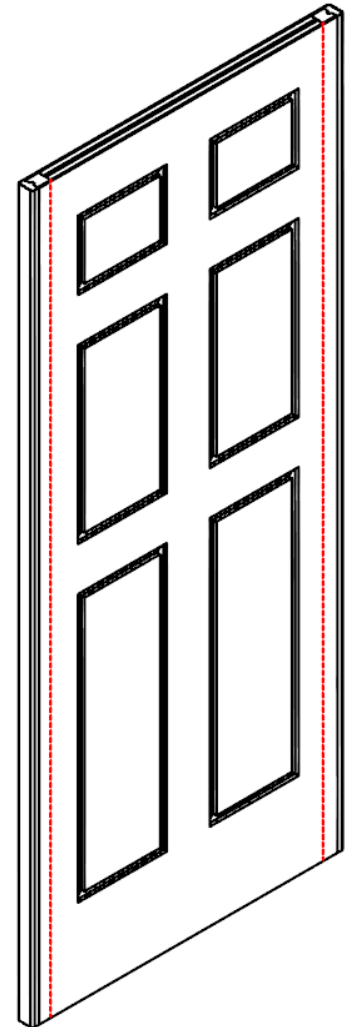


45 Minute Rated Panel Door (PN FD7-45PP)

Bonded SCL Hybrid Core, 7-Ply Construction, Cat. A, PP

(Fire Test Standards – IBC, UL-10C, CAN/ULC S104, & NFPA 252)

	Single Swing	Pair or Double Egress
Core Type & Standards	SCL Hybrid: (60 lb/ft ³)	
Maximum Sizes	4'0" x 9'0"	8'0" x 9'0"
Protection Plates	Up to 48" (above bottom of door)	
Door Thickness	1-3/4" (+/- 1/16")	
WDMA Prefit Tolerance	Width: (+/- 1/32") Height & Thickness: (+/- 1/16")	
Weight	6.92lb/ft ² (3070 Door = 145lbs) (4070 Door = 193lbs)	
Crossband	High Density FSC Fiberboard	
Blocking	(Standard) 5" top rail; 2" Bottom Rail; 5" Fixed Internal Stiles (Additional blocking upon request)	
Assembly Adhesive	Face: Type I (waterproof); Core: Type II (water-resistant)	
Replaceable Edge Stiles & Covers	Field Replaceable Mineral/SCL Stiles. Acrovyn and/or 20GA #4 finish Stainless Steel Replaceable Covers	
Replaceable Edge Profile	Beveled, Square	
Lites	Not Available	
Max Visible Glass Area	Not Available	
Lite Frames	Not Available	
Louvers	Not Available	
Electronic Options	Not Available	
Hinges	Per NFPA 80 "Table 6.4.3.1"	
Points of Latching	Singles = 1pt	Pairs = 2pts DE Pairs = 3pts
Pivots	Offset w/intermediate (Center hung not allowed)	
Locks	Mortise & Cylindrical (Max 5" Backset)	
Exit Devices	Surface Vertical Rod (Includes LBR), RIM & Mortised	
Concealed Vertical Rod	Not Available	
Flushbolts	Must Be Extension Type (Metal Door)	
Closing Devices	Surface Mounted	
Door Bottoms	Mortised or Surface Mounted	
Transoms	Not Available	
Panel Design Options	8 standard options (See Pages 10 - 18)	
Max Recess of Panel	3/8"	



Overview of Acrovyn Door Systems

Features & Benefits

- Acrovyn Doors will not tear, chip, or crack. Key to the doors durability is the rugged Acrovyn face and edge material.
- Acrovyn is 5 times as abrasion resistant as wood and twice as resistant as HPL.
- Integrated Acrovyn or stainless steel radiused edge guards wrap around both door stiles to provide the ultimate damage protection
- If ever damaged, the Acrovyn Door's edge guards & stiles can be easily replaced in the field for a longer door life.*
- Contains no PBT's & is completely free of PVC
- Standard line of Acrovyn Doors are C2C certified at the Silver level

Acrovyn Face & Edge Finish Options

- 20 standard woodgrain & 2 metal Chameleon Acrovyn finishes available in a smooth suede texture
- 67 standard Acrovyn solid colors
- Stainless steel edges available in 20Ga type 304, #4 finish

Technical Data

- Standards: WDMA I.S.1-A Extra Heavy Duty Door
- Lites & Louvers: Cutouts, vision kits, glazing, and louvers available*
- Pre-machining available for all mortise hardware from manufacturer's templates & approved shop drawings
- Warranty: Limited Lifetime
- Top & bottom rails are factory sealed with an approved sealant.

*As noted on the individual product data sheets

Standard Construction



U.S. Patents:

7,621,102; 7,587,876; 7,775,013-B2; 7,886,501-B2.

