2" STILES, TOP RAIL & 3-3/8" BOTTOM RAIL



Unit Dimension given for primed units only
 Clad Unit Dimension is identical to Frame Size
 Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

OXXO Slide Patio Doors - Narrow (2-1/2") Stiles

2-1/2" STILES, TOP RAIL & 3-3/8" BOTTOM RAIL

	116 ¹ / ₈ "	140 ¹ / ₈ "	152 ¹ / ₈ "	188 ¹ / ₈ "
Primed Unit Dimension	114 ⁵ / ₈ "	138 ³ / ₈ "	150 ³ / ₈ "	188 ⁵ / ₈ "
Rough Opening	114 ¹ / ₈ "	138 ³ / ₈ "	150 ³ / ₈ "	186 ¹ / ₈ "
Frame	25 ¹ / ₈ "	31 ¹ / ₈ "	37 ¹ / ₈ "	43 ¹ / ₈ "
Class				
	10/0	12/0 REPL	12/0 FULL	16/0
6/6	 114-1/8 x 79-1/8	 138-1/8 x 79-1/8	 150-1/8 x 79-1/8	 186-1/8 x 79-1/8
6/8	 114-1/8 x 82-1/4	 138-1/8 x 82-1/4	 150-1/8 x 82-1/4	 186-1/8 x 82-1/4
7/0	 114-1/8 x 86-1/4	 138-1/8 x 86-1/4	 150-1/8 x 86-1/4	 186-1/8 x 86-1/4
8/0	 114-1/8 x 98-1/4	 138-1/8 x 98-1/4	 150-1/8 x 98-1/4	 186-1/8 x 98-1/4

Unit Dimension given for primed units only

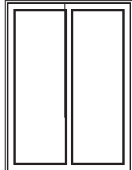
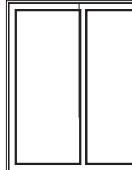
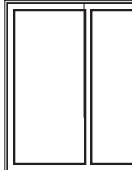
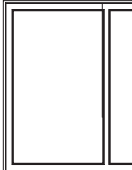
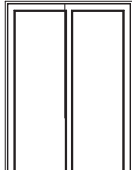
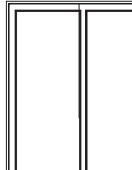
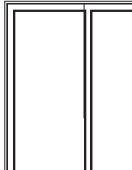
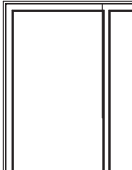
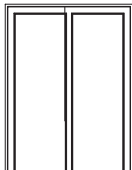
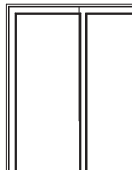
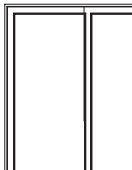
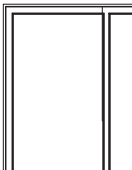
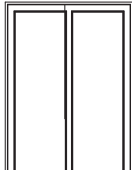
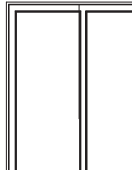
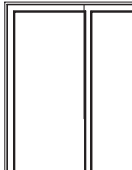
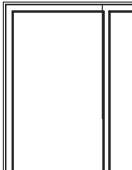
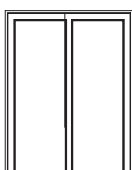
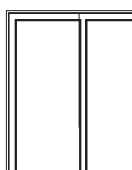
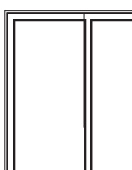
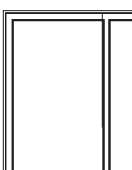
Clad Unit Dimension is identical to Frame Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Slide Patio Doors - Lifestyle (3-3/4") Stiles

3-3/8" STILES, TOP RAIL & BOTTOM RAIL

(4-13/16" AND 7-3/16" BOTTOM OPTION AVAILABLE)

		60 ³ / ₁₆ "	72 ³ / ₁₆ "	78 ³ / ₁₆ "	96 ³ / ₁₆ "
		58 ¹ / ₁₆ "	70 ¹ / ₁₆ "	76 ¹ / ₁₆ "	94 ¹ / ₁₆ "
		58 ⁷ / ₁₆ "	70 ⁷ / ₁₆ "	76 ⁷ / ₁₆ "	94 ⁷ / ₁₆ "
		23 ¹ / ₁₆ "	29 ¹ / ₁₆ "	32 ¹ / ₁₆ "	41 ¹ / ₁₆ "
Primed Unit Dimension	Rough Opening	Class			
		5/0	6/0 REPL	6/0 FULL	8/0
80 ¹ / ₁₆ "	79 ⁵ / ₁₆ "	 58-3/16 x 79-1/8	 70-3/16 x 79-1/8	 76-3/16 x 79-1/8	 94-3/16 x 79-1/8
83 ¹ / ₁₆ "	82 ³ / ₁₆ "	 58-3/16 x 82-1/4	 70-3/16 x 82-1/4	 76-3/16 x 82-1/4	 94-3/16 x 82-1/4
87 ¹ / ₁₆ "	86 ¹ / ₁₆ "	 58-3/16 x 86-1/4	 70-3/16 x 86-1/4	 76-3/16 x 86-1/4	 94-3/16 x 86-1/4
99 ¹ / ₁₆ "	98 ³ / ₁₆ "	 58-3/16 x 98-1/4	 70-3/16 x 98-1/4	 76-3/16 x 98-1/4	 94-3/16 x 98-1/4
111 ¹ / ₁₆ "	110 ³ / ₁₆ "	 58-3/16 x 110-1/4	 70-3/16 x 110-1/4	 76-3/16 x 110-1/4	 94-3/16 x 110-1/4

Unit Dimension given for primed units only

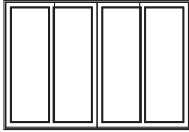
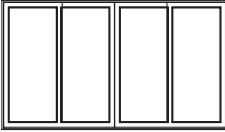
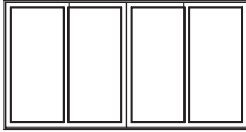
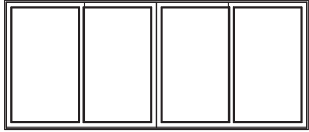
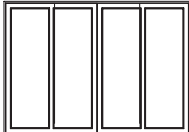
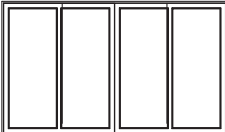
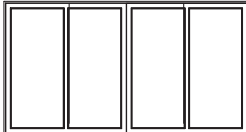
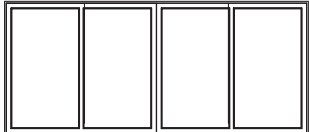
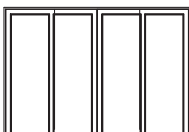
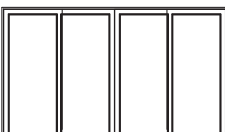
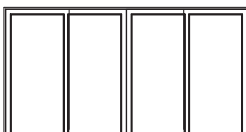
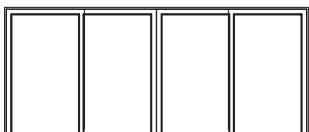


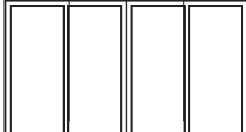

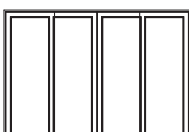
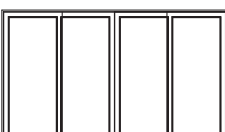
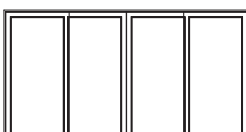
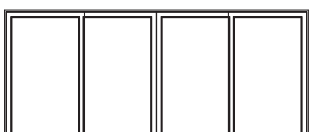
Clad Unit Dimension is identical to Frame Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

OXXO Slide Patio Doors - Lifestyle (3-3/4") Stiles

3-3/8" STILES, TOP RAIL & BOTTOM RAIL

(4-13/16" AND 7-3/16" BOTTOM OPTION AVAILABLE)

		116 ¹ / ₈ "	140 ¹ / ₈ "	152 ¹ / ₈ "	188 ¹ / ₈ "
		114 ⁵ / ₈ "	114 ⁵ / ₈ "	152 ⁵ / ₈ "	188 ⁵ / ₈ "
		114 ¹ / ₈ "	138 ¹ / ₈ "	150 ¹ / ₈ "	186 ¹ / ₈ "
		23 ¹ / ₁₆ "	29 ¹ / ₁₆ "	32 ¹ / ₁₆ "	41 ¹ / ₁₆ "
Primed Unit Dimension	Rough Opening				
		Frame	Class		
		10/0	12/0 REPL	12/0 FULL	16/0
80 ¹ / ₈ "	79 ⁵ / ₈ "				
		114-1/8 x 79-1/8	138-1/8 x 79-1/8	150-1/8 x 79-1/8	186-1/8 x 79-1/8
83 ¹ / ₄ "	82 ³ / ₄ "				
		114-1/8 x 82-1/4	138-1/8 x 82-1/4	150-1/8 x 82-1/4	186-1/8 x 82-1/4
87 ¹ / ₄ "	86 ¹ / ₄ "				
		114-1/8 x 86-1/4	138-1/8 x 86-1/4	150-1/8 x 86-1/4	186-1/8 x 86-1/4
99 ¹ / ₄ "	98 ³ / ₄ "				
		114-1/8 x 98-1/4	138-1/8 x 98-1/4	150-1/8 x 98-1/4	186-1/8 x 98-1/4
111 ¹ / ₄ "	110 ³ / ₄ "				
		114-1/8 x 110-1/4	138-1/8 x 110-1/4	150-1/8 x 110-1/4	186-1/8 x 110-1/4

Unit Dimension given for primed units only

Clad Unit Dimension is identical to Frame Size




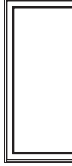



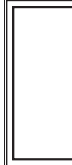



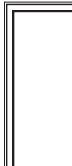



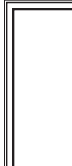



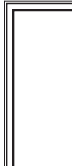
Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Slide Patio Doors Single Panel Sidelites - Lifestyle (3-3/8") Stiles

3-3/8" STILES, TOP RAIL & BOTTOM RAIL

(4-13/16" AND 7-3/16" BOTTOM OPTION AVAILABLE)

	Primed Unit Dimension	Rough Opening	Frame	Glass	34 ³ / ₈ "	40 ³ / ₈ "	43 ³ / ₈ "	52 ³ / ₈ "
					32 ³ / ₈ "	38 ³ / ₈ "	41 ³ / ₈ "	50 ³ / ₈ "
					31 ⁷ / ₈ "	37 ⁷ / ₈ "	40 ⁷ / ₈ "	49 ⁷ / ₈ "
					23 ¹ / ₁₆ "	29 ¹ / ₁₆ "	32 ¹ / ₁₆ "	41 ¹ / ₁₆ "

	2/6	3/0 REPL	3/0 FULL	4/0
6/6	 31-7/8 x 79-1/8	 37-7/8 x 79-1/8	 40-7/8 x 79-1/8	 49-7/8 x 79-1/8
6/8	 31-7/8 x 82-1/4	 37-7/8 x 82-1/4	 40-7/8 x 82-1/4	 49-7/8 x 82-1/4
7/0	 31-7/8 x 86-1/4	 37-7/8 x 86-1/4	 40-7/8 x 86-1/4	 49-7/8 x 86-1/4
8/0	 31-7/8 x 98-1/4	 37-7/8 x 98-1/4	 40-7/8 x 98-1/4	 49-7/8 x 98-1/4
9/0	 31-7/8 x 110-1/4	 37-7/8 x 110-1/4	 40-7/8 x 110-1/4	 49-7/8 x 110-1/4

Unit Dimension given for primed units only

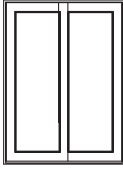
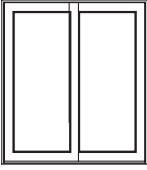
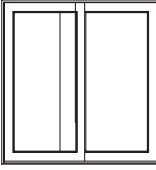
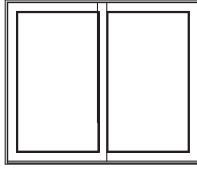
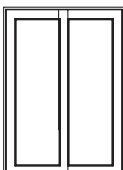
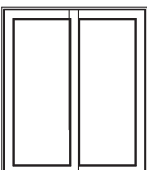
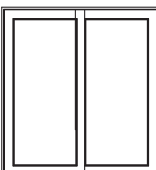
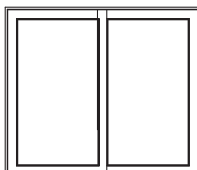
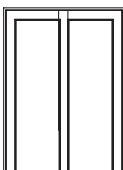
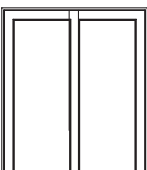
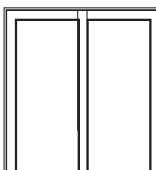
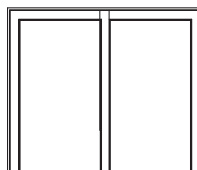
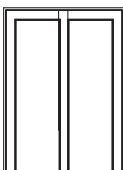
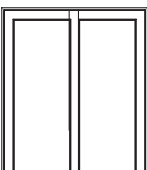
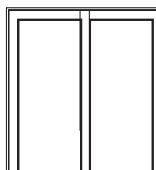
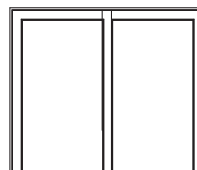
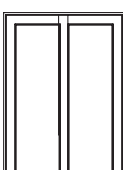
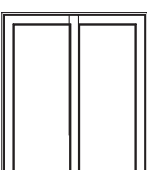
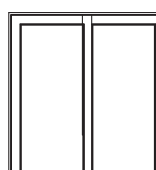
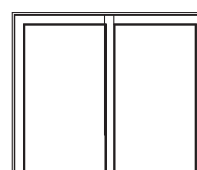
Clad Unit Dimension is identical to Frame Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Slide Patio Doors - Wide (4-13/16") Stiles

4-13/16" STILES, TOP RAIL & BOTTOM RAIL

(7-3/16" BOTTOM OPTION AVAILABLE)

















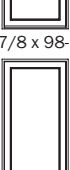
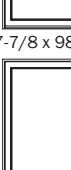

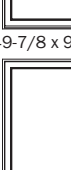
	60 ³ / ₁₆ "	72 ³ / ₁₆ "	78 ³ / ₁₆ "	96 ³ / ₁₆ "
Primed Unit Dimension	58 ¹ / ₁₆ "	70 ¹ / ₁₆ "	76 ¹ / ₁₆ "	94 ¹ / ₁₆ "
Rough Opening	58 ³ / ₁₆ "	70 ³ / ₁₆ "	76 ³ / ₁₆ "	94 ³ / ₁₆ "
Frame	21 ¹ / ₃₂ "	27 ¹ / ₃₂ "	30 ¹ / ₃₂ "	39 ¹ / ₃₂ "
Class				
	5/0	6/0 REPL	6/0 FULL	8/0
6/6	 58-3/16 x 79-1/8	 70-3/16 x 79-1/8	 76-3/16 x 79-1/8	 94-3/16 x 79-1/8
6/8	 58-3/16 x 82-1/4	 70-3/16 x 82-1/4	 76-3/16 x 82-1/4	 94-3/16 x 82-1/4
7/0	 58-3/16 x 86-1/4	 70-3/16 x 86-1/4	 76-3/16 x 86-1/4	 94-3/16 x 86-1/4
8/0	 58-3/16 x 98-1/4	 70-3/16 x 98-1/4	 76-3/16 x 98-1/4	 94-3/16 x 98-1/4
9/0	 58-3/16 x 110-1/4	 70-3/16 x 110-1/4	 76-3/16 x 110-1/4	 94-3/16 x 110-1/4

Unit Dimension given for primed units only

Clad Unit Dimension is identical to Frame Size

Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Slide Patio Doors Single Panel Sidelites - Wide (4-13/16") Stiles
4-13/16" STILES, TOP RAIL & BOTTOM RAIL
(4-13/16" AND 7-3/16" BOTTOM OPTION AVAILABLE)

	Primed Unit Dimension	Rough Opening	Frame	Glass				
					34 5/8"	40 5/8"	43 3/8"	52 3/8"
					33 3/8"	39 1/8"	42 1/8"	51 1/8"
					32 5/8"	38 5/8"	41 1/8"	50 5/8"
					21 17/32"	27 17/32"	30 17/32"	39 17/32"
					2/6	3/0 REPL	3/0 FULL	4/0
6/6	80 1/8"	79 5/8"	79 1/8"	67 5/8"				
					31-7/8 x 79-1/8	37-7/8 x 79-1/8	40-7/8 x 79-1/8	49-7/8 x 79-1/8
6/8	83 1/4"	82 3/4"	82 1/4"	70"				
					31-7/8 x 82-1/4	37-7/8 x 82-1/4	40-7/8 x 82-1/4	49-7/8 x 82-1/4
7/0	87 1/4"	86 3/4"	86 1/4"	74 1/4"				
					31-7/8 x 86-1/4	37-7/8 x 86-1/4	40-7/8 x 86-1/4	49-7/8 x 86-1/4
8/0	99 1/4"	98 3/4"	98 1/4"	86 1/4"				
					31-7/8 x 98-1/4	37-7/8 x 98-1/4	40-7/8 x 98-1/4	49-7/8 x 98-1/4
9/0	111 1/4"	110 3/4"	110 1/4"	98 3/8"				
					31-7/8 x 110-1/4	37-7/8 x 110-1/4	40-7/8 x 110-1/4	49-7/8 x 110-1/4

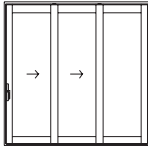
Unit Dimension given for primed units only
 Clad Unit Dimension is identical to Frame Size
 Masonry Opening: Recommended minimum of Unit or Frame Dimension plus 1/4"

Multi-Slide Patio Doors

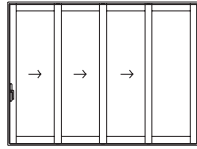
Typical Configurations



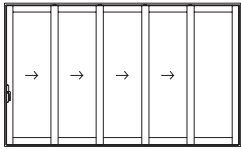
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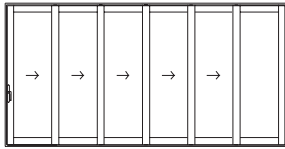
XXO



