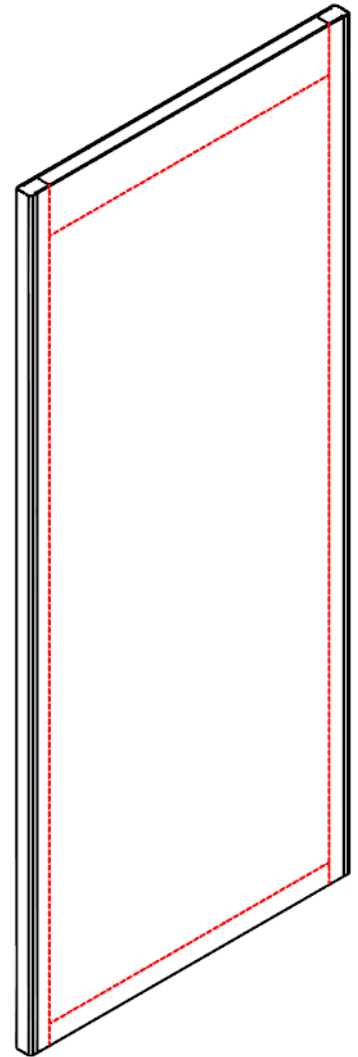


## Lead Lined, 60 Minute Rated Mineral (LL FD7-60PP)

Bonded Mineral Core, 7-Ply Construction, Cat. A, PP

	Single Swing	Pair or Double Egress
<b>Core Type &amp; Standards</b>	Mineral Composite: (28-35 lb/ft <sup>3</sup> )	
<b>Maximum Sizes</b>	4'0" x 9'0"	8'0" x 9'0" (Requires Lead Astragal)
<b>Protection Plates</b>	Up to 48" (above bottom of door)	
<b>Door Thickness</b>	1-3/4" (+/- 1/16")	
<b>Lead Thickness</b>	1/16" (4lb) or 1/8" (8lb), Balanced Construction	
<b>WDMA Prefit Tolerance</b>	Width: (+/- 1/32") Height & Thickness: (+/- 1/16")	
<b>Weight</b>	1/16" Lead – 10.63lb/ft <sup>2</sup> (3070 = 206lbs) (4070 = 277lbs) 1/8" Lead – 14.46lb/ft <sup>2</sup> (3070 = 286lbs) (4070 = 385lbs)	
<b>Crossband</b>	High Density FSC Fiberboard	
<b>Blocking</b>	(Standard) 5" top rail; 1" Bottom Rail; 1" Fixed Internal Stiles (Additional blocking upon request)	
<b>Assembly Adhesive</b>	Face: Type I (waterproof); Core: Type II (water-resistant)	
<b>Replaceable Edge Stiles &amp; Covers</b>	Non-Replaceable SCL Stiles. Acrovyn and/or 20GA #4 finish Stainless Steel Replaceable Covers	
<b>Replaceable Edge Profile</b>	Beveled, Square	
<b>Lites</b>	6" from edges, 5" from hardware or additional cutouts	
<b>Max Visible Glass Area</b>	100 in <sup>2</sup>	
<b>Lite Frames</b>	Metal Lead Lined– Painted, Wood Veneered	
<b>Glazing</b>	Any appropriate lead equivalency Any listed & labeled (60min or greater)	
<b>Louvers</b>	Not Available	
<b>Electronic Options</b>	Electronic hardware & raceways Available	
<b>Hinges</b>	Per NFPA 80 "Table 6.4.3.1"	
<b>Points of Latching</b>	Singles = 1pt	Pairs = 4pts (2pts w/ GP Blue Core) DE Pairs = 4pts (2pts w/ GP Blue Core)
<b>Pivots</b>	Offset w/intermediate (Center hung – Not Available)	
<b>Locks</b>	Mortise & Cylindrical	
<b>Exit Devices</b>	Surface Vertical Rod (Includes LBR), RIM & Mortised	
<b>Concealed Vertical Rod</b>	Not Available	
<b>Flushbolts</b>	Must Be Extension Type (Metal Door)	
<b>Closing Devices</b>	Mortised or Surface Mounted (Mortised will affect lead)	
<b>Door Bottoms</b>	Mortised or Surface Mounted (Mortised will affect lead)	
<b>Transoms</b>	Not Available	