U.S. Design Patents:

D512 785S; D515 713S; D517 224S; D517 701S; D518 185S

Performance Attributes

All Door Products*

- **Cycle Slam:** Extra Heavy Duty per WDMA TM-7, -2,000,000 cycles *(2x the WDMA requirement)*
- **Hinge Loading:** Extra Heavy Duty per WDMA TM-8
- **Screw Holding:** Extra Heavy Duty per WDMA TM-10
- **Door Finish Wear Index:** ASTM D4060-90 *(Abrasion Resistance Testing)*
- **Door Finish Chemical Resistance Testing:** ASTM D1308-93
- **Door Finish Impact Resistance:** ASTM D-4226
- **Warp Tolerance:** WDMA TM-2
- **Stain Resistance/Cleanability:** ASTM D1308-93 *(Common Stains Easily Removed)*
- **Resistance to Fungi:** ASTM G-21-96 – Zero Fungal Growth *(On Acrovyn Sheet)*
- **Resistance to Bacteria:** ASTM G-22-96 – Zero Bacterial Growth *(On Acrovyn Sheet)*
- **Resistance to Fungi:** ASTM G-21-2013 – Zero Fungal Growth *(At Replaceable Edge Seam)*
- **Resistance to Bacteria:** ASTM G-22-2013 – Zero Bacterial Growth *(At Replaceable Edge Seam)*

WDMA I.S.1A Flush Wood Door Minimum Performance Standards

Performance Attribute	Performance Duty Level		
	Extra Heavy Duty	Heavy Duty	Standard Duty
Adhesive Bond Durability, WDMA TM-6	Type I or Type II	Type I or Type II	Type I or Type II
Cycle Slam, WDMA TM-7	1,000,000 cycles	500,000 cycles	250,000 cycles
Hinge-Loading, WDMA TM-8	550 lbs. (2440 N)	475 lbs. (4110 N)	400 lbs. (1780 N)
Door Finishes Various ASTM test methods	TR-6/OP-6 or equal **	TR-4/OP-4 or equal **	TR-2/OP-2 or equal **
Screwholding, WDMA TM-10 Door Face (Blocked or unblocked) Vertical Door Edge Horizontal Door Edge	550 lbs. (2440 N) 550 lbs. (2440 N) 300 lbs. (1330 N)	475 lbs. (2110 N) 475 lbs. (2110 N) 240 lbs. (1060 N)	400 lbs. (1780 N)*** 400 lbs. (1780 N) 180 lbs. (810 N)
Telegraph, Section T-1	Maximum 0.010 inch in any 3 inch span (0.25 mm in any 76 mm span)		
Warp Tolerance, Section T-2	Maximum 0.25 inch in any 3'-6" x 7'-0" (6.4 mm in any 1050 mm x 2100 mm) door section		
Squareness, Section T-3	Diagonal variance 1/8 inch (3.2 mm)		

* Acrovyn Door model FC5-NR, meets Extra Heavy Duty for all sections above with the exception of "Screwholding WDMA TM-10 (unblocked)"

** Other formulations may exhibit similar performance characteristics, but must meet or exceed the performance levels for the systems specified to be considered as equal.

*** If screw holding power is less than 400 lbs. (1780 N) in a Standard Duty door, blocking or thru-bolts are recommended for operable hardware.

LEED® v4 Contributions

	Building Product Disclosure and Optimization Credits				Indoor Environmental Quality Credits	
	Environment al Product Declarations	Raw Materials FSC/POST/PRE Recycled Content	Material Ingredients (3 rd party certification)	Regional Priority (manuf <100 miles away)	Low Emitting Materials (ULEF & NAF)	Emissions And Content (non- emitting)
<u>Non-Rated – Agrifiber</u>	C2C Silver	NO/0%/56%	C2C Silver	NO	YES	YES
<u>Non-Rated – SCL</u>	C2C Silver	NO/0%/0%	C2C Silver	NO	YES	YES
<u>Non-Rated – FSC-PB</u>	C2C Silver	YES/0%/100%	C2C Silver	NO	YES	YES
<u>Non-Rated – PB</u>	C2C Silver	NO/0%/58%	C2C Silver	NO	YES	YES
<u>Non-Rated – SCL-STC30</u>	C2C Silver	NO/0%/0%	C2C Silver	NO	YES	YES
<u>Non-Rated – SCL-STC43-46</u>	C2C Silver	NO/0%/0%	C2C Silver	NO	YES	YES
<u>20min – Agrifiber</u>	C2C Silver	NO/0%/0%	C2C Silver	NO	YES	YES
<u>20min – SCL</u>	C2C Silver	NO/0%/36%	C2C Silver	NO	YES	YES
<u>20min – FSC-PB</u>	C2C Silver	Yes/0%/0%	C2C Silver	NO	YES	YES
<u>20min – PB</u>	C2C Silver	No/0%/36%	C2C Silver	NO	YES	YES
<u>45min – Mineral</u>	C2C Silver	NO/0%/36%	C2C Silver	NO	YES	YES
<u>60min – Mineral</u>	C2C Silver	NO/0%/36%	C2C Silver	NO	YES	YES
<u>90min – Mineral</u>	C2C Silver	NO/0%/36%	C2C Silver	NO	YES	YES
<u>Lead Lined – NR – Agrifiber</u>	N/A	NO/0%/0%	N/A	NO	YES	YES
<u>Lead Lined – NR – SCL</u>	N/A	NO/0%/0%	N/A	NO	YES	YES
<u>Lead Lined – NR – FSC-PB</u>	N/A	YES/0%/56%	N/A	NO	YES	YES
<u>Lead Lined – NR – PB</u>	N/A	NO/0%/0%	N/A	NO	YES	YES
<u>Lead Lined – 20min – FSC-PB</u>	N/A	YES/0%/56%	N/A	NO	YES	YES
<u>Lead Lined – 20min – PB</u>	N/A	NO/0%/56%	N/A	NO	YES	YES

The U.S. Green Building Council's LEED® green building program is the preeminent program for the design, construction, maintenance and operations of high-performance green buildings. Learn more at usgbc.org/LEED.