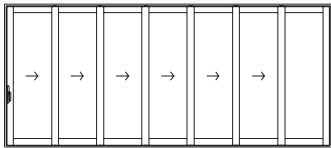
XXXO



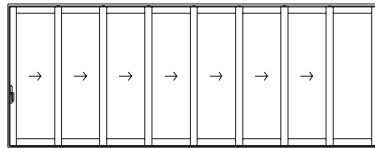
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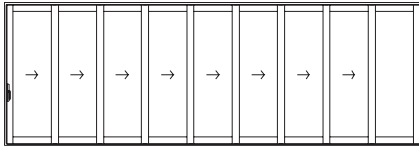
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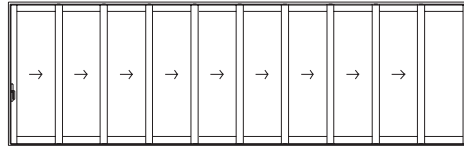
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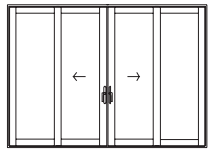
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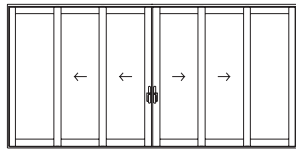
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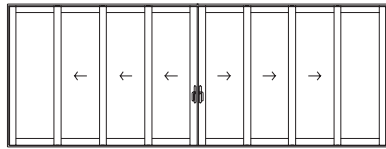
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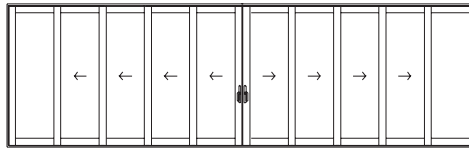
OXXO



OXXXXO



OXXXXXXO



OXXXXXXXXO

1-3/4" Panel Thickness

Maximum Panel Width: 4' 0-1/2"

Maximum Panel Height: 9' 0"

Maximum Number of Panels: 10

Approximate Maximum Width: 38'

Maximum Height: 9' 0-3/16"

Minimum Roof Overhang: 8' 0"

2-1/4" Panel Thickness

Maximum Panel Width: 6' 0"

Maximum Panel Height: 10' 0"

Maximum Number of Panels: 10

Approximate Maximum Width: 38' 0"

Maximum Height: 10' 3-1/8"

Minimum Roof Overhang: 8' 0"

Single Swing Patio Doors

2-Wide Swing Patio Doors

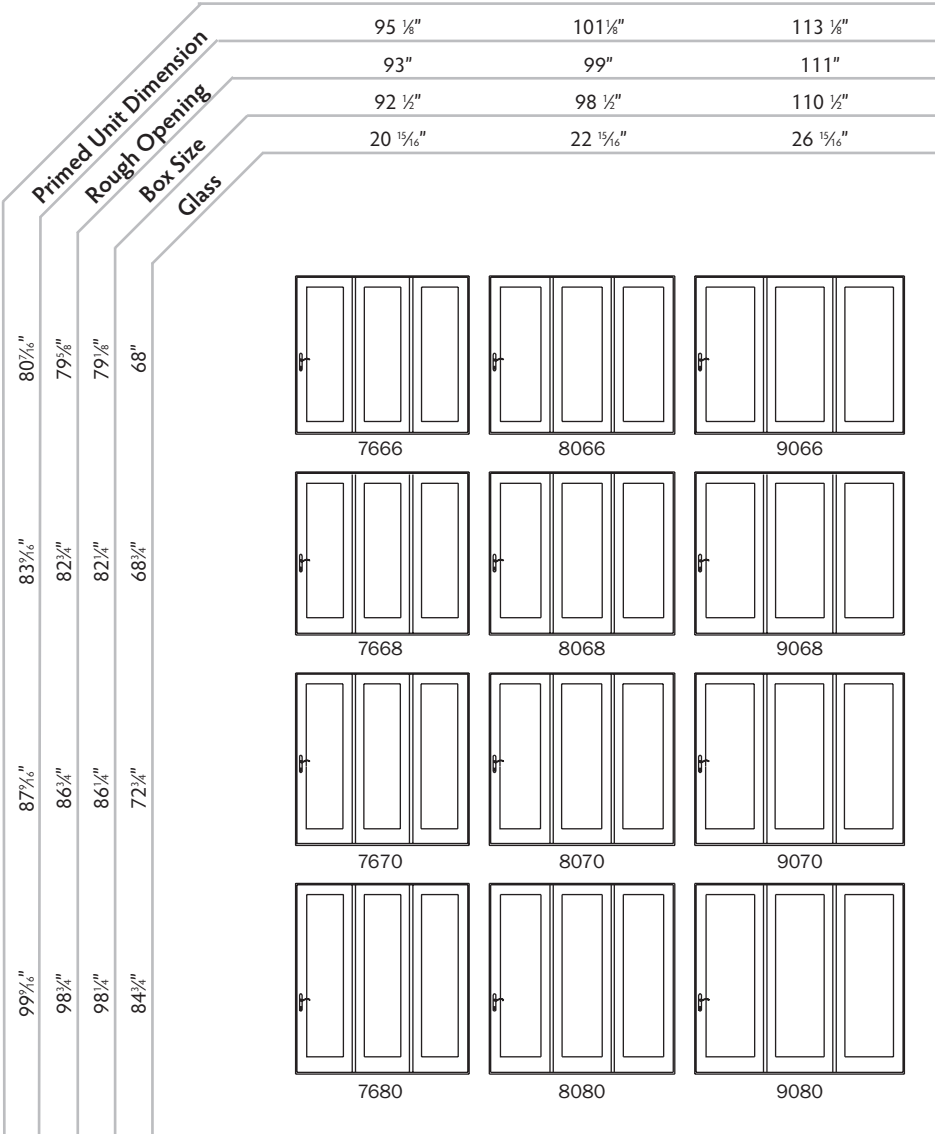
Single Swing Patio Doors					2-Wide Swing Patio Doors				
Primed Unit Dimension					Primed Unit Dimension				
Rough Opening					Rough Opening				
Box Size					Box Size				
Glass					Glass				
34"	36"	40"	46"	64 1/16"	68 1/16"	76 1/16"			
31 7/8"	33 7/8"	37 7/8"	43 7/8"	62 7/16"	66 7/16"	74 7/16"			
31 3/8"	33 3/8"	37 3/8"	43 3/8"	61 15/16"	65 15/16"	73 15/16"			
20 1/16"	22 1/16"	26 1/16"	32 1/16"	20 1/16"	22 1/16"	26 1/16"			
80 1/16"	83 1/16"	87 1/16"	99 1/16"	111 1/16"	80 1/16"	83 1/16"	87 1/16"	99 1/16"	111 1/16"
79 3/8"	82 1/4"	86 1/4"	98 3/4"	110 1/4"	79 3/8"	82 1/4"	86 1/4"	98 3/4"	110 3/4"
79 1/8"	82 1/8"	86 1/8"	98 3/8"	110 1/8"	79 1/8"	82 1/8"	86 1/8"	98 3/8"	110 1/8"
68"	68 3/4"	72 1/4"	84 3/4"	96 3/4"	68"	68 3/4"	72 3/4"	84 3/4"	96 3/4"
2666	2866	3066	3666	5066	5466	6066			
2668	2868	3068	3668	5068	5468	6068			
2670	2870	3070	3670	5070	5470	6070			
2680	2880	3080	3680	5080	5480	6080			
2690	2890	3090	3690	5090	5490	6090			

Unit Dimension given for wood In-Swing units only. Wood Out-Swing unit dimensions 3/8" larger in width and 3/16" larger in height.

Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Box Dimension plus 1/4"

3-Wide Swing Patio Doors

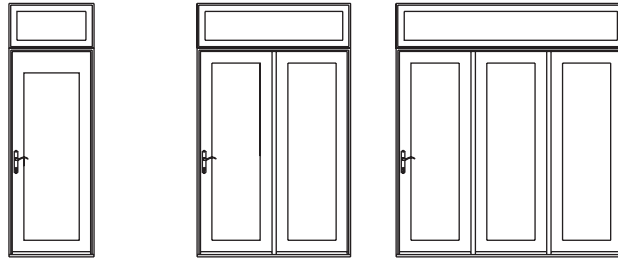


Unit Dimension given for primed In-Swing units only. Out-Swing 3/8" larger in width and 3/16" larger in height.

Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Box Dimension plus 1/4"

Swing Patio Door Transom Unit Charts


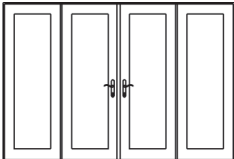
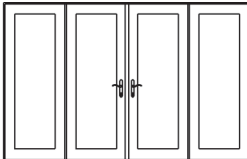
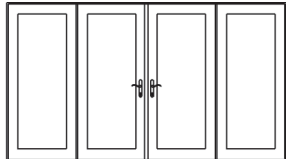
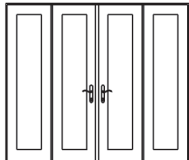
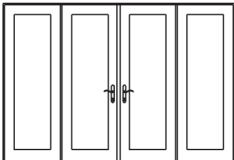
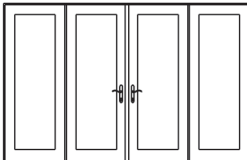
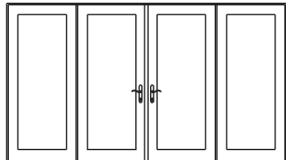
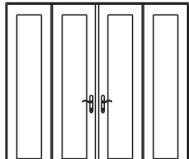
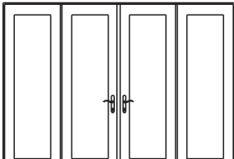
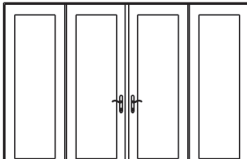
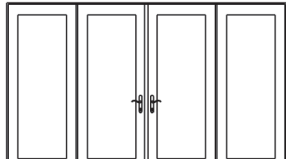
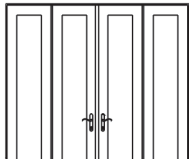

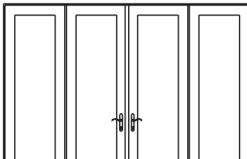
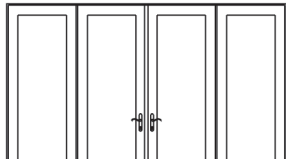


Box Height	Width			
	Glass	31 3/8"	61 15/16"	92 1/2"
		1 - 26	2 - 50	3 - 76
12"	7"	SWT1-26/07-1	SWT2-50/07-1	SWT3-76/07-1
18"	13"	SWT1-26/13-1	SWT2-50/13-1	SWT3-76/13-1
20"	15"	SWT1-26/15-1	SWT2-50/15-1	SWT3-76/15-1
24"	19"	SWT1-26/19-1	SWT1-50/19-1	SWT3-76/19-1
28"	23"	SWT1-26/23-1	SWT1-50/23-1	SWT3-76/23-1

Box Height	Width			
	Glass	33 3/8"	65 15/16"	98 1/2"
		1 - 28	2 - 54	3 - 80
12"	7"	SWT1-28/07-1	SWT2-54/07-1	SWT3-80/07-1
18"	13"	SWT1-28/13-1	SWT2-54/13-1	SWT3-80/13-1
20"	15"	SWT1-28/15-1	SWT2-54/15-1	SWT3-80/15-1
24"	19"	SWT1-28/19-1	SWT1-54/19-1	SWT3-80/19-1
28"	23"	SWT1-28/23-1	SWT1-54/23-1	SWT3-80/23-1

Box Height	Width			
	Glass	37 3/8"	73 15/16"	106 1/2"
		1 - 30	2 - 60	3 - 90
12"	7"	SWT1-30/07-1	SWT2-60/07-1	SWT3-90/07-1
18"	13"	SWT1-30/13-1	SWT2-60/13-1	SWT3-90/13-1
20"	15"	SWT1-30/15-1	SWT2-60/15-1	SWT3-90/15-1
24"	19"	SWT1-30/19-1	SWT1-60/19-1	SWT3-90/19-1
28"	23"	SWT1-30/23-1	SWT1-60/23-1	SWT3-90/23-1

4-Wide French Swing Patio Doors with Sidelites

	101 $\frac{1}{4}$ "	125 $\frac{3}{4}$ "	133 $\frac{3}{4}$ "	149 $\frac{3}{4}$ "
	99 $\frac{5}{8}$ "	123 $\frac{3}{8}$ "	131 $\frac{5}{8}$ "	147 $\frac{5}{8}$ "
	99 $\frac{5}{8}$ "	123 $\frac{3}{8}$ "	131 $\frac{5}{8}$ "	147 $\frac{5}{8}$ "
	15 $\frac{1}{16}$ "	21 $\frac{1}{16}$ "	23 $\frac{1}{16}$ "	27 $\frac{1}{16}$ "
Primed Unit Dimension				
Rough Opening				
Box Size				
Glass				
80 $\frac{1}{16}$ "				
	8066	1066	10866	12066
83 $\frac{3}{16}$ "				
	8068	1068	10868	12068
87 $\frac{1}{16}$ "				
	8070	1070	10870	12070
99 $\frac{1}{16}$ "				
	8080	1080	10880	12080

Unit Dimension given for primed In-Swing units only. Out-Swing 3/8" larger in width and 3/16" larger in height.

Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Box Dimension plus 1/4"

Swing Patio Door Sidelites

2-1/2" Stile Sidelites

	Box	Panel	Class	13 3/8"	19 3/8"	25 3/8"
79 1/8"	79 1/8"	76 7/16"	68"	1066	1666	2066
82 1/4"	82 1/4"	79 3/16"	68 3/4"	1068	1668	2068
86 1/4"	86 1/4"	83 3/16"	72 1/4"	1070	1670	2070
98 1/4"	98 1/4"	95 3/16"	84 3/4"	1080	1680	2080
110 1/4"	110 1/4"	107 3/16"	96 3/4"	1090	1690	2090

3-3/8" Stile Sidelites

	Box	Panel	Class	25 3/8"	31 3/8"	33 3/8"	37 3/8"
79 1/8"	79 1/8"	76 7/16"	68"	2066	2666	2866	3066
82 1/4"	82 1/4"	79 3/16"	68 3/4"	2068	2668	2868	3068
86 1/4"	86 1/4"	83 3/16"	72 1/4"	2070	2670	2870	3070
98 1/4"	98 1/4"	95 3/16"	84 3/4"	2080	2680	2880	3080
110 1/4"	110 1/4"	107 3/16"	96 3/4"	2090	2690	2890	3090


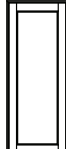

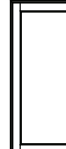

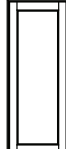
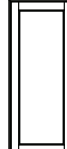


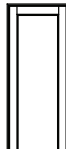
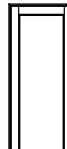


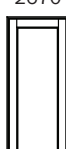



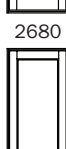
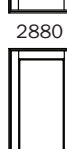

Rough Opening Widths: Individual Units Mullled. For rough opening width add R.O. of Swing door of your choice plus box(es) of sidelite.

Panels with Continuous Head and Sill: For rough opening width add R.O. of Swing door of your choice plus glass width of Sidelite panel(s) plus 4 15/16" (for each panel) – 2-1/2" stile only

Swing Patio Door Sidelites

4-13/16" Stile Sidelites

Rough Opening Widths: Individual Units Mullled. For rough opening width add R.O. of Swing door of your choice plus box(es) of sidelite.

	Box	Panel	Class				
	79 1/8"	76 27/32"	68"	25 3/8"	31 3/8"	33 3/8"	37 3/8"
	82 1/4"	79 3/32"	68 3/4"	23 13/16"	29 13/16"	31 13/16"	35 13/16"
	86 1/4"	83 3/32"	72 3/4"	14 15/16"	20 15/16"	22 15/16"	26 15/16"
	98 1/4"	95 31/32"	84 3/4"				
	110 1/4"	107 31/32"	96 3/4"				
							
				2066	2666	2866	3066
							
				2068	2668	2868	3068
							
				2070	2670	2870	3070
							
				2080	2680	2880	3080
							
				2090	2690	2890	3090











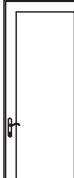
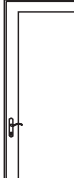

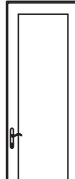

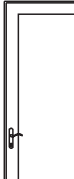

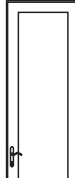

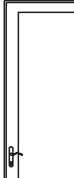
Single Swing Patio Doors - 2-1/4" Panels

Unit Dimension given for wood In-Swing units only. Wood Out-Swing unit dimensions 3/8" larger in width and 3/16" larger in height.

Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Box Dimension plus 1/4"

	34"	36"	40"	46"
Primed Unit Dimension	31 7/8"	33 7/8"	37 7/8"	43 7/8"
Rough Opening	31 3/8"	33 3/8"	37 3/8"	42 3/8"
Box Size	20 15/16"	22 15/16"	26 15/16"	32 15/16"
Glass				

83 3/8"	82 1/4"	82 1/4"	68 3/4"				
				2668	2868	3068	3668
87 7/8"	86 3/4"	86 3/4"	72 3/4"				
				2670	2870	3070	3670
99 9/16"	98 3/4"	98 3/4"	84 3/4"				
				2680	2880	3080	3680
111 1/8"	110 3/4"	110 3/4"	96 3/4"				
				2690	2890	3090	3690
123 3/8"	122 1/4"	122 1/4"	98 3/4"				
				26100	28100	30100	36100

2-Wide Swing Patio Doors - 2-1/4" Panels

Unit Dimension given for wood In-Swing units only. Wood Out-Swing unit dimensions 3/8" larger in width and 3/16" larger in height.

Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Box Dimension plus 1/4"

	Primed Unit Dimension	Rough Opening	Box Size	Glass
	64 5/16"	68 5/16"	76 5/16"	88 5/16"
	62 7/16"	66 7/16"	74 7/16"	86 7/16"
	61 15/16"	65 15/16"	73 15/16"	85 15/16"
	20 15/16"	22 15/16"	26 15/16"	32 15/16"

83 3/8"	5068	5468	6068	7068
87 7/16"	5070	5470	6070	7070
82 3/4"	5080	5480	6080	7080
86 3/4"	5090	5490	6090	7090
82 1/4"	50100	54100	60100	70100
68 3/4"				
86 3/4"				
72 3/4"				
99 7/16"				
98 3/4"				
98 1/4"				
84 3/4"				
111 1/8"				
110 3/4"				
110 1/4"				
96 1/4"				
123 3/16"				
122 3/4"				
122 1/4"				
98 3/4"				

French Swing Patio Doors - 2-1/4" Panels

	52 5/16"	64 5/16"	68 5/16"	76 5/16"	88 5/16"
Primed Unit Dimension	52 5/16"	64 5/16"	68 5/16"	76 5/16"	88 5/16"
Rough Opening	50 7/16"	62 7/16"	66 7/16"	74 7/16"	86 7/16"
Box Size	49 15/16"	61 15/16"	65 15/16"	73 15/16"	85 15/16"
Glass	14 15/16"	20 15/16"	22 15/16"	26 15/16"	32 15/16"

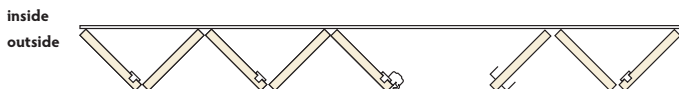
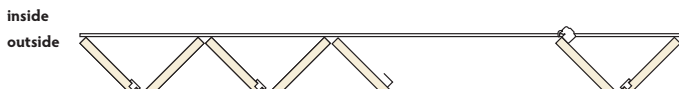
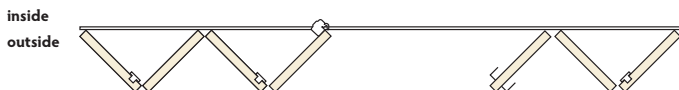
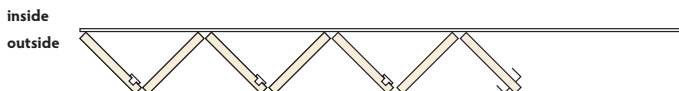
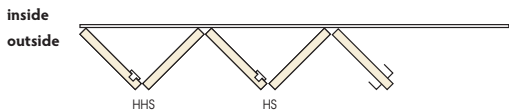
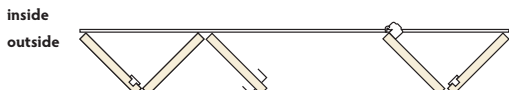
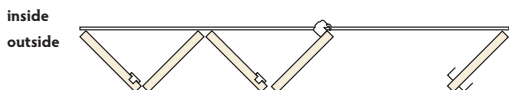
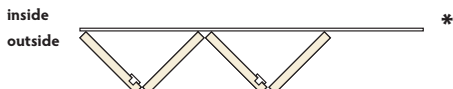
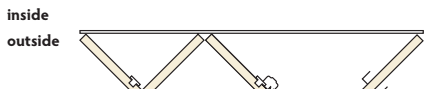
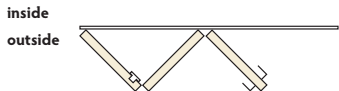
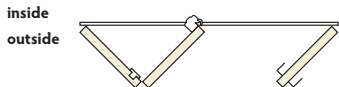
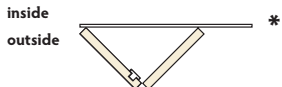
83 5/16"					
	4068	5068	5468	6068	7068
87 5/16"					
	4070	5070	5470	6070	7070
98 5/16"					
	4080	5080	5480	6080	7080
111 5/16"					
	4090	5090	5490	6090	7090
123 5/16"					
	40100	50100	54100	60100	70100

Unit Dimension given for primed In-Swing units only. Out-Swing 3/8" larger in width and 3/16" larger in height. Clad Unit Dimension is identical to Box Size

Masonry Opening: Recommended minimum of Unit or Box Dimension plus 1/4"

Swing doors are available as in-swing or out-swing.

Fold-A-Way Patio Door Typical Configurations



1-3/4" Panel Thickness
 Maximum Panel Width: 3' 6"
 Maximum Panel Height: 9' 0"
 Maximum Number of Panels: 16
 Approximate Maximum Width: 56' 0"
 Maximum Panel Weight: 250 lbs

2-1/4" Panel Thickness
 Maximum Panel Width: 3' 6"
 Maximum Panel Height: 10' 0"
 Maximum Number of Panels: 16
 Approximate Maximum Width: 56' 0"
 Maximum Panel Weight: 250 lbs

*NOTE: Configurations without access panels are not accessible from the exterior.

Casement - Crank Operator & Standard Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
16	18	7-1/2	13-5/16	0.69	20	18	11-1/2	13-5/16	1.06
16	20	7-1/2	15-5/16	0.80	20	20	11-1/2	15-5/16	1.22
16	24	7-1/2	19-5/16	1.01	20	24	11-1/2	19-5/16	1.54
16	28	7-1/2	23-5/16	1.21	20	28	11-1/2	23-5/16	1.86
16	30	7-1/2	25-5/16	1.32	20	30	11-1/2	25-5/16	2.02
16	32	7-1/2	27-5/16	1.42	20	32	11-1/2	27-5/16	2.18
16	36	7-1/2	31-5/16	1.63	20	36	11-1/2	31-5/16	2.50
16	40	7-1/2	35-5/16	1.84	20	40	11-1/2	35-5/16	2.82
16	42	7-1/2	37-5/16	1.94	20	42	11-1/2	37-5/16	2.98
16	48	7-1/2	43-5/16	2.26	20	48	11-1/2	43-5/16	3.46
16	54	7-1/2	49-5/16	2.57	20	54	11-1/2	49-5/16	3.94
16	60	7-1/2	55-5/16	2.88	20	60	11-1/2	55-5/16	4.42
16	66	7-1/2	61-5/16	3.19	20	66	11-1/2	61-5/16	4.90
16	72	7-1/2	67-5/16	3.51	20	72	11-1/2	67-5/16	5.38
16	78	7-1/2	73-5/16	3.82	20	78	11-1/2	73-5/16	5.85
16	84	7-1/2	79-5/16	4.13	20	84	11-1/2	79-5/16	6.33
16	90	7-1/2	85-5/16	4.44	20	90	11-1/2	85-5/16	6.81
16	96	7-1/2	91-5/16	4.76	20	96	11-1/2	91-5/16	7.29
18	18	9-1/2	13-5/16	0.88	24	18	15-1/2	13-5/16	1.43
18	20	9-1/2	15-5/16	1.01	24	20	15-1/2	15-5/16	1.65
18	24	9-1/2	19-5/16	1.27	24	24	15-1/2	19-5/16	2.08
18	28	9-1/2	23-5/16	1.54	24	28	15-1/2	23-5/16	2.51
18	30	9-1/2	25-5/16	1.67	24	30	15-1/2	25-5/16	2.72
18	32	9-1/2	27-5/16	1.80	24	32	15-1/2	27-5/16	2.94
18	36	9-1/2	31-5/16	2.07	24	36	15-1/2	31-5/16	3.37
18	40	9-1/2	35-5/16	2.33	24	40	15-1/2	35-5/16	3.80
18	42	9-1/2	37-5/16	2.46	24	42	15-1/2	37-5/16	4.02
18	48	9-1/2	43-5/16	2.86	24	48	15-1/2	43-5/16	4.66
18	54	9-1/2	49-5/16	3.25	24	54	15-1/2	49-5/16	5.31
18	60	9-1/2	55-5/16	3.65	24	60	15-1/2	55-5/16	5.95
18	66	9-1/2	61-5/16	4.04	24	66	15-1/2	61-5/16	6.60
18	72	9-1/2	67-5/16	4.44	24	72	15-1/2	67-5/16	7.25
18	78	9-1/2	73-5/16	4.84	24	78	15-1/2	73-5/16	7.89
18	84	9-1/2	79-5/16	5.23	24	84	15-1/2	79-5/16	8.54
18	90	9-1/2	85-5/16	5.63	24	90	15-1/2	85-5/16	9.18
18	96	9-1/2	91-5/16	6.02	24	96	15-1/2	91-5/16	9.83

All dimensions $\pm 1/16"$

Clear opening Width = Box - 8 $\frac{1}{2}"$

Clear Opening Height = Box - 4 $\frac{11}{16}"$

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Crank Operator & Standard Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
28	18	19-1/2	13-5/16	1.80	32	18	23-1/2	13-5/16	2.17
28	20	19-1/2	15-5/16	2.07	32	20	23-1/2	15-5/16	2.50
28	24	19-1/2	19-5/16	2.62	32	24	23-1/2	19-5/16	3.15
28	28	19-1/2	23-5/16	3.16	32	28	23-1/2	23-5/16	3.80
28	30	19-1/2	25-5/16	3.43	32	30	23-1/2	25-5/16	4.13
28	32	19-1/2	27-5/16	3.70	32	32	23-1/2	27-5/16	4.46
28	36	19-1/2	31-5/16	4.24	32	36	23-1/2	31-5/16	5.11
28	40	19-1/2	35-5/16	4.78	32	40	23-1/2	35-5/16	5.76
28	42	19-1/2	37-5/16	5.05	32	42	23-1/2	37-5/16	6.09
28	48	19-1/2	43-5/16	5.87	32	48	23-1/2	43-5/16	7.07
28	54	19-1/2	49-5/16	6.68	32	54	23-1/2	49-5/16	8.05
28	60	19-1/2	55-5/16	7.49	32	60	23-1/2	55-5/16	9.03
28	66	19-1/2	61-5/16	8.30	32	66	23-1/2	61-5/16	10.01
28	72	19-1/2	67-5/16	9.12	32	72	23-1/2	67-5/16	10.99
28	78	19-1/2	73-5/16	9.93	32	78	23-1/2	73-5/16	11.96
28	84	19-1/2	79-5/16	10.74	32	84	23-1/2	79-5/16	12.94
28	90	19-1/2	85-5/16	11.55	32	90	23-1/2	85-5/16	13.92
28	96	19-1/2	91-5/16	12.37	32	96	23-1/2	91-5/16	14.90
30	18	21-1/2	13-5/16	1.99	36	18	27-1/2	13-5/16	2.54
30	20	21-1/2	15-5/16	2.29	36	20	27-1/2	15-5/16	2.92
30	24	21-1/2	19-5/16	2.88	36	24	27-1/2	19-5/16	3.69
30	28	21-1/2	23-5/16	3.48	36	28	27-1/2	23-5/16	4.45
30	30	21-1/2	25-5/16	3.78	36	30	27-1/2	25-5/16	4.83
30	32	21-1/2	27-5/16	4.08	36	32	27-1/2	27-5/16	5.22
30	36	21-1/2	31-5/16	4.68	36	36	27-1/2	31-5/16	5.98
30	40	21-1/2	35-5/16	5.27	36	40	27-1/2	35-5/16	6.74
30	42	21-1/2	37-5/16	5.57	36	42	27-1/2	37-5/16	7.13
30	48	21-1/2	43-5/16	6.47	36	48	27-1/2	43-5/16	8.27
30	54	21-1/2	49-5/16	7.36	36	54	27-1/2	49-5/16	9.42
30	60	21-1/2	55-5/16	8.26	36	60	27-1/2	55-5/16	10.56
30	66	21-1/2	61-5/16	9.15	36	66	27-1/2	61-5/16	11.71
30	72	21-1/2	67-5/16	10.05	36	72	27-1/2	67-5/16	12.85
30	78	21-1/2	73-5/16	10.95	36	78	27-1/2	73-5/16	14.00
30	84	21-1/2	79-5/16	11.84	36	84	27-1/2	79-5/16	15.15
30	90	21-1/2	85-5/16	12.74	36	90	27-1/2	85-5/16	16.29
30	96	21-1/2	91-5/16	13.63	36	96	27-1/2	91-5/16	17.44

All dimensions ± 1/16"

Clear opening Width = Box - 8½"

Clear Opening Height = Box - 4¼"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Crank Operator & Standard Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
42	18	33-1/2	13-5/16	3.10
42	20	33-1/2	15-5/16	3.56
42	24	33-1/2	19-5/16	4.49
42	28	33-1/2	23-5/16	5.42
42	30	33-1/2	25-5/16	5.89
42	32	33-1/2	27-5/16	6.35
42	36	33-1/2	31-5/16	7.28
42	40	33-1/2	35-5/16	8.22
42	42	33-1/2	37-5/16	8.68
42	48	33-1/2	43-5/16	10.08
42	54	33-1/2	49-5/16	11.47
42	60	33-1/2	55-5/16	12.87
42	66	33-1/2	61-5/16	14.26
42	72	33-1/2	67-5/16	15.66
42	78	33-1/2	73-5/16	17.06
42	84	33-1/2	79-5/16	18.45
42	90	33-1/2	85-5/16	19.85
42	96	33-1/2	91-5/16	21.24

All dimensions $\pm 1/16''$

Clear opening Width = Box - $8\frac{1}{2}''$

Clear Opening Height = Box - $4\frac{1}{16}''$

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Crank Operator & Retractable Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
16	18	6-5/8	12-9/16	0.58	20	18	10-5/8	12-9/16	0.93
16	20	6-5/8	14-9/16	0.67	20	20	10-5/8	14-9/16	1.07
16	24	6-5/8	18-9/16	0.85	20	24	10-5/8	18-9/16	1.37
16	28	6-5/8	22-9/16	1.04	20	28	10-5/8	22-9/16	1.66
16	30	6-5/8	24-9/16	1.13	20	30	10-5/8	24-9/16	1.81
16	32	6-5/8	26-9/16	1.22	20	32	10-5/8	26-9/16	1.96
16	36	6-5/8	30-9/16	1.41	20	36	10-5/8	30-9/16	2.26
16	40	6-5/8	34-9/16	1.59	20	40	10-5/8	34-9/16	2.55
16	42	6-5/8	36-9/16	1.68	20	42	10-5/8	36-9/16	2.70
16	48	6-5/8	42-9/16	1.96	20	48	10-5/8	42-9/16	3.14
16	54	6-5/8	48-9/16	2.23	20	54	10-5/8	48-9/16	3.58
16	60	6-5/8	54-9/16	2.51	20	60	10-5/8	54-9/16	4.03
16	66	6-5/8	60-9/16	2.79	20	66	10-5/8	60-9/16	4.47
16	72	6-5/8	66-9/16	3.06	20	72	10-5/8	66-9/16	4.91
16	78	6-5/8	72-9/16	3.34	20	78	10-5/8	72-9/16	5.35
16	84	6-5/8	78-9/16	3.61	20	84	10-5/8	78-9/16	5.80
16	90	6-5/8	84-9/16	3.89	20	90	10-5/8	84-9/16	6.24
16	96	6-5/8	90-9/16	4.17	20	96	10-5/8	90-9/16	6.68
18	18	8-5/8	12-9/16	0.75	24	18	14-5/8	12-9/16	1.28
18	20	8-5/8	14-9/16	0.87	24	20	14-5/8	14-9/16	1.48
18	24	8-5/8	18-9/16	1.11	24	24	14-5/8	18-9/16	1.89
18	28	8-5/8	22-9/16	1.35	24	28	14-5/8	22-9/16	2.29
18	30	8-5/8	24-9/16	1.47	24	30	14-5/8	24-9/16	2.49
18	32	8-5/8	26-9/16	1.59	24	32	14-5/8	26-9/16	2.70
18	36	8-5/8	30-9/16	1.83	24	36	14-5/8	30-9/16	3.10
18	40	8-5/8	34-9/16	2.07	24	40	14-5/8	34-9/16	3.51
18	42	8-5/8	36-9/16	2.19	24	42	14-5/8	36-9/16	3.71
18	48	8-5/8	42-9/16	2.55	24	48	14-5/8	42-9/16	4.32
18	54	8-5/8	48-9/16	2.91	24	54	14-5/8	48-9/16	4.93
18	60	8-5/8	54-9/16	3.27	24	60	14-5/8	54-9/16	5.54
18	66	8-5/8	60-9/16	3.63	24	66	14-5/8	60-9/16	6.15
18	72	8-5/8	66-9/16	3.99	24	72	14-5/8	66-9/16	6.76
18	78	8-5/8	72-9/16	4.35	24	78	14-5/8	72-9/16	7.37
18	84	8-5/8	78-9/16	4.71	24	84	14-5/8	78-9/16	7.98
18	90	8-5/8	84-9/16	5.06	24	90	14-5/8	84-9/16	8.59
18	96	8-5/8	90-9/16	5.42	24	96	14-5/8	90-9/16	9.20

All dimensions ± 1/16"

Clear opening Width = Box - 9³/₁₆"

Clear Opening Height = Box - 5⁷/₁₆"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Crank Operator & Retractable Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
28	18	18-5/8	12-9/16	1.62	32	18	22-5/8	12-9/16	1.97
28	20	18-5/8	14-9/16	1.88	32	20	22-5/8	14-9/16	2.29
28	24	18-5/8	18-9/16	2.40	32	24	22-5/8	18-9/16	2.92
28	28	18-5/8	22-9/16	2.92	32	28	22-5/8	22-9/16	3.54
28	30	18-5/8	24-9/16	3.18	32	30	22-5/8	24-9/16	3.86
28	32	18-5/8	26-9/16	3.44	32	32	22-5/8	26-9/16	4.17
28	36	18-5/8	30-9/16	3.95	32	36	22-5/8	30-9/16	4.80
28	40	18-5/8	34-9/16	4.47	32	40	22-5/8	34-9/16	5.43
28	42	18-5/8	36-9/16	4.73	32	42	22-5/8	36-9/16	5.74
28	48	18-5/8	42-9/16	5.51	32	48	22-5/8	42-9/16	6.69
28	54	18-5/8	48-9/16	6.28	32	54	22-5/8	48-9/16	7.63
28	60	18-5/8	54-9/16	7.06	32	60	22-5/8	54-9/16	8.57
28	66	18-5/8	60-9/16	7.83	32	66	22-5/8	60-9/16	9.52
28	72	18-5/8	66-9/16	8.61	32	72	22-5/8	66-9/16	10.46
28	78	18-5/8	72-9/16	9.39	32	78	22-5/8	72-9/16	11.40
28	84	18-5/8	78-9/16	10.16	32	84	22-5/8	78-9/16	12.34
28	90	18-5/8	84-9/16	10.94	32	90	22-5/8	84-9/16	13.29
28	96	18-5/8	90-9/16	11.71	32	96	22-5/8	90-9/16	14.23
30	18	20-5/8	12-9/16	1.80	36	18	26-5/8	12-9/16	2.32
30	20	20-5/8	14-9/16	2.09	36	20	26-5/8	14-9/16	2.69
30	24	20-5/8	18-9/16	2.66	36	24	26-5/8	18-9/16	3.43
30	28	20-5/8	22-9/16	3.23	36	28	26-5/8	22-9/16	4.17
30	30	20-5/8	24-9/16	3.52	36	30	26-5/8	24-9/16	4.54
30	32	20-5/8	26-9/16	3.80	36	32	26-5/8	26-9/16	4.91
30	36	20-5/8	30-9/16	4.38	36	36	26-5/8	30-9/16	5.65
30	40	20-5/8	34-9/16	4.95	36	40	26-5/8	34-9/16	6.39
30	42	20-5/8	36-9/16	5.24	36	42	26-5/8	36-9/16	6.76
30	48	20-5/8	42-9/16	6.10	36	48	26-5/8	42-9/16	7.87
30	54	20-5/8	48-9/16	6.96	36	54	26-5/8	48-9/16	8.98
30	60	20-5/8	54-9/16	7.81	36	60	26-5/8	54-9/16	10.09
30	66	20-5/8	60-9/16	8.67	36	66	26-5/8	60-9/16	11.20
30	72	20-5/8	66-9/16	9.53	36	72	26-5/8	66-9/16	12.31
30	78	20-5/8	72-9/16	10.39	36	78	26-5/8	72-9/16	13.42
30	84	20-5/8	78-9/16	11.25	36	84	26-5/8	78-9/16	14.53
30	90	20-5/8	84-9/16	12.11	36	90	26-5/8	84-9/16	15.64
30	96	20-5/8	90-9/16	12.97	36	96	26-5/8	90-9/16	16.74