## 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
<b>Adhesive Bond Durability, WDMA TM-6</b>	Type I or Type II	Type I or Type II	Type I or Type II
<b>Cycle Slam, WDMA TM-7</b>	1,000,000 cycles	500,000 cycles	250,000 cycles
<b>Hinge-Loading, WDMA TM-8</b>	550 lbs. (2440 N)	475 lbs. (4110 N)	400 lbs. (1780 N)
<b>Door Finishes Various ASTM test methods</b>	TR-6/OP-6 or equal **	TR-4/OP-4 or equal **	TR-2/OP-2 or equal **
<b>Screwholding, WDMA TM-10</b> 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)
<b>Telegraph, Section T-1</b>	Maximum 0.010 inch in any 3 inch span (0.25 mm in any 76 mm span)		
<b>Warp Tolerance, Section T-2</b>	Maximum 0.25 inch in any 3'-6" x 7'-0" (6.4 mm in any 1050 mm x 2100 mm) door section		
<b>Squareness, Section T-3</b>	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 <sup>rd</sup> party certification)	Regional Priority (manuf <100 miles away)	Low Emitting Materials (ULEF & NAF)	Emissions And Content (non- emitting)
<b><u>Non-Rated – Agrifiber</u></b>	C2C Silver	NO/0%/56%	C2C Silver	NO	YES	YES
<b><u>Non-Rated – SCL</u></b>	C2C Silver	NO/0%/0%	C2C Silver	NO	YES	YES
<b><u>Non-Rated – FSC-PB</u></b>	C2C Silver	YES/0%/100%	C2C Silver	NO	YES	YES
<b><u>Non-Rated – PB</u></b>	C2C Silver	NO/0%/58%	C2C Silver	NO	YES	YES
<b><u>Non-Rated – SCL-STC30</u></b>	C2C Silver	NO/0%/0%	C2C Silver	NO	YES	YES
<b><u>Non-Rated – SCL-STC43-46</u></b>	C2C Silver	NO/0%/0%	C2C Silver	NO	YES	YES
<b><u>20min – Agrifiber</u></b>	C2C Silver	NO/0%/0%	C2C Silver	NO	YES	YES
<b><u>20min – SCL</u></b>	C2C Silver	NO/0%/36%	C2C Silver	NO	YES	YES
<b><u>20min – FSC-PB</u></b>	C2C Silver	Yes/0%/0%	C2C Silver	NO	YES	YES
<b><u>20min – PB</u></b>	C2C Silver	No/0%/36%	C2C Silver	NO	YES	YES
<b><u>45min – Mineral</u></b>	C2C Silver	NO/0%/36%	C2C Silver	NO	YES	YES
<b><u>60min – Mineral</u></b>	C2C Silver	NO/0%/36%	C2C Silver	NO	YES	YES
<b><u>90min – Mineral</u></b>	C2C Silver	NO/0%/36%	C2C Silver	NO	YES	YES
<b><u>Lead Lined – NR – Agrifiber</u></b>	N/A	NO/0%/0%	N/A	NO	YES	YES
<b><u>Lead Lined – NR – SCL</u></b>	N/A	NO/0%/0%	N/A	NO	YES	YES
<b><u>Lead Lined – NR – FSC-PB</u></b>	N/A	YES/0%/56%	N/A	NO	YES	YES
<b><u>Lead Lined – NR – PB</u></b>	N/A	NO/0%/0%	N/A	NO	YES	YES
<b><u>Lead Lined – 20min – FSC-PB</u></b>	N/A	YES/0%/56%	N/A	NO	YES	YES
<b><u>Lead Lined – 20min – PB</u></b>	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](http://usgbc.org/LEED).