LEED® 2009 v3.0 Contributions

	Materials & Resources Credits			Indoor Environmental Quality Credits
	MR 4 Recycled Content	MR6 Rapidly Renewable	MR 7 Certified Wood	IEQ 4.4 No added Urea Formaldehyde
<u>Non-Rated – Agrifiber</u>	X	X	X	X
<u>Non-Rated – SCL</u>			X	X
<u>Non-Rated – FSC-PB</u>	X		X	X
<u>Non-Rated – PB</u>	X			X
<u>Non-Rated – SCL-STC30</u>			X	X
<u>Non-Rated – SCL-STC43-46</u>				
<u>20min – Agrifiber</u>	X	X	X	X
<u>20min – SCL</u>			X	X
<u>20min – FSC-PB</u>	X		X	X
<u>20min – PB</u>	X			X
<u>45min – Mineral</u>				X
<u>60min – Mineral</u>				X
<u>90min – Mineral</u>				X
<u>Lead Lined – NR – Agrifiber</u>	X	X	X	X
<u>Lead Lined – NR – SCL</u>	X			X
<u>Lead Lined – NR – FSC-PB</u>	X		X	X
<u>Lead Lined – NR – PB</u>	X			X
<u>Lead Lined – 20min – FSC-PB</u>	X		X	X
<u>Lead Lined – 20min – PB</u>	X			X

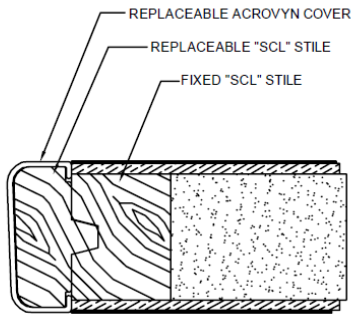
The U.S. Green Building Council's LEED® green building program is the preeminent program for the design, construction, maintenance and operations of high-performance green buildings. Learn more at usgbc.org/LEED.

Door Edge Options

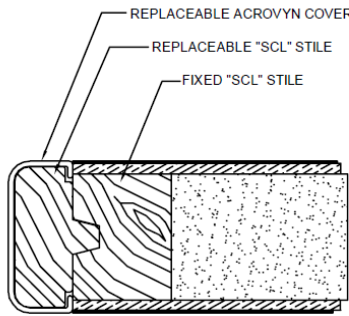
REPLACEABLE ACROVYN EDGE

STANDARD ON NR THRU 90 MINUTE DOORS*
REPLACEABLE IN FIELD

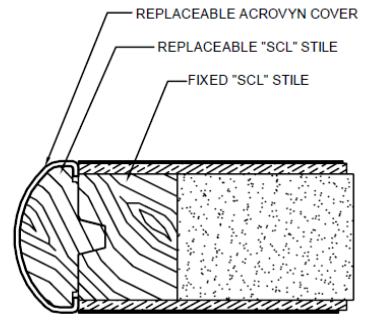
*Available in either Acrovyn (or) Stainless Steel
(Stainless Steel not available on Radius edge)
(Radius edge not available for fire rated doors)