All dimensions $\pm 1/16"$

Clear opening Width = Box - $9\frac{3}{8}"$

Clear Opening Height = Box - $5\frac{1}{16}"$

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Crank Operator & Retractable Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
42	18	32-5/8	12-9/16	2.85
42	20	32-5/8	14-9/16	3.30
42	24	32-5/8	18-9/16	4.21
42	28	32-5/8	22-9/16	5.11
42	30	32-5/8	24-9/16	5.56
42	32	32-5/8	26-9/16	6.02
42	36	32-5/8	30-9/16	6.92
42	40	32-5/8	34-9/16	7.83
42	42	32-5/8	36-9/16	8.28
42	48	32-5/8	42-9/16	9.64
42	54	32-5/8	48-9/16	11.00
42	60	32-5/8	54-9/16	12.36
42	66	32-5/8	60-9/16	13.72
42	72	32-5/8	66-9/16	15.08
42	78	32-5/8	72-9/16	16.44
42	84	32-5/8	78-9/16	17.80
42	90	32-5/8	84-9/16	19.16
42	96	32-5/8	90-9/16	20.52

All dimensions ± 1/16"

Clear opening Width = Box - 9 3/8"

Clear Opening Height = Box - 5 1/8"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Crank Operator, Standard Screen & Butt Hinges

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
16	18	10-11/16	13-5/16	0.99	20	18	14-11/16	13-5/16	1.36
16	20	10-11/16	15-5/16	1.14	20	20	14-11/16	15-5/16	1.56
16	24	10-11/16	19-5/16	1.43	20	24	14-11/16	19-5/16	1.97
16	28	10-11/16	23-5/16	1.73	20	28	14-11/16	23-5/16	2.38
16	30	10-11/16	25-5/16	1.88	20	30	14-11/16	25-5/16	2.58
16	32	10-11/16	27-5/16	2.03	20	32	14-11/16	27-5/16	2.79
16	36	10-11/16	31-5/16	2.32	20	36	14-11/16	31-5/16	3.19
16	40	10-11/16	35-5/16	2.62	20	40	14-11/16	35-5/16	3.60
16	42	10-11/16	37-5/16	2.77	20	42	14-11/16	37-5/16	3.81
16	48	10-11/16	43-5/16	3.21	20	48	14-11/16	43-5/16	4.42
16	54	10-11/16	49-5/16	3.66	20	54	14-11/16	49-5/16	5.03
16	60	10-11/16	55-5/16	4.11	20	60	14-11/16	55-5/16	5.64
16	66	10-11/16	61-5/16	4.55	20	66	14-11/16	61-5/16	6.25
16	72	10-11/16	67-5/16	5.00	20	72	14-11/16	67-5/16	6.87
16	78	10-11/16	73-5/16	5.44	20	78	14-11/16	73-5/16	7.48
16	84	10-11/16	79-5/16	5.89	20	84	14-11/16	79-5/16	8.09
16	90	10-11/16	85-5/16	6.33	20	90	14-11/16	85-5/16	8.70
16	96	10-11/16	91-5/16	6.78	20	96	14-11/16	91-5/16	9.31
18	18	12-11/16	13 -5/16	1.17	24	18	18-11/16	13-5/16	1.73
18	20	12-11/16	15 -5/16	1.35	24	20	18-11/16	15-5/16	1.99
18	24	12-11/16	19 -5/16	1.70	24	24	18-11/16	19-5/16	2.51
18	28	12-11/16	23 -5/16	2.05	24	28	18-11/16	23-5/16	3.03
18	30	12-11/16	25 -5/16	2.23	24	30	18-11/16	25-5/16	3.28
18	32	12-11/16	27 -5/16	2.41	24	32	18-11/16	27-5/16	3.54
18	36	12-11/16	31 -5/16	2.76	24	36	18-11/16	31-5/16	4.06
18	40	12-11/16	35 -5/16	3.11	24	40	18-11/16	35-5/16	4.58
18	42	12-11/16	37 -5/16	3.29	24	42	18-11/16	37-5/16	4.84
18	48	12-11/16	43 -5/16	3.82	24	48	18-11/16	43-5/16	5.62
18	54	12-11/16	49 -5/16	4.34	24	54	18-11/16	49-5/16	6.40
18	60	12-11/16	55 -5/16	4.87	24	60	18-11/16	55-5/16	7.18
18	66	12-11/16	61 -5/16	5.40	24	66	18-11/16	61-5/16	7.96
18	72	12-11/16	67 -5/16	5.93	24	72	18-11/16	67-5/16	8.74
18	78	12-11/16	73 -5/16	6.46	24	78	18-11/16	73-5/16	9.51
18	84	12-11/16	79 -5/16	6.99	24	84	18-11/16	79-5/16	10.29
18	90	12-11/16	85 -5/16	7.52	24	90	18-11/16	85-5/16	11.07
18	96	12-11/16	91 -5/16	8.05	24	96	18-11/16	91-5/16	11.85

All dimensions $\pm 1/16''$

Clear opening Width = Box - $5\frac{1}{8}''$

Clear Opening Height = Box - $4\frac{1}{8}''$

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Crank Operator, Standard Screen & Butt Hinges

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
28	18	22-11/16	13-5/16	2.10	32	18	26-11/16	13-5/16	2.47
28	20	22-11/16	15-5/16	2.41	32	20	26-11/16	15-5/16	2.84
28	24	22-11/16	19-5/16	3.04	32	24	26-11/16	19-5/16	3.58
28	28	22-11/16	23-5/16	3.67	32	28	26-11/16	23-5/16	4.32
28	30	22-11/16	25-5/16	3.99	32	30	26-11/16	25-5/16	4.69
28	32	22-11/16	27-5/16	4.30	32	32	26-11/16	27-5/16	5.06
28	36	22-11/16	31-5/16	4.93	32	36	26-11/16	31-5/16	5.80
28	40	22-11/16	35-5/16	5.56	32	40	26-11/16	35-5/16	6.54
28	42	22-11/16	37-5/16	5.88	32	42	26-11/16	37-5/16	6.92
28	48	22-11/16	43-5/16	6.82	32	48	26-11/16	43-5/16	8.03
28	54	22-11/16	49-5/16	7.77	32	54	26-11/16	49-5/16	9.14
28	60	22-11/16	55-5/16	8.71	32	60	26-11/16	55-5/16	10.25
28	66	22-11/16	61-5/16	9.66	32	66	26-11/16	61-5/16	11.36
28	72	22-11/16	67-5/16	10.61	32	72	26-11/16	67-5/16	12.48
28	78	22-11/16	73-5/16	11.55	32	78	26-11/16	73-5/16	13.59
28	84	22-11/16	79-5/16	12.50	32	84	26-11/16	79-5/16	14.70
28	90	22-11/16	85-5/16	13.44	32	90	26-11/16	85-5/16	15.81
28	96	22-11/16	91-5/16	14.39	32	96	26-11/16	91-5/16	16.92
30	18	24-11/16	13-5/16	2.28	36	18	30-11/16	13-5/16	2.84
30	20	24-11/16	15-5/16	2.63	36	20	30-11/16	15-5/16	3.26
30	24	24-11/16	19-5/16	3.31	36	24	30-11/16	19-5/16	4.12
30	28	24-11/16	23-5/16	4.00	36	28	30-11/16	23-5/16	4.97
30	30	24-11/16	25-5/16	4.34	36	30	30-11/16	25-5/16	5.39
30	32	24-11/16	27-5/16	4.68	36	32	30-11/16	27-5/16	5.82
30	36	24-11/16	31-5/16	5.37	36	36	30-11/16	31-5/16	6.67
30	40	24-11/16	35-5/16	6.05	36	40	30-11/16	35-5/16	7.53
30	42	24-11/16	37-5/16	6.40	36	42	30-11/16	37-5/16	7.95
30	48	24-11/16	43-5/16	7.43	36	48	30-11/16	43-5/16	9.23
30	54	24-11/16	49-5/16	8.45	36	54	30-11/16	49-5/16	10.51
30	60	24-11/16	55-5/16	9.48	36	60	30-11/16	55-5/16	11.79
30	66	24-11/16	61-5/16	10.51	36	66	30-11/16	61-5/16	13.07
30	72	24-11/16	67-5/16	11.54	36	72	30-11/16	67-5/16	14.34
30	78	24-11/16	73-5/16	12.57	36	78	30-11/16	73-5/16	15.62
30	84	24-11/16	79-5/16	13.60	36	84	30-11/16	79-5/16	16.90
30	90	24-11/16	85-5/16	14.63	36	90	30-11/16	85-5/16	18.18
30	96	24-11/16	91-5/16	15.65	36	96	30-11/16	91-5/16	19.46

All dimensions ± 1/16"

Clear opening Width = Box - 5 3/16"

Clear Opening Height = Box - 4 1 1/16"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Crank Operator, Standard Screen & Butt Hinges

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
42	18	36-11/16	13-5/16	3.39
42	20	36-11/16	15-5/16	3.90
42	24	36-11/16	19-5/16	4.92
42	28	36-11/16	23-5/16	5.94
42	30	36-11/16	25-5/16	6.45
42	32	36-11/16	27-5/16	6.96
42	36	36-11/16	31-5/16	7.98
42	40	36-11/16	35-5/16	9.00
42	42	36-11/16	37-5/16	9.51
42	48	36-11/16	43-5/16	11.03
42	54	36-11/16	49-5/16	12.56
42	60	36-11/16	55-5/16	14.09
42	66	36-11/16	61-5/16	15.62
42	72	36-11/16	67-5/16	17.15
42	78	36-11/16	73-5/16	18.68
42	84	36-11/16	79-5/16	20.21
42	90	36-11/16	85-5/16	21.74
42	96	36-11/16	91-5/16	23.26

All dimensions $\pm 1/16$ "

Clear opening Width = Box - $5\frac{5}{16}$ "

Clear Opening Height = Box - $4\frac{1}{16}$ "

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator & Wood Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
16	18	7-7/16	14-11/16	0.76	20	18	11-7/16	14-11/16	1.17
16	20	7-7/16	16-11/16	0.86	20	20	11-7/16	16-11/16	1.33
16	24	7-7/16	20-11/16	1.07	20	24	11-7/16	20-11/16	1.64
16	28	7-7/16	24-11/16	1.28	20	28	11-7/16	24-11/16	1.96
16	30	7-7/16	26-11/16	1.38	20	30	11-7/16	26-11/16	2.12
16	32	7-7/16	28-11/16	1.48	20	32	11-7/16	28-11/16	2.28
16	36	7-7/16	32-11/16	1.69	20	36	11-7/16	32-11/16	2.60
16	40	7-7/16	36-11/16	1.89	20	40	11-7/16	36-11/16	2.91
16	42	7-7/16	38-11/16	2.00	20	42	11-7/16	38-11/16	3.07
16	48	7-7/16	44-11/16	2.31	20	48	11-7/16	44-11/16	3.55
16	54	7-7/16	50-11/16	2.62	20	54	11-7/16	50-11/16	4.03
16	60	7-7/16	56-11/16	2.93	20	60	11-7/16	56-11/16	4.50
16	66	7-7/16	62-11/16	3.24	20	66	11-7/16	62-11/16	4.98
16	72	7-7/16	68-11/16	3.55	20	72	11-7/16	68-11/16	5.46
16	78	7-7/16	74-11/16	3.86	20	78	11-7/16	74-11/16	5.93
16	84	7-7/16	80-11/16	4.17	20	84	11-7/16	80-11/16	6.41
16	90	7-7/16	86-11/16	4.48	20	90	11-7/16	86-11/16	6.89
16	96	7-7/16	92-11/16	4.79	20	96	11-7/16	92-11/16	7.36
18	18	9-7/16	14-11/16	0.96	24	18	15-7/16	14-11/16	1.57
18	20	9-7/16	16-11/16	1.09	24	20	15-7/16	16-11/16	1.79
18	24	9-7/16	20-11/16	1.36	24	24	15-7/16	20-11/16	2.22
18	28	9-7/16	24-11/16	1.62	24	28	15-7/16	24-11/16	2.65
18	30	9-7/16	26-11/16	1.75	24	30	15-7/16	26-11/16	2.86
18	32	9-7/16	28-11/16	1.88	24	32	15-7/16	28-11/16	3.08
18	36	9-7/16	32-11/16	2.14	24	36	15-7/16	32-11/16	3.50
18	40	9-7/16	36-11/16	2.40	24	40	15-7/16	36-11/16	3.93
18	42	9-7/16	38-11/16	2.54	24	42	15-7/16	38-11/16	4.15
18	48	9-7/16	44-11/16	2.93	24	48	15-7/16	44-11/16	4.79
18	54	9-7/16	50-11/16	3.32	24	54	15-7/16	50-11/16	5.43
18	60	9-7/16	56-11/16	3.72	24	60	15-7/16	56-11/16	6.08
18	66	9-7/16	62-11/16	4.11	24	66	15-7/16	62-11/16	6.72
18	72	9-7/16	68-11/16	4.50	24	72	15-7/16	68-11/16	7.36
18	78	9-7/16	74-11/16	4.89	24	78	15-7/16	74-11/16	8.01
18	84	9-7/16	80-11/16	5.29	24	84	15-7/16	80-11/16	8.65
18	90	9-7/16	86-11/16	5.68	24	90	15-7/16	86-11/16	9.29
18	96	9-7/16	92-11/16	6.07	24	96	15-7/16	92-11/16	9.94

All dimensions ± 1/16"

Clear opening Width = Box - 8 3/8"

Clear Opening Height = Box - 3"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator & Wood Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
28	18	19-7/16	14-11/16	1.98	32	18	23-7/16	14-11/16	2.39
28	20	19-7/16	16-11/16	2.25	32	20	23-7/16	16-11/16	2.72
28	24	19-7/16	20-11/16	2.79	32	24	23-7/16	20-11/16	3.37
28	28	19-7/16	24-11/16	3.33	32	28	23-7/16	24-11/16	4.02
28	30	19-7/16	26-11/16	3.60	32	30	23-7/16	26-11/16	4.34
28	32	19-7/16	28-11/16	3.87	32	32	23-7/16	28-11/16	4.67
28	36	19-7/16	32-11/16	4.41	32	36	23-7/16	32-11/16	5.32
28	40	19-7/16	36-11/16	4.95	32	40	23-7/16	36-11/16	5.97
28	42	19-7/16	38-11/16	5.22	32	42	23-7/16	38-11/16	6.30
28	48	19-7/16	44-11/16	6.03	32	48	23-7/16	44-11/16	7.27
28	54	19-7/16	50-11/16	6.84	32	54	23-7/16	50-11/16	8.25
28	60	19-7/16	56-11/16	7.65	32	60	23-7/16	56-11/16	9.23
28	66	19-7/16	62-11/16	8.46	32	66	23-7/16	62-11/16	10.20
28	72	19-7/16	68-11/16	9.27	32	72	23-7/16	68-11/16	11.18
28	78	19-7/16	74-11/16	10.08	32	78	23-7/16	74-11/16	12.16
28	84	19-7/16	80-11/16	10.89	32	84	23-7/16	80-11/16	13.13
28	90	19-7/16	86-11/16	11.70	32	90	23-7/16	86-11/16	14.11
28	96	19-7/16	92-11/16	12.51	32	96	23-7/16	92-11/16	15.09
30	18	21-7/16	14-11/16	2.19	36	18	27-7/16	14-11/16	2.80
30	20	21-7/16	16-11/16	2.48	36	20	27-7/16	16-11/16	3.18
30	24	21-7/16	20-11/16	3.08	36	24	27-7/16	20-11/16	3.94
30	28	21-7/16	24-11/16	3.68	36	28	27-7/16	24-11/16	4.70
30	30	21-7/16	26-11/16	3.97	36	30	27-7/16	26-11/16	5.08
30	32	21-7/16	28-11/16	4.27	36	32	27-7/16	28-11/16	5.47
30	36	21-7/16	32-11/16	4.87	36	36	27-7/16	32-11/16	6.23
30	40	21-7/16	36-11/16	5.46	36	40	27-7/16	36-11/16	6.99
30	42	21-7/16	38-11/16	5.76	36	42	27-7/16	38-11/16	7.37
30	48	21-7/16	44-11/16	6.65	36	48	27-7/16	44-11/16	8.51
30	54	21-7/16	50-11/16	7.55	36	54	27-7/16	50-11/16	9.66
30	60	21-7/16	56-11/16	8.44	36	60	27-7/16	56-11/16	10.80
30	66	21-7/16	62-11/16	9.33	36	66	27-7/16	62-11/16	11.94
30	72	21-7/16	68-11/16	10.23	36	72	27-7/16	68-11/16	13.09
30	78	21-7/16	74-11/16	11.12	36	78	27-7/16	74-11/16	14.23
30	84	21-7/16	80-11/16	12.01	36	84	27-7/16	80-11/16	15.37
30	90	21-7/16	86-11/16	12.91	36	90	27-7/16	86-11/16	16.52
30	96	21-7/16	92-11/16	13.80	36	96	27-7/16	92-11/16	17.66