## LEED® 2009 v3.0 Contributions

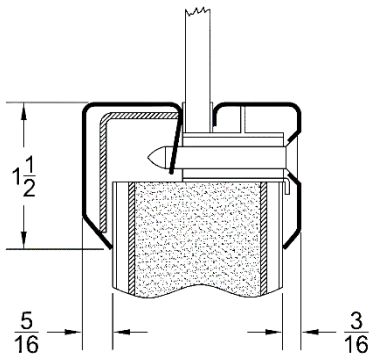
	Materials & Resources Credits			Indoor Environmental Quality Credits
	MR 4 Recycled Content	MR6 Rapidly Renewable	MR 7 Certified Wood	IEQ 4.4 No added Urea Formaldehyde
<b><u>Non-Rated – Agrifiber</u></b>	X	X	X	X
<b><u>Non-Rated – SCL</u></b>			X	X
<b><u>Non-Rated – FSC-PB</u></b>	X		X	X
<b><u>Non-Rated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

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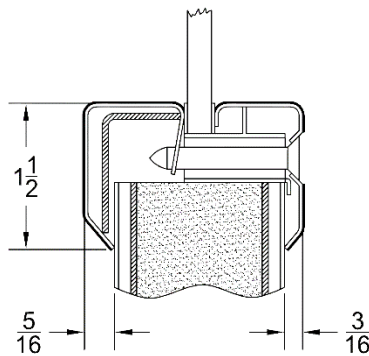
## Lite Kit Options (Cont.)