BEVELED EDGE



SQUARE EDGE

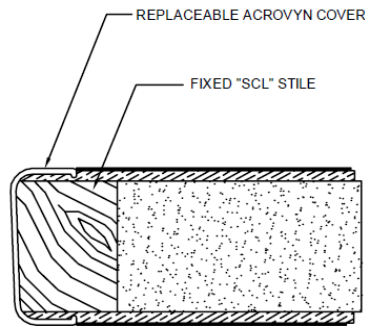


RADIUS EDGE

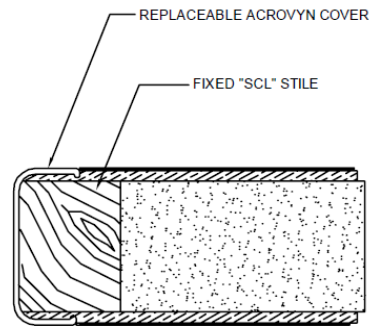
WRAPPED ACROVYN EDGE

STANDARD ON LL DOORS
REPLACEABLE IN FIELD

*Available in either Acrovyn (or) Stainless Steel



WRAPPED BEVELED EDGE

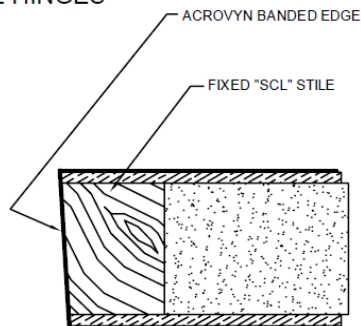


WRAPPED SQUARE EDGE

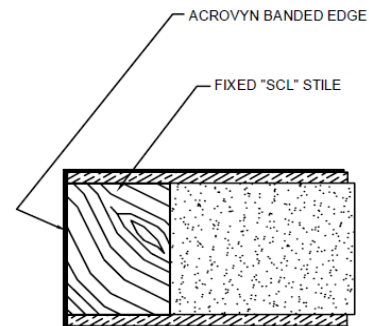
BANDED EDGE

AVAILABLE FOR SPECIAL REQUESTS ONLY
TYPICALLY USED ON HINGE EDGE WITH
EDGE GUARD TYPE HINGES