All dimensions $\pm 1/16''$

Clear opening Width = Box - $8\frac{3}{8}''$

Clear Opening Height = Box - 3"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator & Wood Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
42	18	33-7/16	14-11/16	3.41
42	20	33-7/16	16-11/16	3.87
42	24	33-7/16	20-11/16	4.80
42	28	33-7/16	24-11/16	5.73
42	30	33-7/16	26-11/16	6.20
42	32	33-7/16	28-11/16	6.66
42	36	33-7/16	32-11/16	7.59
42	40	33-7/16	36-11/16	8.52
42	42	33-7/16	38-11/16	8.98
42	48	33-7/16	44-11/16	10.38
42	54	33-7/16	50-11/16	11.77
42	60	33-7/16	56-11/16	13.16
42	66	33-7/16	62-11/16	14.56
42	72	33-7/16	68-11/16	15.95
42	78	33-7/16	74-11/16	17.34
42	84	33-7/16	80-11/16	18.74
42	90	33-7/16	86-11/16	20.13
42	96	33-7/16	92-11/16	21.52

All dimensions ± 1/16"

Clear opening Width = Box - 8 3/8"

Clear Opening Height = Box - 3"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator & Retractable Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
16	18	7	13-7/16	0.65	20	18	11	13-7/16	1.03
16	20	7	15-7/16	0.75	20	20	11	15-7/16	1.18
16	24	7	19-7/16	0.94	20	24	11	19-7/16	1.48
16	28	7	23-7/16	1.14	20	28	11	23-7/16	1.79
16	30	7	25-7/16	1.24	20	30	11	25-7/16	1.94
16	32	7	27-7/16	1.33	20	32	11	27-7/16	2.10
16	36	7	31-7/16	1.53	20	36	11	31-7/16	2.40
16	40	7	35-7/16	1.72	20	40	11	35-7/16	2.71
16	42	7	37-7/16	1.82	20	42	11	37-7/16	2.86
16	48	7	43-7/16	2.11	20	48	11	43-7/16	3.32
16	54	7	49-7/16	2.40	20	54	11	49-7/16	3.78
16	60	7	55-7/16	2.69	20	60	11	55-7/16	4.23
16	66	7	61-7/16	2.99	20	66	11	61-7/16	4.69
16	72	7	67-7/16	3.28	20	72	11	67-7/16	5.15
16	78	7	73-7/16	3.57	20	78	11	73-7/16	5.61
16	84	7	79-7/16	3.86	20	84	11	79-7/16	6.07
16	90	7	85-7/16	4.15	20	90	11	85-7/16	6.53
16	96	7	91-7/16	4.44	20	96	11	91-7/16	6.98
18	18	9	13-7/16	0.84	24	18	15	13-7/16	1.40
18	20	9	15-7/16	0.96	24	20	15	15-7/16	1.61
18	24	9	19-7/16	1.21	24	24	15	19-7/16	2.02
18	28	9	23-7/16	1.46	24	28	15	23-7/16	2.44
18	30	9	25-7/16	1.59	24	30	15	25-7/16	2.65
18	32	9	27-7/16	1.71	24	32	15	27-7/16	2.86
18	36	9	31-7/16	1.96	24	36	15	31-7/16	3.27
18	40	9	35-7/16	2.21	24	40	15	35-7/16	3.69
18	42	9	37-7/16	2.34	24	42	15	37-7/16	3.90
18	48	9	43-7/16	2.71	24	48	15	43-7/16	4.52
18	54	9	49-7/16	3.09	24	54	15	49-7/16	5.15
18	60	9	55-7/16	3.46	24	60	15	55-7/16	5.77
18	66	9	61-7/16	3.84	24	66	15	61-7/16	6.40
18	72	9	67-7/16	4.21	24	72	15	67-7/16	7.02
18	78	9	73-7/16	4.59	24	78	15	73-7/16	7.65
18	84	9	79-7/16	4.96	24	84	15	79-7/16	8.27
18	90	9	85-7/16	5.34	24	90	15	85-7/16	8.90
18	96	9	91-7/16	5.71	24	96	15	91-7/16	9.52

All dimensions $\pm 1/16$ "

Clear opening Width = Box - 9"

Clear Opening Height = Box - 4 $\frac{1}{16}$ "

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator & Retractable Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
28	18	19	13-7/16	1.77	32	18	23	13-7/16	2.15
28	20	19	15-7/16	2.04	32	20	23	15-7/16	2.47
28	24	19	19-7/16	2.56	32	24	23	19-7/16	3.10
28	28	19	23-7/16	3.09	32	28	23	23-7/16	3.74
28	30	19	25-7/16	3.36	32	30	23	25-7/16	4.06
28	32	19	27-7/16	3.62	32	32	23	27-7/16	4.38
28	36	19	31-7/16	4.15	32	36	23	31-7/16	5.02
28	40	19	35-7/16	4.68	32	40	23	35-7/16	5.66
28	42	19	37-7/16	4.94	32	42	23	37-7/16	5.98
28	48	19	43-7/16	5.73	32	48	23	43-7/16	6.94
28	54	19	49-7/16	6.52	32	54	23	49-7/16	7.90
28	60	19	55-7/16	7.31	32	60	23	55-7/16	8.85
28	66	19	61-7/16	8.11	32	66	23	61-7/16	9.81
28	72	19	67-7/16	8.90	32	72	23	67-7/16	10.77
28	78	19	73-7/16	9.69	32	78	23	73-7/16	11.73
28	84	19	79-7/16	10.48	32	84	23	79-7/16	12.69
28	90	19	85-7/16	11.27	32	90	23	85-7/16	13.65
28	96	19	91-7/16	12.06	32	96	23	91-7/16	14.60
30	18	21	13-7/16	1.96	36	18	27	13-7/16	2.52
30	20	21	15-7/16	2.25	36	20	27	15-7/16	2.89
30	24	21	19-7/16	2.83	36	24	27	19-7/16	3.64
30	28	21	23-7/16	3.42	36	28	27	23-7/16	4.39
30	30	21	25-7/16	3.71	36	30	27	25-7/16	4.77
30	32	21	27-7/16	4.00	36	32	27	27-7/16	5.14
30	36	21	31-7/16	4.58	36	36	27	31-7/16	5.89
30	40	21	35-7/16	5.17	36	40	27	35-7/16	6.64
30	42	21	37-7/16	5.46	36	42	27	37-7/16	7.02
30	48	21	43-7/16	6.33	36	48	27	43-7/16	8.14
30	54	21	49-7/16	7.21	36	54	27	49-7/16	9.27
30	60	21	55-7/16	8.08	36	60	27	55-7/16	10.39
30	66	21	61-7/16	8.96	36	66	27	61-7/16	11.52
30	72	21	67-7/16	9.83	36	72	27	67-7/16	12.64
30	78	21	73-7/16	10.71	36	78	27	73-7/16	13.77
30	84	21	79-7/16	11.58	36	84	27	79-7/16	14.89
30	90	21	85-7/16	12.46	36	90	27	85-7/16	16.02
30	96	21	91-7/16	13.33	36	96	27	91-7/16	17.14

All dimensions ± 1/16"

Clear opening Width = Box - 9"

Clear Opening Height = Box - 4 1/8"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator & Retractable Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
42	18	33	13-7/16	3.08
42	20	33	15-7/16	3.54
42	24	33	19-7/16	4.45
42	28	33	23-7/16	5.37
42	30	33	25-7/16	5.83
42	32	33	27-7/16	6.29
42	36	33	31-7/16	7.20
42	40	33	35-7/16	8.12
42	42	33	37-7/16	8.58
42	48	33	43-7/16	9.95
42	54	33	49-7/16	11.33
42	60	33	55-7/16	12.70
42	66	33	61-7/16	14.08
42	72	33	67-7/16	15.45
42	78	33	73-7/16	16.83
42	84	33	79-7/16	18.20
42	90	33	85-7/16	19.58
42	96	33	91-7/16	20.95

All dimensions $\pm 1/16''$

Clear opening Width = Box - 9"

Clear Opening Height = Box - 4 $\frac{1}{16}$ "

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator, Retractable Screen & Butt Hinges

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
16	18	10-13/16	13-7/16	1.01	20	18	14-13/16	13-7/16	1.38
16	20	10-13/16	15-7/16	1.16	20	20	14-13/16	15-7/16	1.59
16	24	10-13/16	19-7/16	1.46	20	24	14-13/16	19-7/16	2.00
16	28	10-13/16	23-7/16	1.76	20	28	14-13/16	23-7/16	2.41
16	30	10-13/16	25-7/16	1.91	20	30	14-13/16	25-7/16	2.62
16	32	10-13/16	27-7/16	2.06	20	32	14-13/16	27-7/16	2.82
16	36	10-13/16	31-7/16	2.36	20	36	14-13/16	31-7/16	3.23
16	40	10-13/16	35-7/16	2.66	20	40	14-13/16	35-7/16	3.65
16	42	10-13/16	37-7/16	2.81	20	42	14-13/16	37-7/16	3.85
16	48	10-13/16	43-7/16	3.26	20	48	14-13/16	43-7/16	4.47
16	54	10-13/16	49-7/16	3.71	20	54	14-13/16	49-7/16	5.09
16	60	10-13/16	55-7/16	4.16	20	60	14-13/16	55-7/16	5.70
16	66	10-13/16	61-7/16	4.61	20	66	14-13/16	61-7/16	6.32
16	72	10-13/16	67-7/16	5.06	20	72	14-13/16	67-7/16	6.94
16	78	10-13/16	73-7/16	5.51	20	78	14-13/16	73-7/16	7.55
16	84	10-13/16	79-7/16	5.96	20	84	14-13/16	79-7/16	8.17
16	90	10-13/16	85-7/16	6.42	20	90	14-13/16	85-7/16	8.79
16	96	10-13/16	91-7/16	6.87	20	96	14-13/16	91-7/16	9.41
18	18	12-13/16	13-7/16	1.20	24	18	18-13/16	13-7/16	1.76
18	20	12-13/16	15-7/16	1.37	24	20	18-13/16	15-7/16	2.02
18	24	12-13/16	19-7/16	1.73	24	24	18-13/16	19-7/16	2.54
18	28	12-13/16	23-7/16	2.09	24	28	18-13/16	23-7/16	3.06
18	30	12-13/16	25-7/16	2.26	24	30	18-13/16	25-7/16	3.32
18	32	12-13/16	27-7/16	2.44	24	32	18-13/16	27-7/16	3.58
18	36	12-13/16	31-7/16	2.80	24	36	18-13/16	31-7/16	4.11
18	40	12-13/16	35-7/16	3.15	24	40	18-13/16	35-7/16	4.63
18	42	12-13/16	37-7/16	3.33	24	42	18-13/16	37-7/16	4.89
18	48	12-13/16	43-7/16	3.86	24	48	18-13/16	43-7/16	5.67
18	54	12-13/16	49-7/16	4.40	24	54	18-13/16	49-7/16	6.46
18	60	12-13/16	55-7/16	4.93	24	60	18-13/16	55-7/16	7.24
18	66	12-13/16	61-7/16	5.47	24	66	18-13/16	61-7/16	8.03
18	72	12-13/16	67-7/16	6.00	24	72	18-13/16	67-7/16	8.81
18	78	12-13/16	73-7/16	6.53	24	78	18-13/16	73-7/16	9.59
18	84	12-13/16	79-7/16	7.07	24	84	18-13/16	79-7/16	10.38
18	90	12-13/16	85-7/16	7.60	24	90	18-13/16	85-7/16	11.16
18	96	12-13/16	91-7/16	8.14	24	96	18-13/16	91-7/16	11.95

All dimensions ± 1/16"

Clear opening Width = Box - 5³/₁₆"

Clear Opening Height = Box - 4¹¹/₁₆"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator, Retractable Screen & Butt Hinges

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
28	18	22-13/16	13-7/16	2.13	32	18	26-13/16	13-7/16	2.50
28	20	22-13/16	15-7/16	2.45	32	20	26-13/16	15-7/16	2.87
28	24	22-13/16	19-7/16	3.08	32	24	26-13/16	19-7/16	3.62
28	28	22-13/16	23-7/16	3.71	32	28	26-13/16	23-7/16	4.36
28	30	22-13/16	25-7/16	4.03	32	30	26-13/16	25-7/16	4.74
28	32	22-13/16	27-7/16	4.35	32	32	26-13/16	27-7/16	5.11
28	36	22-13/16	31-7/16	4.98	32	36	26-13/16	31-7/16	5.85
28	40	22-13/16	35-7/16	5.61	32	40	26-13/16	35-7/16	6.60
28	42	22-13/16	37-7/16	5.93	32	42	26-13/16	37-7/16	6.97
28	48	22-13/16	43-7/16	6.88	32	48	26-13/16	43-7/16	8.09
28	54	22-13/16	49-7/16	7.83	32	54	26-13/16	49-7/16	9.21
28	60	22-13/16	55-7/16	8.78	32	60	26-13/16	55-7/16	10.32
28	66	22-13/16	61-7/16	9.73	32	66	26-13/16	61-7/16	11.44
28	72	22-13/16	67-7/16	10.68	32	72	26-13/16	67-7/16	12.56
28	78	22-13/16	73-7/16	11.63	32	78	26-13/16	73-7/16	13.67
28	84	22-13/16	79-7/16	12.58	32	84	26-13/16	79-7/16	14.79
28	90	22-13/16	85-7/16	13.54	32	90	26-13/16	85-7/16	15.91
28	96	22-13/16	91-7/16	14.49	32	96	26-13/16	91-7/16	17.03
30	18	24-13/16	13-7/16	2.32	36	18	30-13/16	13-7/16	2.88
30	20	24-13/16	15-7/16	2.66	36	20	30-13/16	15-7/16	3.30
30	24	24-13/16	19-7/16	3.35	36	24	30-13/16	19-7/16	4.16
30	28	24-13/16	23-7/16	4.04	36	28	30-13/16	23-7/16	5.02
30	30	24-13/16	25-7/16	4.38	36	30	30-13/16	25-7/16	5.44
30	32	24-13/16	27-7/16	4.73	36	32	30-13/16	27-7/16	5.87
30	36	24-13/16	31-7/16	5.42	36	36	30-13/16	31-7/16	6.73
30	40	24-13/16	35-7/16	6.11	36	40	30-13/16	35-7/16	7.58
30	42	24-13/16	37-7/16	6.45	36	42	30-13/16	37-7/16	8.01
30	48	24-13/16	43-7/16	7.48	36	48	30-13/16	43-7/16	9.29
30	54	24-13/16	49-7/16	8.52	36	54	30-13/16	49-7/16	10.58
30	60	24-13/16	55-7/16	9.55	36	60	30-13/16	55-7/16	11.86
30	66	24-13/16	61-7/16	10.59	36	66	30-13/16	61-7/16	13.15
30	72	24-13/16	67-7/16	11.62	36	72	30-13/16	67-7/16	14.43
30	78	24-13/16	73-7/16	12.65	36	78	30-13/16	73-7/16	15.71
30	84	24-13/16	79-7/16	13.69	36	84	30-13/16	79-7/16	17.00
30	90	24-13/16	85-7/16	14.72	36	90	30-13/16	85-7/16	18.28
30	96	24-13/16	91-7/16	15.76	36	96	30-13/16	91-7/16	19.57

All dimensions $\pm 1/16''$

Clear opening Width = Box - $5\frac{3}{16}''$

Clear Opening Height = Box - $4\frac{11}{16}''$

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Casement - Push-Out Operator, Retractable Screen & Butt Hinges

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
42	18	36-13/16	13-7/16	3.44
42	20	36-13/16	15-7/16	3.95
42	24	36-13/16	19-7/16	4.97
42	28	36-13/16	23-7/16	5.99
42	30	36-13/16	25-7/16	6.50
42	32	36-13/16	27-7/16	7.01
42	36	36-13/16	31-7/16	8.04
42	40	36-13/16	35-7/16	9.06
42	42	36-13/16	37-7/16	9.57
42	48	36-13/16	43-7/16	11.10
42	54	36-13/16	49-7/16	12.64
42	60	36-13/16	55-7/16	14.17
42	66	36-13/16	61-7/16	15.71
42	72	36-13/16	67-7/16	17.24
42	78	36-13/16	73-7/16	18.77
42	84	36-13/16	79-7/16	20.31
42	90	36-13/16	85-7/16	21.84
42	96	36-13/16	91-7/16	23.38

All dimensions ± 1/16"

Clear opening Width = Box - 5³/₁₆"

Clear Opening Height = Box - 4¹/₁₆"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

French Push-Out Casement with Retractable Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
30	20	16-3/8	15-7/16	1.76	40	20	26-3/8	15-7/16	2.83
30	24	16-3/8	19-7/16	2.21	40	24	26-3/8	19-7/16	3.56
30	28	16-3/8	23-7/16	2.67	40	28	26-3/8	23-7/16	4.29
30	30	16-3/8	25-7/16	2.89	40	30	26-3/8	25-7/16	4.66
30	32	16-3/8	27-7/16	3.12	40	32	26-3/8	27-7/16	5.03
30	36	16-3/8	31-7/16	3.57	40	36	26-3/8	31-7/16	5.76
30	40	16-3/8	35-7/16	4.03	40	40	26-3/8	35-7/16	6.49
30	42	16-3/8	37-7/16	4.26	40	42	26-3/8	37-7/16	6.86
30	48	16-3/8	43-7/16	4.94	40	48	26-3/8	43-7/16	7.96
30	54	16-3/8	49-7/16	5.62	40	54	26-3/8	49-7/16	9.05
30	60	16-3/8	55-7/16	6.30	40	60	26-3/8	55-7/16	10.15
30	66	16-3/8	61-7/16	6.99	40	66	26-3/8	61-7/16	11.25
30	72	16-3/8	67-7/16	7.67	40	72	26-3/8	67-7/16	12.35
30	78	16-3/8	73-7/16	8.35	40	78	26-3/8	73-7/16	13.45
32	20	18-3/8	15-7/16	1.97	48	20	34-3/8	15-7/16	3.69
32	24	18-3/8	19-7/16	2.48	48	24	34-3/8	19-7/16	4.64
32	28	18-3/8	23-7/16	2.99	48	28	34-3/8	23-7/16	5.59
32	30	18-3/8	25-7/16	3.25	48	30	34-3/8	25-7/16	6.07
32	32	18-3/8	27-7/16	3.50	48	32	34-3/8	27-7/16	6.55
32	36	18-3/8	31-7/16	4.01	48	36	34-3/8	31-7/16	7.50
32	40	18-3/8	35-7/16	4.52	48	40	34-3/8	35-7/16	8.46
32	42	18-3/8	37-7/16	4.78	48	42	34-3/8	37-7/16	8.94
32	48	18-3/8	43-7/16	5.54	48	48	34-3/8	43-7/16	10.37
32	54	18-3/8	49-7/16	6.31	48	54	34-3/8	49-7/16	11.80
32	60	18-3/8	55-7/16	7.07	48	60	34-3/8	55-7/16	13.23
32	66	18-3/8	61-7/16	7.84	48	66	34-3/8	61-7/16	14.67
32	72	18-3/8	67-7/16	8.61	48	72	34-3/8	67-7/16	16.10
32	78	18-3/8	73-7/16	9.37	48	78	34-3/8	73-7/16	17.53
36	20	22-3/8	15-7/16	2.40					
36	24	22-3/8	19-7/16	3.02					
36	28	22-3/8	23-7/16	3.64					
36	30	22-3/8	25-7/16	3.95					
36	32	22-3/8	27-7/16	4.26					
36	36	22-3/8	31-7/16	4.88					
36	40	22-3/8	35-7/16	5.51					
36	42	22-3/8	37-7/16	5.82					
36	48	22-3/8	43-7/16	6.75					
36	54	22-3/8	49-7/16	7.68					
36	60	22-3/8	55-7/16	8.61					
36	66	22-3/8	61-7/16	9.55					
36	72	22-3/8	67-7/16	10.48					
36	78	22-3/8	73-7/16	11.41					