### **Lead-Lined Metal Lite Kit (NON RATED)**

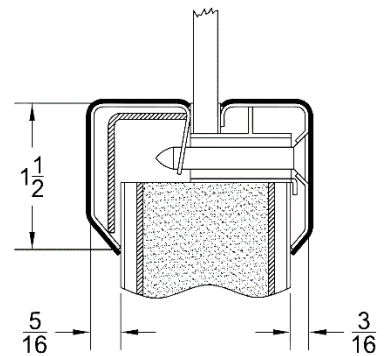
Painted



Wood Veneered

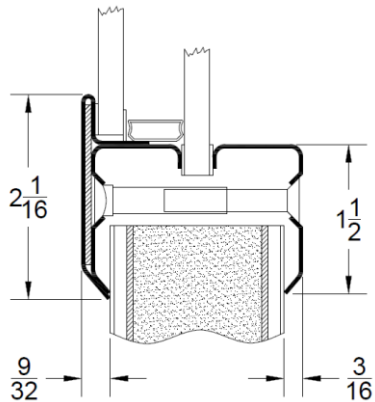


Acrovyn Wrapped

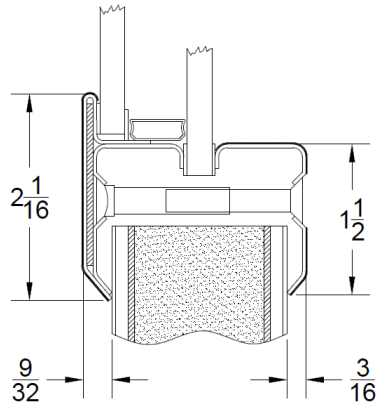


### **Lead-Lined Metal Lite Kit (FIRE RATED)**

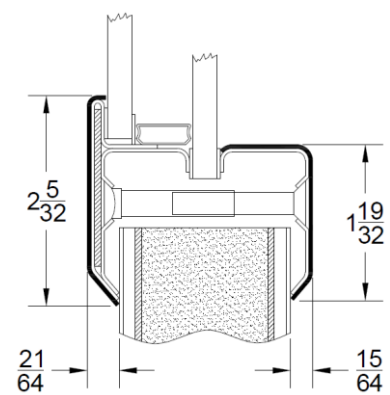
Painted



Wood Veneered



Acrovyn Wrapped



\*Inner Pane = Fire Rated Glass

\*Outer Pane = Lead Glass

ALL DIMENSIONS NOTED ARE NOMINAL

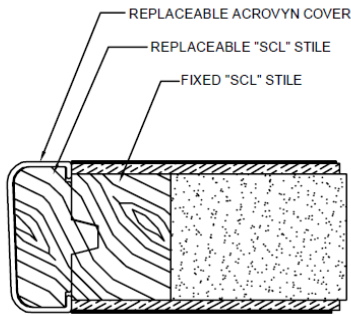


## Door Edge Options

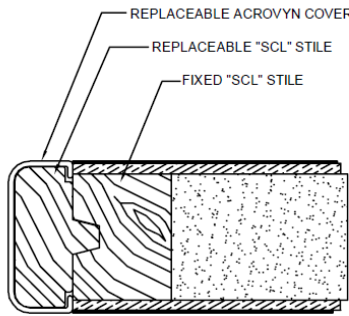
### REPLACEABLE ACROVYN EDGE

STANDARD ON NR THRU 90 MINUTE DOORS\*  
REPLACEABLE IN FIELD

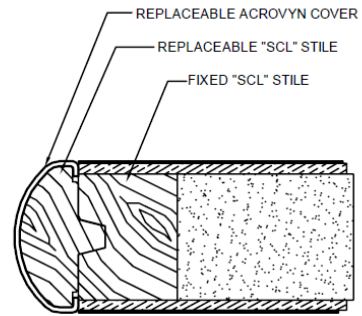
\*Available in either Acrovyn (or) Stainless Steel  
(Stainless Steel not available on Radius edge)  
(Radius edge not available for fire rated doors)



BEVELED EDGE



SQUARE EDGE

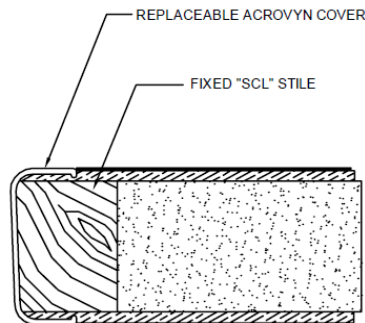


RADIUS EDGE

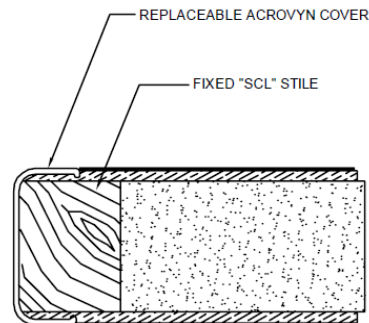
### WRAPPED ACROVYN EDGE

STANDARD ON LL DOORS  
REPLACEABLE IN FIELD

\*Available in either Acrovyn (or) Stainless Steel



WRAPPED BEVELED EDGE

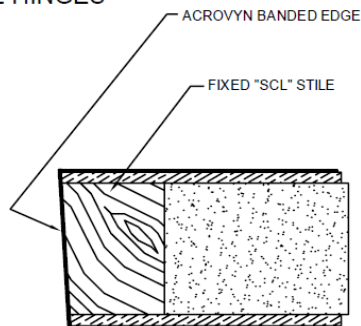


WRAPPED SQUARE EDGE

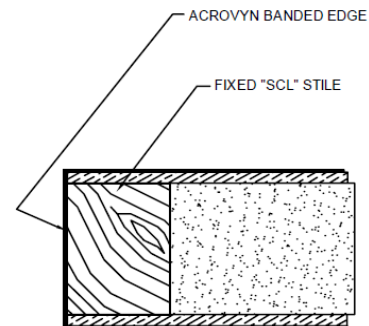
### BANDED EDGE

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

## Astragal Options

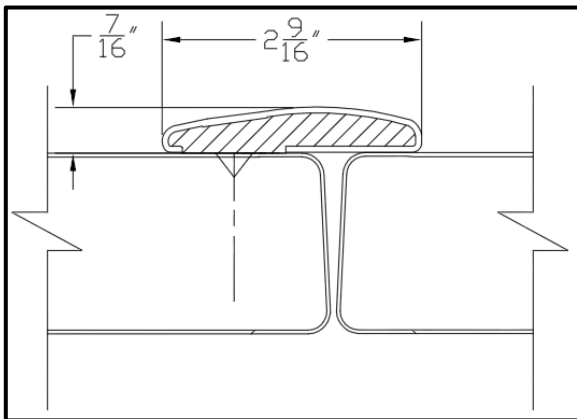
### Features:

- Field replaceable Acrovyn cover
- Made with the same durable Acrovyn sheet as the rest of the door
- Perfect color match to the door
- Offers a low profile “airfoil” design to deflect hard impacts
- Can be through bolted or attached using standard fasteners
- Offers a concealed fastener design (Unless through bolted)

### Applications:

- Acrovyn Door pairs do not require the usage of Astragals to maintain fire rating
- To be used as a sight seal
- Lead lined option available for use on lead lined doors.

### Acrovyn Wrapped



### Acrovyn Wrapped (Lead)