*Available only in Acrovyn



BANDED BEVELED EDGE



BANDED SQUARE EDGE

Standard Panel Door Designs

Montclair



Somerset



Madison



Summit



Berkeley



Chatham

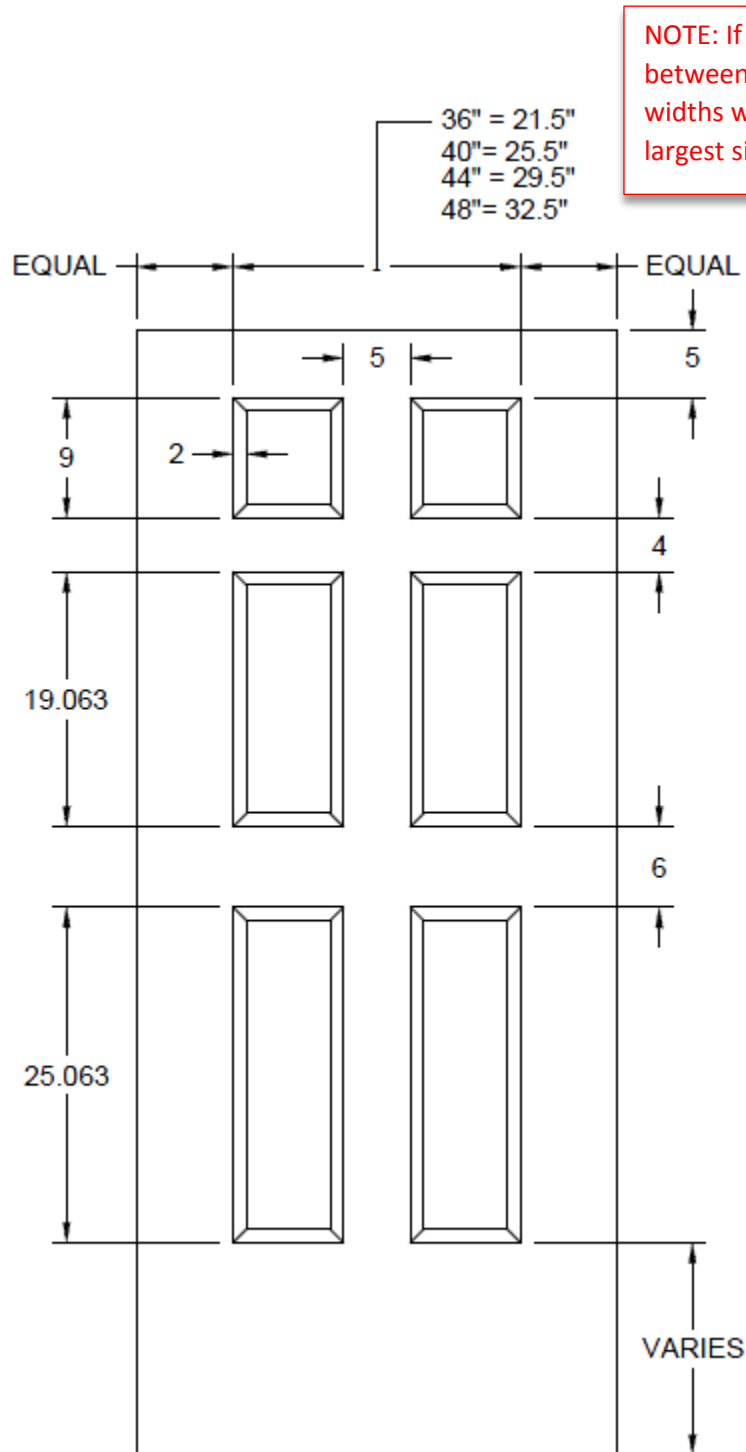


Montgomery



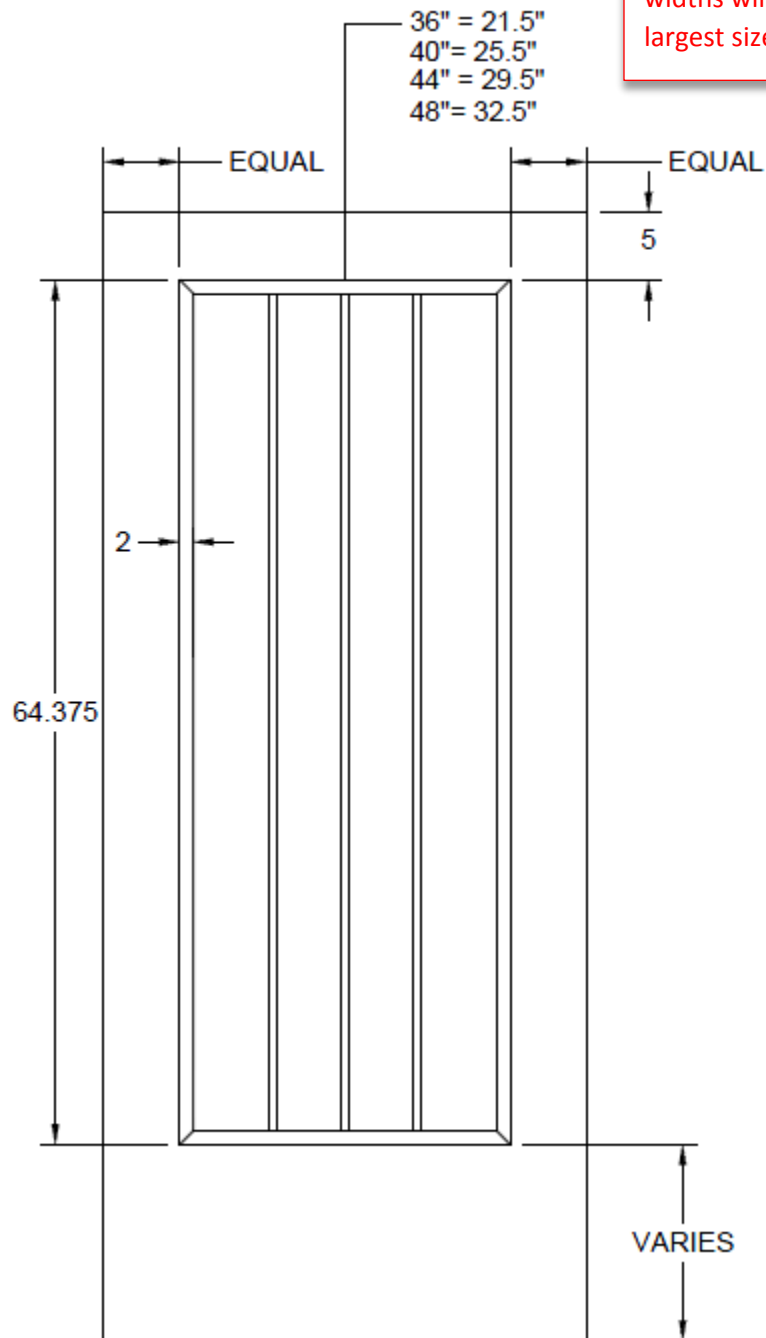
Plymouth

Montclair Panel Door Details



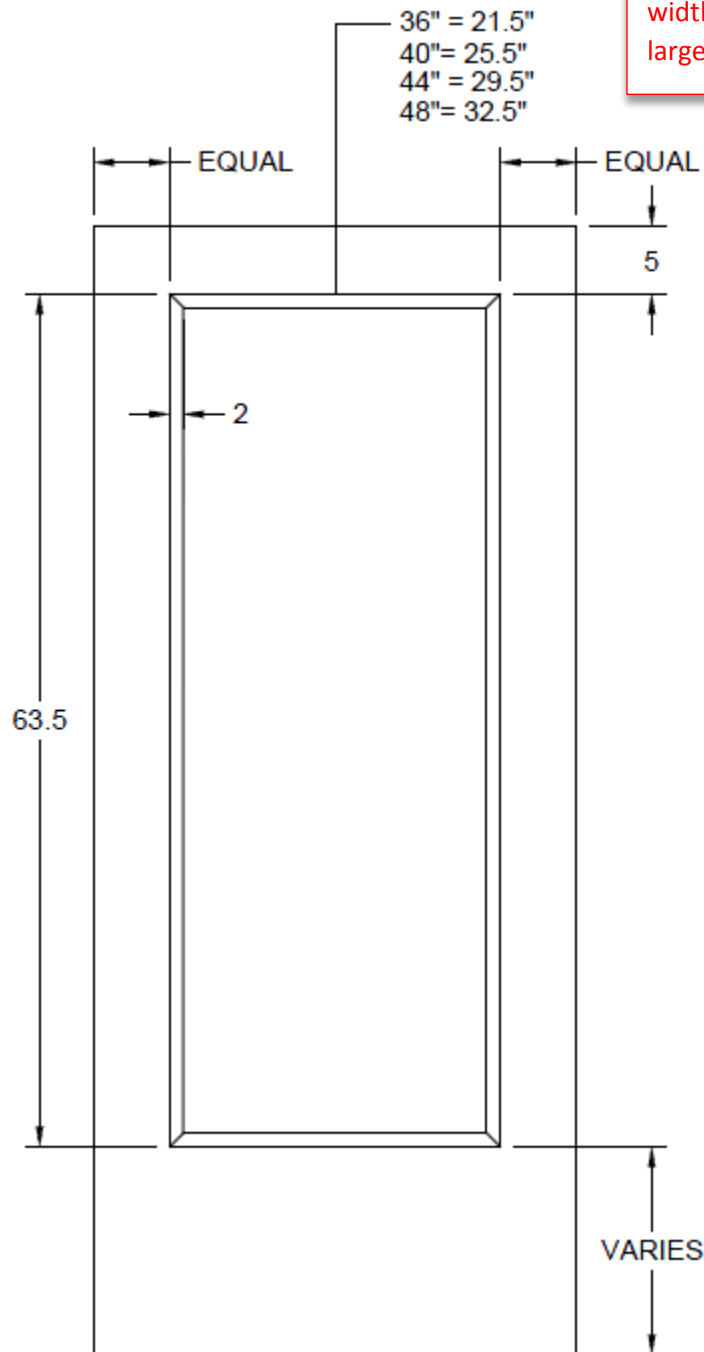
NOTE: If detailing door widths between the sizes noted, panel widths will be used from the next largest size