All dimensions \pm 1/16"

Clear opening Width = Box - 12 $\frac{3}{8}$ "

Clear Opening Height = Box - 4 $\frac{11}{16}$ "

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

French Push-Out Casement with Retractable Screen

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
56	20	42-3/8	15-7/16	4.54	60	20	46-3/8	15-7/16	4.97
56	24	42-3/8	19-7/16	5.72	60	24	46-3/8	19-7/16	6.26
56	28	42-3/8	23-7/16	6.90	60	28	46-3/8	23-7/16	7.55
56	30	42-3/8	25-7/16	7.49	60	30	46-3/8	25-7/16	8.19
56	32	42-3/8	27-7/16	8.07	60	32	46-3/8	27-7/16	8.84
56	36	42-3/8	31-7/16	9.25	60	36	46-3/8	31-7/16	10.12
56	40	42-3/8	35-7/16	10.43	60	40	46-3/8	35-7/16	11.41
56	42	42-3/8	37-7/16	11.02	60	42	46-3/8	37-7/16	12.06
56	48	42-3/8	43-7/16	12.78	60	48	46-3/8	43-7/16	13.99
56	54	42-3/8	49-7/16	14.55	60	54	46-3/8	49-7/16	15.92
56	60	42-3/8	55-7/16	16.31	60	60	46-3/8	55-7/16	17.85
56	66	42-3/8	61-7/16	18.08	60	66	46-3/8	61-7/16	19.79
56	72	42-3/8	67-7/16	19.84	60	72	46-3/8	67-7/16	21.72
56	78	42-3/8	73-7/16	21.61	60	78	46-3/8	73-7/16	23.65

All dimensions ± 1/16"

Clear opening Width = Box - 12⁵/₈"

Clear Opening Height = Box - 4¹/₁₆"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Double Hungs - Standard or Concealed Jambliners

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
17-3/8	32-1/2	14	11-3/4	1.14	29-3/8	32-1/2	26	11-3/4	2.12
17-3/8	36-1/2	14	13-3/4	1.34	29-3/8	36-1/2	26	13-3/4	2.48
17-3/8	40-1/2	14	15-3/4	1.53	29-3/8	40-1/2	26	15-3/4	2.84
17-3/8	44-1/2	14	17-3/4	1.73	29-3/8	44-1/2	26	17-3/4	3.20
17-3/8	48-1/2	14	19-3/4	1.92	29-3/8	48-1/2	26	19-3/4	3.57
17-3/8	52-1/2	14	21-3/4	2.11	29-3/8	52-1/2	26	21-3/4	3.93
17-3/8	56-1/2	14	23-3/4	2.31	29-3/8	56-1/2	26	23-3/4	4.29
17-3/8	60-1/2	14	25-3/4	2.50	29-3/8	60-1/2	26	25-3/4	4.65
17-3/8	64-1/2	14	27-3/4	2.70	29-3/8	64-1/2	26	27-3/4	5.01
17-3/8	68-1/2	14	29-3/4	2.89	29-3/8	68-1/2	26	29-3/4	5.37
17-3/8	72-1/2	14	31-3/4	3.09	29-3/8	72-1/2	26	31-3/4	5.73
17-3/8	76-1/2	14	33-3/4	3.28	29-3/8	76-1/2	26	33-3/4	6.09
17-3/8	80-1/2	14	35-3/4	3.48	29-3/8	80-1/2	26	35-3/4	6.45
17-3/8	92-1/2	14	41-3/4	4.06	29-3/8	92-1/2	26	41-3/4	7.54
21-3/8	32-1/2	18	11-3/4	1.47	31-3/8	32-1/2	28	11-3/4	2.28
21-3/8	36-1/2	18	13-3/4	1.72	31-3/8	36-1/2	28	13-3/4	2.67
21-3/8	40-1/2	18	15-3/4	1.97	31-3/8	40-1/2	28	15-3/4	3.06
21-3/8	44-1/2	18	17-3/4	2.22	31-3/8	44-1/2	28	17-3/4	3.45
21-3/8	48-1/2	18	19-3/4	2.47	31-3/8	48-1/2	28	19-3/4	3.84
21-3/8	52-1/2	18	21-3/4	2.72	31-3/8	52-1/2	28	21-3/4	4.23
21-3/8	56-1/2	18	23-3/4	2.97	31-3/8	56-1/2	28	23-3/4	4.62
21-3/8	60-1/2	18	25-3/4	3.22	31-3/8	60-1/2	28	25-3/4	5.01
21-3/8	64-1/2	18	27-3/4	3.47	31-3/8	64-1/2	28	27-3/4	5.40
21-3/8	68-1/2	18	29-3/4	3.72	31-3/8	68-1/2	28	29-3/4	5.78
21-3/8	72-1/2	18	31-3/4	3.97	31-3/8	72-1/2	28	31-3/4	6.17
21-3/8	76-1/2	18	33-3/4	4.22	31-3/8	76-1/2	28	33-3/4	6.56
21-3/8	80-1/2	18	35-3/4	4.47	31-3/8	80-1/2	28	35-3/4	6.95
21-3/8	92-1/2	18	41-3/4	5.22	31-3/8	92-1/2	28	41-3/4	8.12
25-3/8	32-1/2	22	11-3/4	1.80	33-3/8	32-1/2	30	11-3/4	2.45
25-3/8	36-1/2	22	13-3/4	2.10	33-3/8	36-1/2	30	13-3/4	2.86
25-3/8	40-1/2	22	15-3/4	2.41	33-3/8	40-1/2	30	15-3/4	3.28
25-3/8	44-1/2	22	17-3/4	2.71	33-3/8	44-1/2	30	17-3/4	3.70
25-3/8	48-1/2	22	19-3/4	3.02	33-3/8	48-1/2	30	19-3/4	4.11
25-3/8	52-1/2	22	21-3/4	3.32	33-3/8	52-1/2	30	21-3/4	4.53
25-3/8	56-1/2	22	23-3/4	3.63	33-3/8	56-1/2	30	23-3/4	4.95
25-3/8	60-1/2	22	25-3/4	3.93	33-3/8	60-1/2	30	25-3/4	5.36
25-3/8	64-1/2	22	27-3/4	4.24	33-3/8	64-1/2	30	27-3/4	5.78
25-3/8	68-1/2	22	29-3/4	4.55	33-3/8	68-1/2	30	29-3/4	6.20
25-3/8	72-1/2	22	31-3/4	4.85	33-3/8	72-1/2	30	31-3/4	6.61
25-3/8	76-1/2	22	33-3/4	5.16	33-3/8	76-1/2	30	33-3/4	7.03
25-3/8	80-1/2	22	35-3/4	5.46	33-3/8	80-1/2	30	35-3/4	7.45
25-3/8	92-1/2	22	41-3/4	6.38	33-3/8	92-1/2	30	41-3/4	8.70

Double Hungs - Standard or Concealed Jamblers

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
35-3/8	32-1/2	32	11-3/4	2.61	41-3/8	32-1/2	38	11-3/4	3.10
35-3/8	36-1/2	32	13-3/4	3.06	41-3/8	36-1/2	38	13-3/4	3.63
35-3/8	40-1/2	32	15-3/4	3.50	41-3/8	40-1/2	38	15-3/4	4.16
35-3/8	44-1/2	32	17-3/4	3.94	41-3/8	44-1/2	38	17-3/4	4.68
35-3/8	48-1/2	32	19-3/4	4.39	41-3/8	48-1/2	38	19-3/4	5.21
35-3/8	52-1/2	32	21-3/4	4.83	41-3/8	52-1/2	38	21-3/4	5.74
35-3/8	56-1/2	32	23-3/4	5.28	41-3/8	56-1/2	38	23-3/4	6.27
35-3/8	60-1/2	32	25-3/4	5.72	41-3/8	60-1/2	38	25-3/4	6.80
35-3/8	64-1/2	32	27-3/4	6.17	41-3/8	64-1/2	38	27-3/4	7.32
35-3/8	68-1/2	32	29-3/4	6.61	41-3/8	68-1/2	38	29-3/4	7.85
35-3/8	72-1/2	32	31-3/4	7.06	41-3/8	72-1/2	38	31-3/4	8.38
35-3/8	76-1/2	32	33-3/4	7.50	41-3/8	76-1/2	38	33-3/4	8.91
35-3/8	80-1/2	32	35-3/4	7.94	41-3/8	80-1/2	38	35-3/4	9.43
35-3/8	92-1/2	32	41-3/4	9.28	41-3/8	92-1/2	38	41-3/4	11.02
37-3/8	32-1/2	34	11-3/4	2.77	45-3/8	32-1/2	42	11-3/4	3.43
37-3/8	36-1/2	34	13-3/4	3.25	45-3/8	36-1/2	42	13-3/4	4.01
37-3/8	40-1/2	34	15-3/4	3.72	45-3/8	40-1/2	42	15-3/4	4.59
37-3/8	44-1/2	34	17-3/4	4.19	45-3/8	44-1/2	42	17-3/4	5.18
37-3/8	48-1/2	34	19-3/4	4.66	45-3/8	48-1/2	42	19-3/4	5.76
37-3/8	52-1/2	34	21-3/4	5.14	45-3/8	52-1/2	42	21-3/4	6.34
37-3/8	56-1/2	34	23-3/4	5.61	45-3/8	56-1/2	42	23-3/4	6.93
37-3/8	60-1/2	34	25-3/4	6.08	45-3/8	60-1/2	42	25-3/4	7.51
37-3/8	64-1/2	34	27-3/4	6.55	45-3/8	64-1/2	42	27-3/4	8.09
37-3/8	68-1/2	34	29-3/4	7.02	45-3/8	68-1/2	42	29-3/4	8.68
37-3/8	72-1/2	34	31-3/4	7.50	45-3/8	72-1/2	42	31-3/4	9.26
37-3/8	76-1/2	34	33-3/4	7.97	45-3/8	76-1/2	42	33-3/4	9.84
37-3/8	80-1/2	34	35-3/4	8.44	45-3/8	80-1/2	42	35-3/4	10.43
37-3/8	92-1/2	34	41-3/4	9.86	45-3/8	92-1/2	42	41-3/4	12.18

All dimensions ± 1/16"

Clear opening Width = Glass + 1-7/8"

Clear Opening Height = Bottom Sash Glass Height + 3/16"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Double Hungs PG50 - Standard or Concealed Jambliners

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
17-3/8	32-1/2	14	11-1/8	1.08	29-3/8	32-1/2	26	11-1/8	2.01
17-3/8	36-1/2	14	13-1/8	1.28	29-3/8	36-1/2	26	13-1/8	2.37
17-3/8	40-1/2	14	15-1/8	1.47	29-3/8	40-1/2	26	15-1/8	2.73
17-3/8	44-1/2	14	17-1/8	1.66	29-3/8	44-1/2	26	17-1/8	3.09
17-3/8	48-1/2	14	19-1/8	1.86	29-3/8	48-1/2	26	19-1/8	3.45
17-3/8	52-1/2	14	21-1/8	2.05	29-3/8	52-1/2	26	21-1/8	3.81
17-3/8	56-1/2	14	23-1/8	2.25	29-3/8	56-1/2	26	23-1/8	4.18
17-3/8	60-1/2	14	25-1/8	2.44	29-3/8	60-1/2	26	25-1/8	4.54
17-3/8	64-1/2	14	27-1/8	2.64	29-3/8	64-1/2	26	27-1/8	4.90
17-3/8	68-1/2	14	29-1/8	2.83	29-3/8	68-1/2	26	29-1/8	5.26
17-3/8	72-1/2	14	31-1/8	3.03	29-3/8	72-1/2	26	31-1/8	5.62
17-3/8	76-1/2	14	33-1/8	3.22	29-3/8	76-1/2	26	33-1/8	5.98
17-3/8	80-1/2	14	35-1/8	3.41	29-3/8	80-1/2	26	35-1/8	6.34
17-3/8	92-1/2	14	41-1/8	4.00	29-3/8	92-1/2	26	41-1/8	7.43
21-3/8	32-1/2	18	11-1/8	1.39	31-3/8	32-1/2	28	11-1/8	2.16
21-3/8	36-1/2	18	13-1/8	1.64	31-3/8	36-1/2	28	13-1/8	2.55
21-3/8	40-1/2	18	15-1/8	1.89	31-3/8	40-1/2	28	15-1/8	2.94
21-3/8	44-1/2	18	17-1/8	2.14	31-3/8	44-1/2	28	17-1/8	3.33
21-3/8	48-1/2	18	19-1/8	2.39	31-3/8	48-1/2	28	19-1/8	3.72
21-3/8	52-1/2	18	21-1/8	2.64	31-3/8	52-1/2	28	21-1/8	4.11
21-3/8	56-1/2	18	23-1/8	2.89	31-3/8	56-1/2	28	23-1/8	4.50
21-3/8	60-1/2	18	25-1/8	3.14	31-3/8	60-1/2	28	25-1/8	4.89
21-3/8	64-1/2	18	27-1/8	3.39	31-3/8	64-1/2	28	27-1/8	5.27
21-3/8	68-1/2	18	29-1/8	3.64	31-3/8	68-1/2	28	29-1/8	5.66
21-3/8	72-1/2	18	31-1/8	3.89	31-3/8	72-1/2	28	31-1/8	6.05
21-3/8	76-1/2	18	33-1/8	4.14	31-3/8	76-1/2	28	33-1/8	6.44
21-3/8	80-1/2	18	35-1/8	4.39	31-3/8	80-1/2	28	35-1/8	6.83
21-3/8	92-1/2	18	41-1/8	5.14	31-3/8	92-1/2	28	41-1/8	8.00
25-3/8	32-1/2	22	11-1/8	1.70	33-3/8	32-1/2	30	11-1/8	2.32
25-3/8	36-1/2	22	13-1/8	2.01	33-3/8	36-1/2	30	13-1/8	2.73
25-3/8	40-1/2	22	15-1/8	2.31	33-3/8	40-1/2	30	15-1/8	3.15
25-3/8	44-1/2	22	17-1/8	2.62	33-3/8	44-1/2	30	17-1/8	3.57
25-3/8	48-1/2	22	19-1/8	2.92	33-3/8	48-1/2	30	19-1/8	3.98
25-3/8	52-1/2	22	21-1/8	3.23	33-3/8	52-1/2	30	21-1/8	4.40
25-3/8	56-1/2	22	23-1/8	3.53	33-3/8	56-1/2	30	23-1/8	4.82
25-3/8	60-1/2	22	25-1/8	3.84	33-3/8	60-1/2	30	25-1/8	5.23
25-3/8	64-1/2	22	27-1/8	4.14	33-3/8	64-1/2	30	27-1/8	5.65
25-3/8	68-1/2	22	29-1/8	4.45	33-3/8	68-1/2	30	29-1/8	6.07
25-3/8	72-1/2	22	31-1/8	4.76	33-3/8	72-1/2	30	31-1/8	6.48
25-3/8	76-1/2	22	33-1/8	5.06	33-3/8	76-1/2	30	33-1/8	6.90
25-3/8	80-1/2	22	35-1/8	5.37	33-3/8	80-1/2	30	35-1/8	7.32
25-3/8	92-1/2	22	41-1/8	6.28	33-3/8	92-1/2	30	41-1/8	8.57

Double Hungs PG50 - Standard or Concealed Jamblers

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
35-3/8	32-1/2	32	11-1/8	2.47
35-3/8	36-1/2	32	13-1/8	2.92
35-3/8	40-1/2	32	15-1/8	3.36
35-3/8	44-1/2	32	17-1/8	3.81
35-3/8	48-1/2	32	19-1/8	4.25
35-3/8	52-1/2	32	21-1/8	4.69
35-3/8	56-1/2	32	23-1/8	5.14
35-3/8	60-1/2	32	25-1/8	5.58
35-3/8	64-1/2	32	27-1/8	6.03
35-3/8	68-1/2	32	29-1/8	6.47
35-3/8	72-1/2	32	31-1/8	6.92
35-3/8	76-1/2	32	33-1/8	7.36
35-3/8	80-1/2	32	35-1/8	7.81
35-3/8	92-1/2	32	41-1/8	9.14
37-3/8	32-1/2	34	11-1/8	2.63
37-3/8	36-1/2	34	13-1/8	3.10
37-3/8	40-1/2	34	15-1/8	3.57
37-3/8	44-1/2	34	17-1/8	4.04
37-3/8	48-1/2	34	19-1/8	4.52
37-3/8	52-1/2	34	21-1/8	4.99
37-3/8	56-1/2	34	23-1/8	5.46
37-3/8	60-1/2	34	25-1/8	5.93
37-3/8	64-1/2	34	27-1/8	6.40
37-3/8	68-1/2	34	29-1/8	6.88
37-3/8	72-1/2	34	31-1/8	7.35
37-3/8	76-1/2	34	33-1/8	7.82
37-3/8	80-1/2	34	35-1/8	8.29

All dimensions ± 1/16"