Somerset Panel Door Details



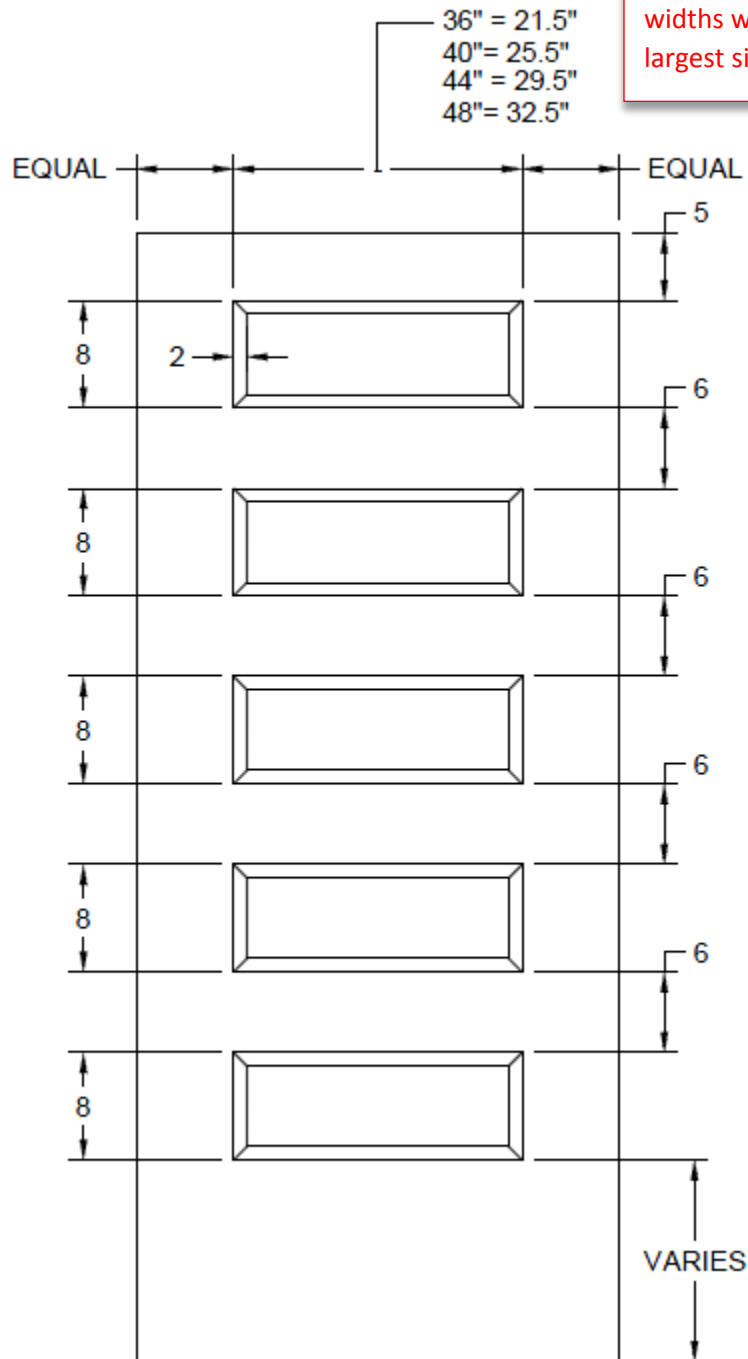
NOTE: If detailing door widths between the sizes noted, panel widths will be used from the next largest size