Clear opening Width = Glass + 1-7/8"

Clear Opening Height = Bottom Sash Glass Height + 3/16"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Quantum Double Hung

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening	Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
39-13/16	73-15/16	35 -1/8	30 -1/4	7.38	51-13/16	73-15/16	47 -1/8	30 -1/4	9.90
39-13/16	81-15/16	35 -1/8	34 -1/4	8.35	51-13/16	81-15/16	47 -1/8	34 -1/4	11.21
39-13/16	89-15/16	35 -1/8	38 -1/4	9.33	51-13/16	89-15/16	47 -1/8	38 -1/4	12.52
39-13/16	97-15/16	35 -1/8	42 -1/4	10.31	51-13/16	97-15/16	47 -1/8	42 -1/4	13.83
39-13/16	105-15/16	35 -1/8	46 -1/4	11.28	51-13/16	105-15/16	47 -1/8	46 -1/4	15.14
39-13/16	113-15/16	35 -1/8	50 -1/4	12.26	51-13/16	113-15/16	47 -1/8	50 -1/4	16.44
39-13/16	119-15/16	35 -1/8	53 -1/4	12.99	55-13/16	73-15/16	51 -1/8	30 -1/4	10.74
43-13/16	73-15/16	39 -1/8	30 -1/4	8.22	55-13/16	81-15/16	51 -1/8	34 -1/4	12.16
43-13/16	81-15/16	39 -1/8	34 -1/4	9.31	55-13/16	89-15/16	51 -1/8	38 -1/4	13.58
43-13/16	89-15/16	39 -1/8	38 -1/4	10.39	55-13/16	97-15/16	51 -1/8	42 -1/4	15.00
43-13/16	97-15/16	39 -1/8	42 -1/4	11.48	55-13/16	105-15/16	51 -1/8	46 -1/4	16.42
43-13/16	105-15/16	39 -1/8	46 -1/4	12.57	55-13/16	113-15/16	51 -1/8	50 -1/4	17.84
43-13/16	113-15/16	39 -1/8	50 -1/4	13.65	55-13/16	119-15/16	51 -1/8	53 -1/4	18.91
43-13/16	119-15/16	39 -1/8	53 -1/4	14.47	59-13/16	73-15/16	55 -1/8	30 -1/4	11.58
47-13/16	73-15/16	43 -1/8	30 -1/4	9.06	59-13/16	81-15/16	55 -1/8	34 -1/4	13.11
47-13/16	81-15/16	43 -1/8	34 -1/4	10.26	59-13/16	89-15/16	55 -1/8	38 -1/4	14.64
47-13/16	89-15/16	43 -1/8	38 -1/4	11.46	59-13/16	97-15/16	55 -1/8	42 -1/4	16.17
47-13/16	97-15/16	43 -1/8	42 -1/4	12.65	59-13/16	105-15/16	55 -1/8	46 -1/4	17.71
47-13/16	105-15/16	43 -1/8	46 -1/4	13.85	59-13/16	113-15/16	55 -1/8	50 -1/4	19.24
47-13/16	113-15/16	43 -1/8	50 -1/4	15.05	59-13/16	119-15/16	55 -1/8	53 -1/4	20.38
47-13/16	119-15/16	43 -1/8	53 -1/4	15.95					
49-13/16	73-15/16	45 -1/8	30 -1/4	9.48					
49-13/16	81-15/16	45 -1/8	34 -1/4	10.73					
49-13/16	89-15/16	45 -1/8	38 -1/4	11.99					
49-13/16	97-15/16	45 -1/8	42 -1/4	13.24					
49-13/16	105-15/16	45 -1/8	46 -1/4	14.49					
49-13/16	113-15/16	45 -1/8	50 -1/4	15.75					
49-13/16	119-15/16	45 -1/8	53 -1/4	16.69					

All dimensions $\pm 1/16''$

Clear opening Width = Glass + 1-7/8"

Clear Opening Height = Bottom Sash Glass Height - 9/16"

Sq. Ft. of Clear Opening = (Clear opening width) x (Clear Opening Height) / 144

Glider Units

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
39-7/8	22-1/8	16-9/16	17-7/8	2.06
39-7/8	26-1/8	16-9/16	21-7/8	2.52
39-7/8	30-1/8	16-9/16	25-7/8	2.98
39-7/8	34-1/8	16-9/16	29-7/8	3.44
39-7/8	38-1/8	16-9/16	33-7/8	3.90
39-7/8	42-1/8	16-9/16	37-7/8	4.36
39-7/8	46-1/8	16-9/16	41-7/8	4.82
39-7/8	54-1/8	16-9/16	49-7/8	5.74
47-7/8	22-1/8	20-9/16	17-7/8	2.55
47-7/8	26-1/8	20-9/16	21-7/8	3.12
47-7/8	30-1/8	20-9/16	25-7/8	3.69
47-7/8	34-1/8	20-9/16	29-7/8	4.27
47-7/8	38-1/8	20-9/16	33-7/8	4.84
47-7/8	42-1/8	20-9/16	37-7/8	5.41
47-7/8	46-1/8	20-9/16	41-7/8	5.98
47-7/8	54-1/8	20-9/16	49-7/8	7.12
55-7/8	22-1/8	24-9/16	17-7/8	3.05
55-7/8	26-1/8	24-9/16	21-7/8	3.73
55-7/8	30-1/8	24-9/16	25-7/8	4.41
55-7/8	34-1/8	24-9/16	29-7/8	5.10
55-7/8	38-1/8	24-9/16	33-7/8	5.78
55-7/8	42-1/8	24-9/16	37-7/8	6.46
55-7/8	46-1/8	24-9/16	41-7/8	7.14
55-7/8	54-1/8	24-9/16	49-7/8	8.51
63-7/8	22-1/8	28-9/16	17-7/8	3.55
63-7/8	26-1/8	28-9/16	21-7/8	4.34
63-7/8	30-1/8	28-9/16	25-7/8	5.13
63-7/8	34-1/8	28-9/16	29-7/8	5.93
63-7/8	38-1/8	28-9/16	33-7/8	6.72
63-7/8	42-1/8	28-9/16	37-7/8	7.51
63-7/8	46-1/8	28-9/16	41-7/8	8.31
63-7/8	54-1/8	28-9/16	49-7/8	9.89
71-7/8	22-1/8	32-9/16	17-7/8	4.04
71-7/8	26-1/8	32-9/16	21-7/8	4.95
71-7/8	30-1/8	32-9/16	25-7/8	5.85
71-7/8	34-1/8	32-9/16	29-7/8	6.76
71-7/8	38-1/8	32-9/16	33-7/8	7.66
71-7/8	42-1/8	32-9/16	37-7/8	8.56
71-7/8	46-1/8	32-9/16	41-7/8	9.47
71-7/8	54-1/8	32-9/16	49-7/8	11.28

Triple Glider Units

Box Size Width	Box Size Height	Clear Opening Width	Clear Opening Height	Square Ft. of Clear Opening
73-3/8	30-1/8	18-1/8	25-7/8	3.26
73-3/8	38-1/8	18-1/8	33-7/8	4.26
73-3/8	42-1/8	18-1/8	37-7/8	4.77
73-3/8	46-1/8	18-1/8	41-7/8	5.27
73-3/8	54-1/8	18-1/8	49-7/8	6.28
85-3/8	30-1/8	22-1/8	25-7/8	3.98
85-3/8	38-1/8	22-1/8	33-7/8	5.20
85-3/8	42-1/8	22-1/8	37-7/8	5.82
85-3/8	46-1/8	22-1/8	41-7/8	6.43
85-3/8	54-1/8	22-1/8	49-7/8	7.66
89-3/8	30-1/8	22-1/8	25-7/8	3.98
89-3/8	38-1/8	22-1/8	33-7/8	5.20
89-3/8	42-1/8	22-1/8	37-7/8	5.82
89-3/8	46-1/8	22-1/8	41-7/8	6.43
89-3/8	54-1/8	22-1/8	49-7/8	7.66
105-3/8	30-1/8	26-1/8	25-7/8	4.69
105-3/8	38-1/8	26-1/8	33-7/8	6.15
105-3/8	42-1/8	26-1/8	37-7/8	6.87
105-3/8	46-1/8	26-1/8	41-7/8	7.60
105-3/8	54-1/8	26-1/8	49-7/8	9.05

All dimensions ± 1/16"

***The clear opening width shown above is with one sash open

All dimensions ± 1/16"

Slide Patio Doors - Narrow Stile

2-1/2 Stile, 2-1/2 Top Rail and 3-3/8 Bottom Rail

Narrow Stile 6/6 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	79-1/8	22-3/16	74-7/8	11.55
6/0	70-3/16	79-1/8	28-3/16	74-7/8	14.67
6/0 FS	76-3/16	79-1/8	31-3/16	74-7/8	16.23
8/0	94-3/16	79-1/8	40-3/16	74-7/8	20.91
3-Panel					
7/6	89-1/2	79-1/8	22-3/16	74-7/8	11.55
9/0	107-1/2	79-1/8	28-3/16	74-7/8	14.67
9/0 FS	116-1/2	79-1/8	31-3/16	74-7/8	16.23
12/0	143-1/2	79-1/8	40-3/16	74-7/8	20.91
4-Panel					
10/0	114-1/8	79-1/8	45-5/8	74-7/8	23.73
12/0	138-1/8	79-1/8	57-5/8	74-7/8	29.97
12/0 FS	150-1/8	79-1/8	63-5/8	74-7/8	33.09
16/0	186-1/8	79-1/8	81-5/8	74-7/8	42.45

Narrow Stile 6/8 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	82-1/4	22-3/16	78	12.03
6/0	70-3/16	82-1/4	28-3/16	78	15.28
6/0 FS	76-3/16	82-1/4	31-3/16	78	16.90
8/0	94-3/16	82-1/4	40-3/16	78	21.78
3-Panel					
7/6	89-1/2	82-1/4	22-3/16	78	12.027
9/0	107-1/2	82-1/4	28-3/16	78	15.278
9/0 FS	116-1/2	82-1/4	31-3/16	78	16.903
12/0	143-1/2	82-1/4	40-3/16	78	21.779
4-Panel					
10/0	114-1/8	82-1/4	45-5/8	78	24.72
12/0	138-1/8	82-1/4	57-5/8	78	31.22
12/0 FS	150-1/8	82-1/4	63-5/8	78	34.47
16/0	186-1/8	82-1/4	81-5/8	78	44.22

Slide Patio Doors - Narrow Stile

2-1/2 Stile, 2-1/2 Top Rail and 3-3/8 Bottom Rail

Narrow Stile 7/0 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	86-1/4	22-3/16	82	12.64
6/0	70-3/16	86-1/4	28-3/16	82	16.06
6/0 FS	76-3/16	86-1/4	31-3/16	82	17.77
8/0	94-3/16	86-1/4	40-3/16	82	22.90
3-Panel					
7/6	89-1/2	86-1/4	22-3/16	82	12.64
9/0	107-1/2	86-1/4	28-3/16	82	16.06
9/0 FS	116-1/2	86-1/4	31-3/16	82	17.769
12/0	143-1/2	86-1/4	40-3/16	82	22.895
4-Panel					
10/0	114-1/8	86-1/4	45-5/8	82	25.99
12/0	138-1/8	86-1/4	57-5/8	82	32.82
12/0 FS	150-1/8	86-1/4	63-5/8	82	36.24
16/0	186-1/8	86-1/4	81-5/8	82	46.49

Narrow Stile 8/0 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	98-1/4	22-3/16	94	14.49
6/0	70-3/16	98-1/4	28-3/16	94	18.41
6/0 FS	76-3/16	98-1/4	31-3/16	94	20.37
8/0	94-3/16	98-1/4	40-3/16	94	26.25
3-Panel					
7/6	89-1/2	98-1/4	22-3/16	94	14.49
9/0	107-1/2	98-1/4	28-3/16	94	18.41
9/0 FS	116-1/2	98-1/4	31-3/16	94	20.37
12/0	143-1/2	98-1/4	40-3/16	94	26.25
4-Panel					
10/0	114-1/8	98-1/4	45-5/8	94	29.79
12/0	138-1/8	98-1/4	57-5/8	94	37.62
12/0 FS	150-1/8	98-1/4	63-5/8	94	41.54
16/0	186-1/8	98-1/4	81-5/8	94	53.29

All dimensions ± 1/16"

Slide Patio Doors - Lifestyle

3-3/8 Stile, 3-3/8 Top Rail and 3-3/8 Bottom Rail / 4-13/16 Bottom Rail / 7-3/16 Bottom Rail

Lifestyle Stile 6/6 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	79-1/8	21-3/4	74-7/8	11.33
6/0	70-3/16	79-1/8	27-3/4	74-7/8	14.45
6/0 FS	76-3/16	79-1/8	30-3/4	74-7/8	16.01
8/0	94-3/16	79-1/8	39-3/4	74-7/8	20.69
3-Panel					
7/6	90-1/16	79-1/8	21-3/4	74-7/8	11.33
9/0	108-1/16	79-1/8	27-3/4	74-7/8	14.45
9/0 FS	117-1/16	79-1/8	30-3/4	74-7/8	16.01
12/0	144-1/16	79-1/8	39-3/4	74-7/8	20.69
4-Panel					
10/0	114-1/8	79-1/8	44-13/16	74-7/8	23.30
12/0	138-1/8	79-1/8	56-13/16	74-7/8	29.55
12/0 FS	150-1/8	79-1/8	62-13/16	74-7/8	32.67
16/0	186-1/8	79-1/8	80-13/16	74-7/8	42.03

Lifestyle Stile 6/8 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	82-1/4	21-3/4	78	11.81
6/0	70-3/16	82-1/4	27-3/4	78	15.06
6/0 FS	76-3/16	82-1/4	30-3/4	78	16.68
8/0	94-3/16	82-1/4	39-3/4	78	21.56
3-Panel					
7/6	90-1/16	82-1/4	21-3/4	78	11.81
9/0	108-1/16	82-1/4	27-3/4	78	15.06
9/0 FS	117-1/16	82-1/4	30-3/4	78	16.68
12/0	144-1/16	82-1/4	39-3/4	78	21.56
4-Panel					
10/0	114-1/8	82-1/4	44-13/16	78	24.28
12/0	138-1/8	82-1/4	56-13/16	78	30.78
12/0 FS	150-1/8	82-1/4	62-13/16	78	34.03
16/0	186-1/8	82-1/4	80-13/16	78	43.78

All dimensions ± 1/16"

Slide Patio Doors - Lifestyle

3-3/8 Stile, 3-3/8 Top Rail and 3-3/8 Bottom Rail / 4-13/16 Bottom Rail / 7-3/16 Bottom Rail

Lifestyle Stile 7/0 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	86-1/4	21-3/4	82	12.41
6/0	70-3/16	86-1/4	27-3/4	82	15.83
6/0 FS	76-3/16	86-1/4	30-3/4	82	17.54
8/0	94-3/16	86-1/4	39-3/4	82	22.66
3-Panel					
7/6	90-1/16	86-1/4	21-3/4	82	12.41
9/0	108-1/16	86-1/4	27-3/4	82	15.83
9/0 FS	117-1/16	86-1/4	30-3/4	82	17.54
12/0	144-1/16	86-1/4	39-3/4	82	22.66
4-Panel					
10/0	114-1/8	86-1/4	44-13/16	82	25.52
12/0	138-1/8	86-1/4	56-13/16	82	32.36
12/0 FS	150-1/8	86-1/4	62-13/16	82	35.77
16/0	186-1/8	86-1/4	80-13/16	82	46.02

Lifestyle Stile 8/0 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	98-1/4	21-3/4	94	14.23
6/0	70-3/16	98-1/4	27-3/4	94	18.15
6/0 FS	76-3/16	98-1/4	30-3/4	94	20.10
8/0	94-3/16	98-1/4	39-3/4	94	25.98
3-Panel					
7/6	90-1/16	98-1/4	21-3/4	94	14.23
9/0	108-1/16	98-1/4	27-3/4	94	18.15
9/0 FS	117-1/16	98-1/4	30-3/4	94	20.10
12/0	144-1/16	98-1/4	39-3/4	94	25.98
4-Panel					
10/0	114-1/8	98-1/4	44-13/16	94	29.26
12/0	138-1/8	98-1/4	56-13/16	94	37.09
12/0 FS	150-1/8	98-1/4	62-13/16	94	41.01
16/0	186-1/8	98-1/4	80-13/16	94	52.76

All dimensions ± 1/16"

Slide Patio Doors - Lifestyle

3-3/8 Stile, 3-3/8 Top Rail and 3-3/8 Bottom Rail / 4-13/16 Bottom Rail / 7-3/16 Bottom Rail

Lifestyle Stile 9/0 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	110-1/4	21-3/4	106	16.04
6/0	70-3/16	110-1/4	27-3/4	106	20.46
6/0 FS	76-3/16	110-1/4	30-3/4	106	22.67
8/0	94-3/16	110-1/4	39-3/4	106	29.30
3-Panel					
7/6	90-1/16	110-1/4	21-3/4	106	16.04
9/0	108-1/16	110-1/4	27-3/4	106	20.46
9/0 FS	117-1/16	110-1/4	30-3/4	106	22.67
12/0	144-1/16	110-1/4	39-3/4	106	29.30
4-Panel					
10/0	114-1/8	110-1/4	44-13/16	106	32.99
12/0	138-1/8	110-1/4	56-13/16	106	41.83
12/0 FS	150-1/8	110-1/4	62-13/16	106	46.24
16/0	186-1/8	110-1/4	80-13/16	106	59.49

All dimensions $\pm 1/16''$

Slide Patio Doors - Wide Stiles

4-13/16 top rail, 4-13/16 Stiles, 4-13/16 & 7-3/16 Bottom Rail

Wide Stile 6/6 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	79-1/8	21-1/16	74-7/8	10.96
6/0	70-3/16	79-1/8	27-1/16	74-7/8	14.08
6/0 FS	76-3/16	79-1/8	30-1/16	74-7/8	15.64
8/0	94-3/16	79-1/8	39-1/16	74-7/8	20.32
3-Panel					
5/0	58-3/16	79-1/8	21-1/16	74-7/8	10.96
6/0	70-3/16	79-1/8	27-1/16	74-7/8	14.08
6/0 FS	76-3/16	79-1/8	30-1/16	74-7/8	15.64
8/0	94-3/16	79-1/8	39-1/16	74-7/8	20.32
4-Panel					
10/0	114-1/8	79-1/8	42-9/16	74-7/8	22.15
12/0	138-1/8	79-1/8	54-9/16	74-7/8	28.39
12/0 FS	150-1/8	79-1/8	60-9/16	74-7/8	31.51
16/0	186-1/8	79-1/8	78-9/16	74-7/8	40.87