Madison Panel Door Details



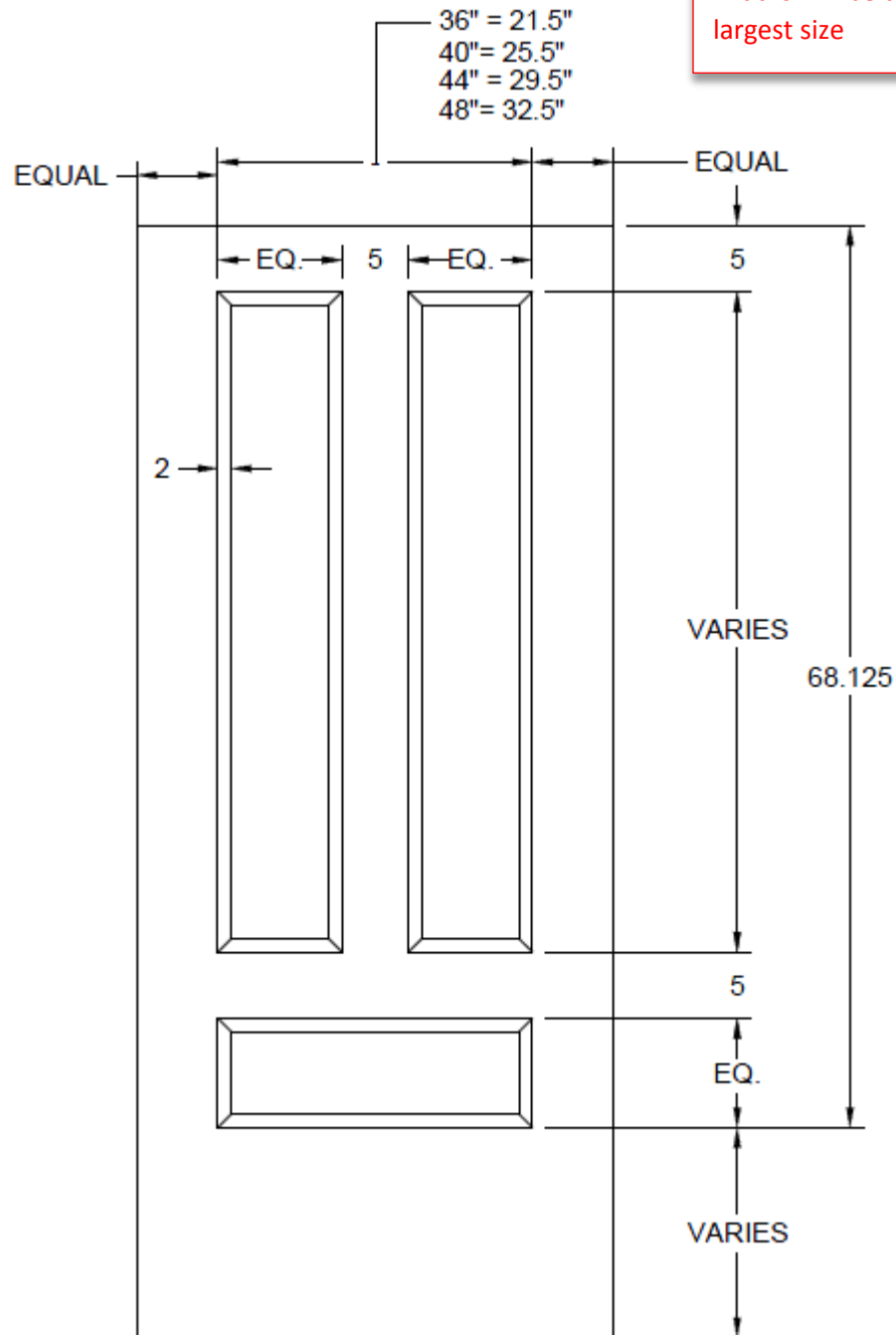
NOTE: If detailing door widths between the sizes noted, panel widths will be used from the next largest size

Summit Panel Door Details



NOTE: If detailing door widths between the sizes noted, panel widths will be used from the next largest size