Wide Stile 6/8 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	82-1/4	21-1/16	78	11.42
6/0	70-3/16	82-1/4	27-1/16	78	14.67
6/0 FS	76-3/16	82-1/4	30-1/16	78	16.29
8/0	94-3/16	82-1/4	39-1/16	78	21.17
3-Panel					
7/6	90-13/16	82-1/4	21-1/16	78	11.42
9/0	108-13/16	82-1/4	27-1/16	78	14.67
9/0 FS	117-13/16	82-1/4	30-1/16	78	16.29
12/0	144-13/16	82-1/4	39-1/16	78	21.17
4-Panel					
10/0	114-1/8	82-1/4	42-9/16	78	23.08
12/0	138-1/8	82-1/4	54-9/16	78	29.58
12/0 FS	150-1/8	82-1/4	60-9/16	78	32.83
16/0	186-1/8	82-1/4	78-9/16	78	42.58

All dimensions ± 1/16"

Slide Patio Doors - Wide Stiles

4-13/16 top rail, 4-13/16 Stiles, 4-13/16 & 7-3/16 Bottom Rail

Wide Stile 7/0 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	86-1/4	21-1/16	82	12.00
6/0	70-3/16	86-1/4	27-1/16	82	15.42
6/0 FS	76-3/16	86-1/4	30-1/16	82	17.13
8/0	94-3/16	86-1/4	39-1/16	82	22.25
3-Panel					
7/6	90-13/16	86-1/4	21-1/16	82	12.00
9/0	108-13/16	86-1/4	27-1/16	82	15.42
9/0 FS	117-13/16	86-1/4	30-1/16	82	17.13
12/0	144-13/16	86-1/4	39-1/16	82	22.25
4-Panel					
10/0	114-1/8	86-1/4	42-9/16	82	24.26
12/0	138-1/8	86-1/4	54-9/16	82	31.09
12/0 FS	150-1/8	86-1/4	60-9/16	82	34.51
16/0	186-1/8	86-1/4	78-9/16	82	44.76

Wide Stile 8/0 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	98-1/4	21-1/16	94	13.76
6/0	70-3/16	98-1/4	27-1/16	94	17.68
6/0 FS	76-3/16	98-1/4	30-1/16	94	19.63
8/0	94-3/16	98-1/4	39-1/16	94	25.51
3-Panel					
7/6	90-13/16	98-1/4	21-1/16	94	13.76
9/0	108-13/16	98-1/4	27-1/16	94	17.68
9/0 FS	117-13/16	98-1/4	30-1/16	94	19.63
12/0	144-13/16	98-1/4	39-1/16	94	25.51
4-Panel					
10/0	114-1/8	98-1/4	42-9/16	94	27.81
12/0	138-1/8	98-1/4	54-9/16	94	35.64
12/0 FS	150-1/8	98-1/4	60-9/16	94	39.56
16/0	186-1/8	98-1/4	78-9/16	94	51.31

All dimensions ± 1/16"

Slide Patio Doors - Wide Stiles

4-13/16 top rail, 4-13/16 Stiles, 4-13/16 & 7-3/16 Bottom Rail

Wide Stile 9/0 Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2-Panel					
5/0	58-3/16	110-1/4	21-1/16	106	15.52
6/0	70-3/16	110-1/4	27-1/16	106	19.93
6/0 FS	76-3/16	110-1/4	30-1/16	106	22.14
8/0	94-3/16	110-1/4	39-1/16	106	28.77
3-Panel					
7/6	90-13/16	110-1/4	21-1/16	106	15.52
9/0	108-13/16	110-1/4	27-1/16	106	19.93
9/0 FS	117-13/16	110-1/4	30-1/16	106	22.14
12/0	144-13/16	110-1/4	39-1/16	106	28.77
4-Panel					
10/0	114-1/8	110-1/4	42-9/16	106	31.36
12/0	138-1/8	110-1/4	54-9/16	106	40.19
12/0 FS	150-1/8	110-1/4	60-9/16	106	44.61
16/0	186-1/8	110-1/4	78-9/16	106	57.86

All dimensions ± 1/16"

In-Swing Patio Doors

6/6 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31 -3/8	79 -1/8	26-13/16	75 7/8	14.13
2/8	33 -3/8	79 -1/8	28-13/16	75 7/8	15.18
3/0	37 -3/8	79 -1/8	32-13/16	75 7/8	17.29

6/8 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31 -3/8	82 -1/4	26-13/16	79	14.71
2/8	33 -3/8	82 -1/4	28-13/16	79	15.81
3/0	37 -3/8	82 -1/4	32-13/16	79	18.00

7/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31 -3/8	86 -1/4	26-13/16	83	15.45
2/8	33 -3/8	86 -1/4	28-13/16	83	16.61
3/0	37 -3/8	86 -1/4	32-13/16	83	18.91

8/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31 -3/8	98 -1/4	26-13/16	95	17.69
2/8	33 -3/8	98 -1/4	28-13/16	95	19.01
3/0	37 -3/8	98 -1/4	32-13/16	95	21.65

9/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31 -3/8	110 -1/4	26-13/16	107	19.92
2/8	33 -3/8	110 -1/4	28-13/16	107	21.41
3/0	37 -3/8	110 -1/4	32-13/16	107	24.38

Note: Clear Opening Width Based on Door Panel Open 90°

Add 1-3/4" to Width For Full Open Door

Add 7/8" To Height for Door with ADA Sill

Interior Jamb Extensions May Affect Clear Opening Widths Beyond 90°

In-Swing French Patio Doors

6/6 Height In-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	79 1/8	43 -3/8	75 7/8	22.85
5/0	61-15/16	79 1/8	55 -3/8	75 7/8	29.18
5/4	65-15/16	79 1/8	59 -3/8	75 7/8	31.29
6/0	73-15/16	79 1/8	67 -3/8	75 7/8	35.50

6/8 Height In-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	82 -1/4	43 -3/8	79	23.80
5/0	61-15/16	82 -1/4	55 -3/8	79	30.38
5/4	65-15/16	82 -1/4	59 -3/8	79	32.57
6/0	73-15/16	82 -1/4	67 -3/8	79	36.96

7/0 Height In-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	86 -1/4	43 -3/8	83	25.00
5/0	61-15/16	86 -1/4	55 -3/8	83	31.92
5/4	65-15/16	86 -1/4	59 -3/8	83	34.22
6/0	73-15/16	86 -1/4	67 -3/8	83	38.83

8/0 Height In-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	98 -1/4	43 -3/8	95	28.62
5/0	61-15/16	98 -1/4	55 -3/8	95	36.53
5/4	65-15/16	98 -1/4	59 -3/8	95	39.17
6/0	73-15/16	98 -1/4	67 -3/8	95	44.45

9/0 Height In-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	110-1/4	43 -3/8	107	32.23
5/0	61-15/16	110 -1/4	55 -3/8	107	41.15
5/4	65-15/16	110 -1/4	59 -3/8	107	44.12
6/0	73-15/16	110 -1/4	67-3/8	107	50.06

Note: Clear Opening Width Based on Both Door Panels Open 90°
 Add 5" to Width For Full Open Door
 Add 7/8" To Height for Door with ADA Sill
 Interior Jamb Extensions May Affect Clear Opening Widths Beyond 90°

Out-Swing Patio Doors

6/6 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	79 1/8	26-7/8	75 15/16	14.17
2/8	33-3/8	79 1/8	28-7/8	75 15/16	15.23
3/0	37-3/8	79 1/8	32-7/8	75 15/16	17.34

6/8 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	82-1/4	26-7/8	79-1/16	14.76
2/8	33-3/8	82-1/4	28-7/8	79-1/16	15.85
3/0	37-3/8	82-1/4	32-7/8	79-1/16	18.05

7/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	86-1/4	26-7/8	83-1/16	15.50
2/8	33-3/8	86-1/4	28-7/8	83-1/16	16.66
3/0	37-3/8	86-1/4	32-7/8	83-1/16	18.96

8/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	98-1/4	26-7/8	95-1/16	17.74
2/8	33-3/8	98-1/4	28-7/8	95-1/16	19.06
3/0	37-3/8	98-1/4	32-7/8	95-1/16	21.70

9/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	110-1/4	26-7/8	107-1/16	19.98
2/8	33-3/8	110-1/4	28-7/8	107-1/16	21.47
3/0	37-3/8	110-1/4	32-7/8	107-1/16	24.44

Note: Clear Opening Width Based on Door Panel Open 90°

Add 1-1/2" to Width For Full Open Door

Add 1" To Height for Door with ADA Sill

Thickness of Exterior Sheathing May Affect Clear Opening Widths Beyond 90° (1 Wide and Jamb Hinged Multiples)

Brick Veneer Exterior May Affect Clear Opening Widths Beyond 90°

Out-Swing French Patio Doors

6/6 Height Out-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	79-1/8	43-5/16	75-15/16	22.84
5/0	61-15/16	79-1/8	55-5/16	75-15/16	29.17
5/4	65-15/16	79-1/8	59-5/16	75-15/16	31.28
6/0	73-15/16	79-1/8	67-5/16	75-15/16	35.50

6/8 Height Out-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	82-1/4	43-5/16	79-1/16	23.78
5/0	61-15/16	82-1/4	55-5/16	79-1/16	30.37
5/4	65-15/16	82-1/4	59-5/16	79-1/16	32.57
6/0	73-15/16	82-1/4	67-5/16	79-1/16	36.96

7/0 Height Out-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	86-1/4	43-5/16	83-1/16	24.98
5/0	61-15/16	86-1/4	55-5/16	83-1/16	31.91
5/4	65-15/16	86-1/4	59-5/16	83-1/16	34.21
6/0	73-15/16	86-1/4	67-5/16	83-1/16	38.83

8/0 Height Out-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	98-1/4	43-5/16	95-1/16	28.59
5/0	61-15/16	98-1/4	55-5/16	95-1/16	36.51
5/4	65-15/16	98-1/4	59-5/16	95-1/16	39.16
6/0	73-15/16	98-1/4	67-5/16	95-1/16	44.44

9/0 Height Out-Swing French Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	110-1/4	43-5/16	107-1/16	32.20
5/0	61-15/16	110-1/4	55-5/16	107-1/16	41.12
5/4	65-15/16	110-1/4	59-5/16	107-1/16	44.10
6/0	73-15/16	110-1/4	67-5/16	107-1/16	50.05

Note: Clear Opening Width Based on Door Panel Open 90°

Add 5-3/8" to Width For Full Open Door

Add 1" To Height for Door with ADA Sill

Thickness of Exterior Sheathing May Affect Clear Opening Widths Beyond 90° (1 Wide and Jamb Hinged Multiples)

Brick Veneer Exterior May Affect Clear Opening Widths Beyond 90°

In-Swing Patio Doors - 2-1/4" Panel

6/8 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	82-1/4	26-5/16	79	14.44
2/8	33-3/8	82-1/4	28-5/16	79	15.53
3/0	37-3/8	82-1/4	32-5/16	79	17.73
3/6	43-3/8	82-1/4	38-5/16	79	21.02

7/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	86-1/4	26-5/16	83	15.17
2/8	33-3/8	86-1/4	28-5/16	83	16.32
3/0	37-3/8	86-1/4	32-5/16	83	18.62
3/6	43-3/8	86-1/4	38-5/16	83	22.08

8/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	98-1/4	26-5/16	95	17.36
2/8	33-3/8	98-1/4	28-5/16	95	18.68
3/0	37-3/8	98-1/4	32-5/16	95	21.32
3/6	43-3/8	98-1/4	38-5/16	95	25.28

9/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	110-1/4	26-5/16	107	19.55
2/8	33-3/8	110-1/4	28-5/16	107	21.04
3/0	37-3/8	110-1/4	32-5/16	107	24.01
3/6	43-3/8	110-1/4	38-5/16	107	28.47

10/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	122-1/4	26-5/16	119	21.74
2/8	33-3/8	122-1/4	28-5/16	119	23.40
3/0	37-3/8	122-1/4	32-5/16	119	26.70
3/6	43-3/8	122-1/4	38-5/16	119	31.66

Note: Clear Opening Width Based on Door Panel Open 90°

Add 1-3/4" to Width For Full Open Door

Add 7/8" To Height for Door with ADA Sill

Interior Jamb Extensions May Affect Clear Opening Widths Beyond 90°

In-Swing French Patio Doors - 2-1/4" Panel

6/8 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
5/0	61-15/16	82-1/4	26-3/16	79	29.76
5/4	65-15/16	82-1/4	28-3/16	79	31.96
6/0	73-15/16	82-1/4	32-3/16	79	36.35
7/0	85-15/16	82-1/4	38-3/16	79	42.93

7/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
5/0	61-15/16	86-1/4	26-3/16	83	31.27
5/4	65-15/16	86-1/4	28-3/16	83	33.57
6/0	73-15/16	86-1/4	32-3/16	83	38.19
7/0	85-15/16	86-1/4	38-3/16	83	45.10

8/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
5/0	61-15/16	98-1/4	26-3/16	95	35.79
5/4	65-15/16	98-1/4	28-3/16	95	38.43
6/0	73-15/16	98-1/4	32-3/16	95	43.71
7/0	85-15/16	98-1/4	38-3/16	95	51.62

9/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
5/0	61-15/16	110-1/4	26-3/16	107	40.31
5/4	65-15/16	110-1/4	28-3/16	107	43.28
6/0	73-15/16	110-1/4	32-3/16	107	49.23
7/0	85-15/16	110-1/4	38-3/16	107	58.14

10/0 Height In-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
5/0	61-15/16	122-1/4	26-3/16	119	44.83
5/4	65-15/16	122-1/4	28-3/16	119	48.14
6/0	73-15/16	122-1/4	32-3/16	119	54.75
7/0	85-15/16	122-1/4	38-3/16	119	64.66

Out-Swing Patio Doors - 2-1/4" Panel

6/8 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	82-1/4	26-3/8	79-1/16	14.48
2/8	33-3/8	82-1/4	28-3/8	79-1/16	15.58
3/0	37-3/8	82-1/4	32-3/8	79-1/16	17.78
3/6	43-3/8	82-1/4	38-3/8	79-1/16	21.07

7/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	86-1/4	26-3/8	83-1/16	15.21
2/8	33-3/8	86-1/4	28-3/8	83-1/16	16.37
3/0	37-3/8	86-1/4	32-3/8	83-1/16	18.67
3/6	43-3/8	86-1/4	38-3/8	83-1/16	22.14

8/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	98-1/4	26-3/8	95-1/16	17.41
2/8	33-3/8	98-1/4	28-3/8	95-1/16	18.73
3/0	37-3/8	98-1/4	32-3/8	95-1/16	21.37
3/6	43-3/8	98-1/4	38-3/8	95-1/16	25.33

9/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	110-1/4	26-3/8	107-1/16	19.61
2/8	33-3/8	110-1/4	28-3/8	107-1/16	21.10
3/0	37-3/8	110-1/4	32-3/8	107-1/16	24.07
3/6	43-3/8	110-1/4	38-3/8	107-1/16	28.53

10/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
2/6	31-3/8	122-1/4	26-3/8	119-1/16	21.81
2/8	33-3/8	122-1/4	28-3/8	119-1/16	23.46
3/0	37-3/8	122-1/4	32-3/8	119-1/16	26.77
3/6	43-3/8	122-1/4	38-3/8	119-1/16	31.73

Note: Clear Opening Width Based on Door Panel Open 90°

Add 1-1/2" to Width For Full Open Door

Add 1" To Height for Door with ADA Sill

Thickness of Exterior Sheathing May Affect Clear Opening Widths Beyond 90° (1 Wide and Jamb Hinged Multiples)

Brick Veneer Exterior May Affect Clear Opening Widths Beyond 90°

Out-Swing French Patio Doors - 2-1/4" Panel

6/8 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	82-1/4	42-1/4	79-1/16	23.20
5/0	61-15/16	82-1/4	54-1/4	79-1/16	29.79
5/4	65-15/16	82-1/4	58-1/4	79-1/16	31.98
6/0	73-15/16	82-1/4	66-1/4	79-1/16	36.37
7/0	85-15/16	82-1/4	78-1/4	79-1/16	42.96

7/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	86-1/4	42-1/4	83-1/16	24.37
5/0	61-15/16	86-1/4	54-1/4	83-1/16	31.29
5/4	65-15/16	86-1/4	58-1/4	83-1/16	33.60
6/0	73-15/16	86-1/4	66-1/4	83-1/16	38.21
7/0	85-15/16	86-1/4	78-1/4	83-1/16	45.14

8/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	98-1/4	42-1/4	95-1/16	27.89
5/0	61-15/16	98-1/4	54-1/4	95-1/16	35.81
5/4	65-15/16	98-1/4	58-1/4	95-1/16	38.45
6/0	73-15/16	98-1/4	66-1/4	95-1/16	43.74
7/0	85-15/16	98-1/4	78-1/4	95-1/16	51.66

9/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	110-1/4	42-1/4	107-1/16	31.41
5/0	61-15/16	110-1/4	54-1/4	107-1/16	40.33
5/4	65-15/16	110-1/4	58-1/4	107-1/16	43.31
6/0	73-15/16	110-1/4	66-1/4	107-1/16	49.26
7/0	85-15/16	110-1/4	78-1/4	107-1/16	58.18

10/0 Height Out-Swing Doors

Unit Size	Box Size: Width	Box Size: Height	Clear Opening: Width	Clear Opening Height	Square Ft. of Clear Opening
4/0	49-15/16	122-1/4	42-1/4	119-1/16	34.93
5/0	61-15/16	122-1/4	54-1/4	119-1/16	44.86
5/4	65-15/16	122-1/4	58-1/4	119-1/16	48.16
6/0	73-15/16	122-1/4	66-1/4	119-1/16	54.78
7/0	85-15/16	122-1/4	78-1/4	119-1/16	64.70

Note: Clear Opening Width Based on Door Panel Open 90°

Add 5-3/8" to Width For Full Open Door

Add 1" To Height for Door with ADA Sill

Thickness of Exterior Sheathing May Affect Clear Opening Widths Beyond 90° (1 Wide and Jamb Hinged Multiples)

Brick Veneer Exterior May Affect Clear Opening Widths Beyond 90°