Berkeley Panel Door Details

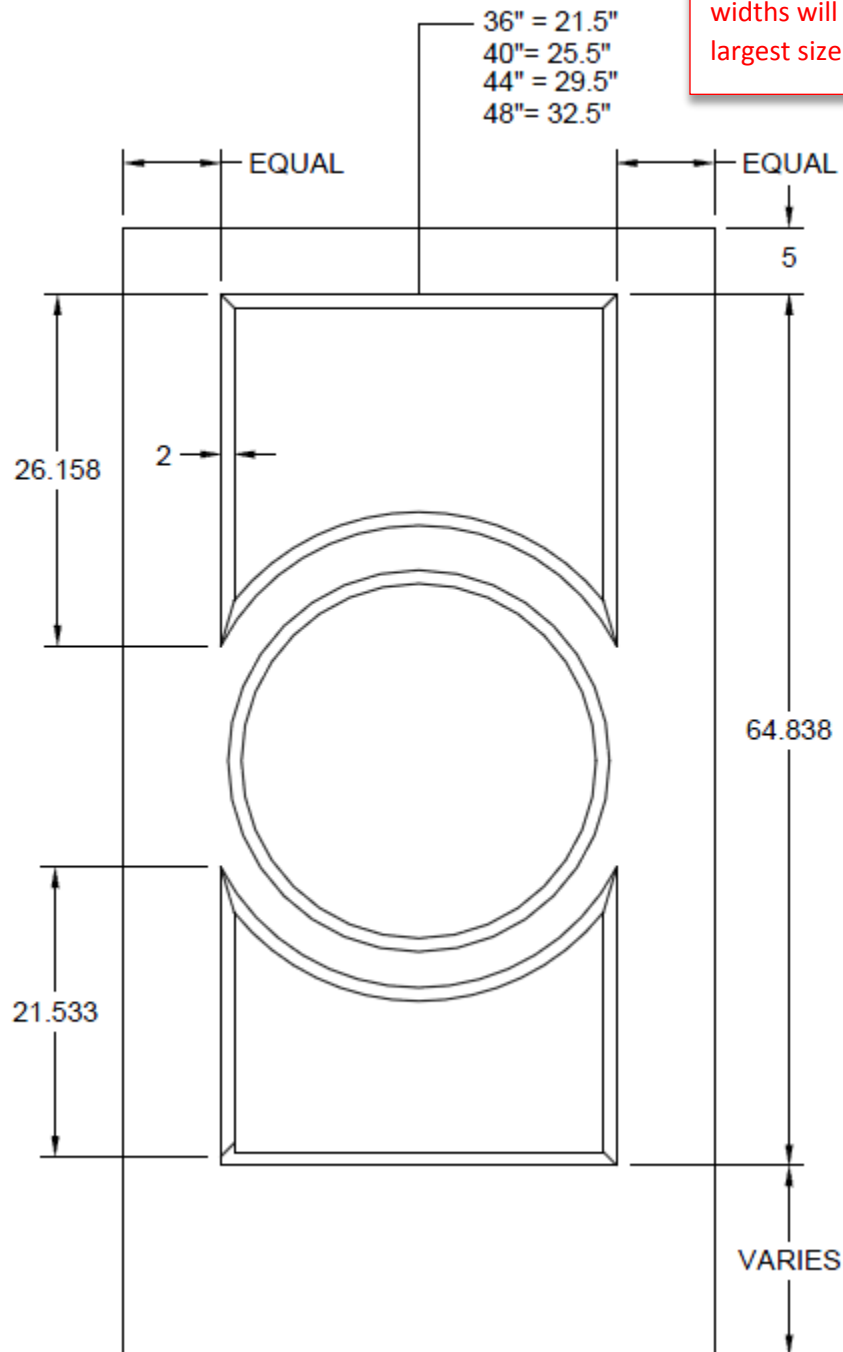


NOTE: If detailing door widths between the sizes noted, panel widths will be used from the next largest size

NOTE: If detailing door widths between the sizes noted, panel widths will be used from the next largest size

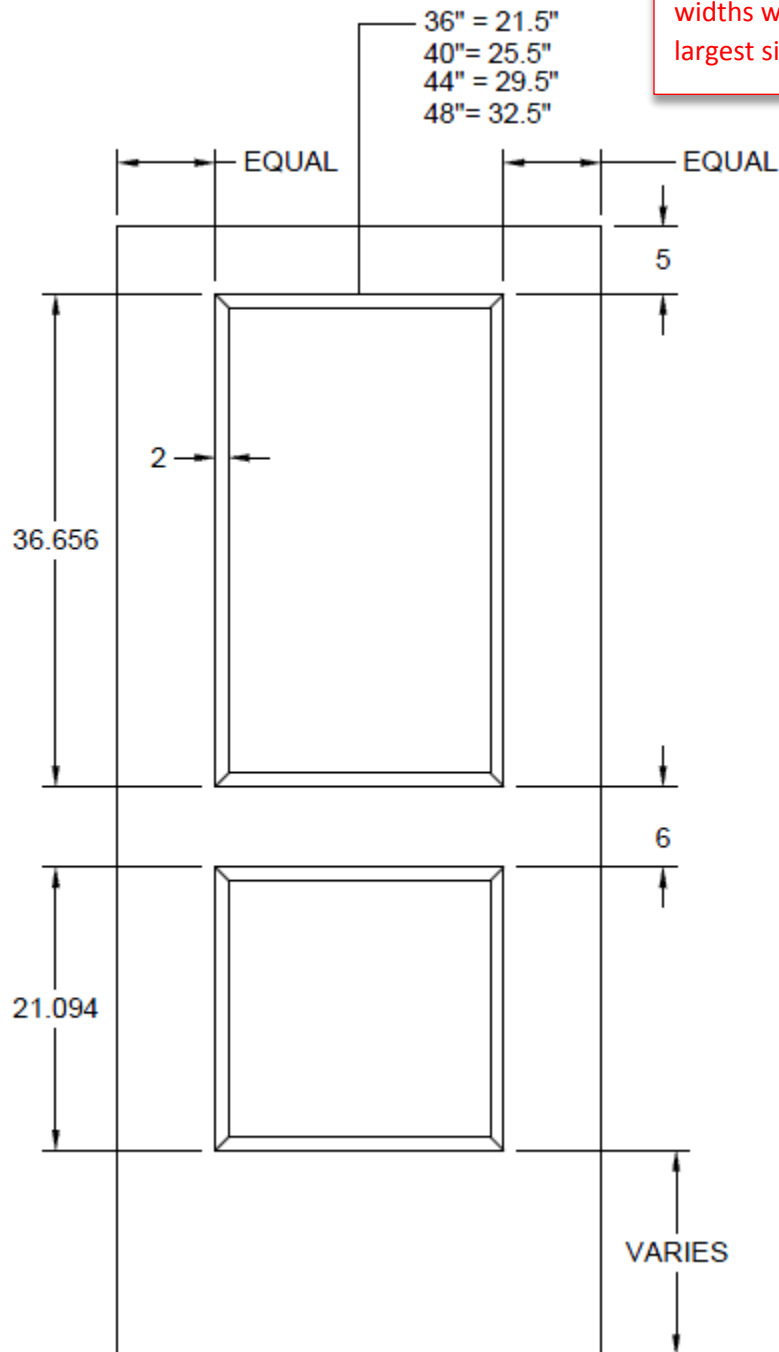


Montgomery Panel Door Details



NOTE: If detailing door widths between the sizes noted, panel widths will be used from the next largest size

Plymouth Panel Door Details



NOTE: If detailing door widths between the sizes noted, panel widths will be used from the next largest size