

Five Lakes Manufacturing  
*exceeding* your door needs...



[www.fivelakesmfg.com](http://www.fivelakesmfg.com)



*Architectural, Commercial and Institutional Wood Doors.*



# Our *Family* of Doors

All of us at Five Lakes Manufacturing welcome you to our family of door products. We think that they are the finest doors in the world. We hope you will feel the same way.

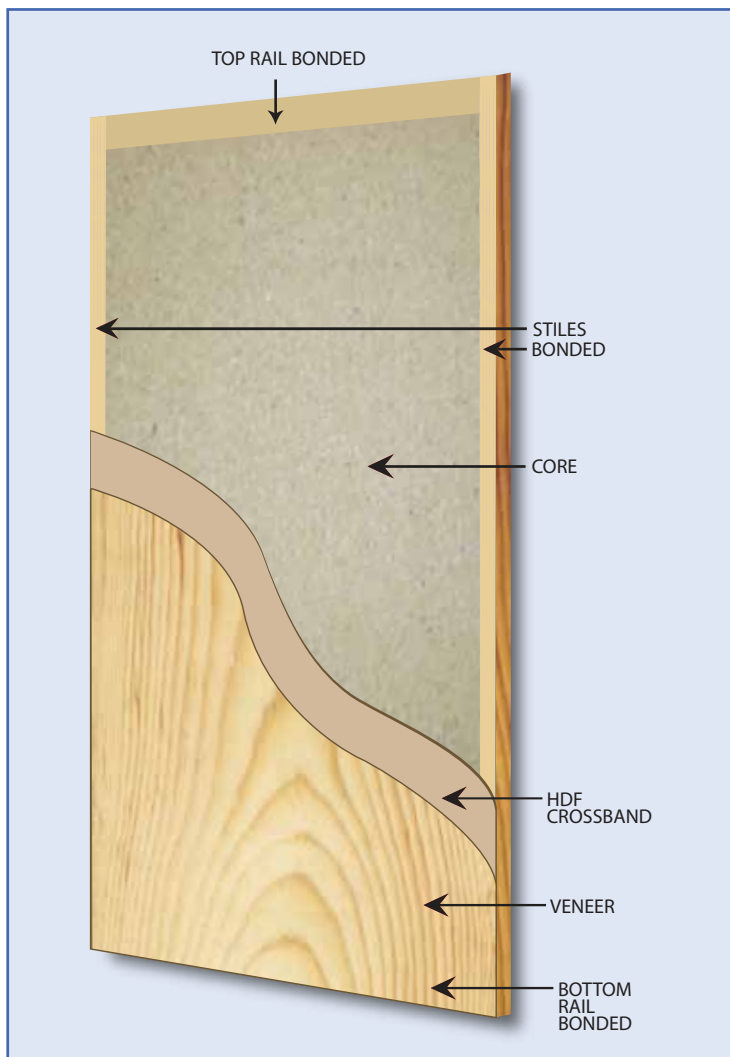
Our team of experienced employees use their skills and the finest equipment available to produce doors to your exact specifications.

All of us at Five Lakes Manufacturing look forward to exceeding your door needs.

Our Family of Doors .....	2
5-Ply Architectural Series.....	3-6
FSC & LEED Doors.....	7
Applied Molding .....	8
Leadlined.....	9
St. Clair Series Prefinish.....	10-11
Installation .....	12
Warranties.....	13-17
Abbreviations .....	18

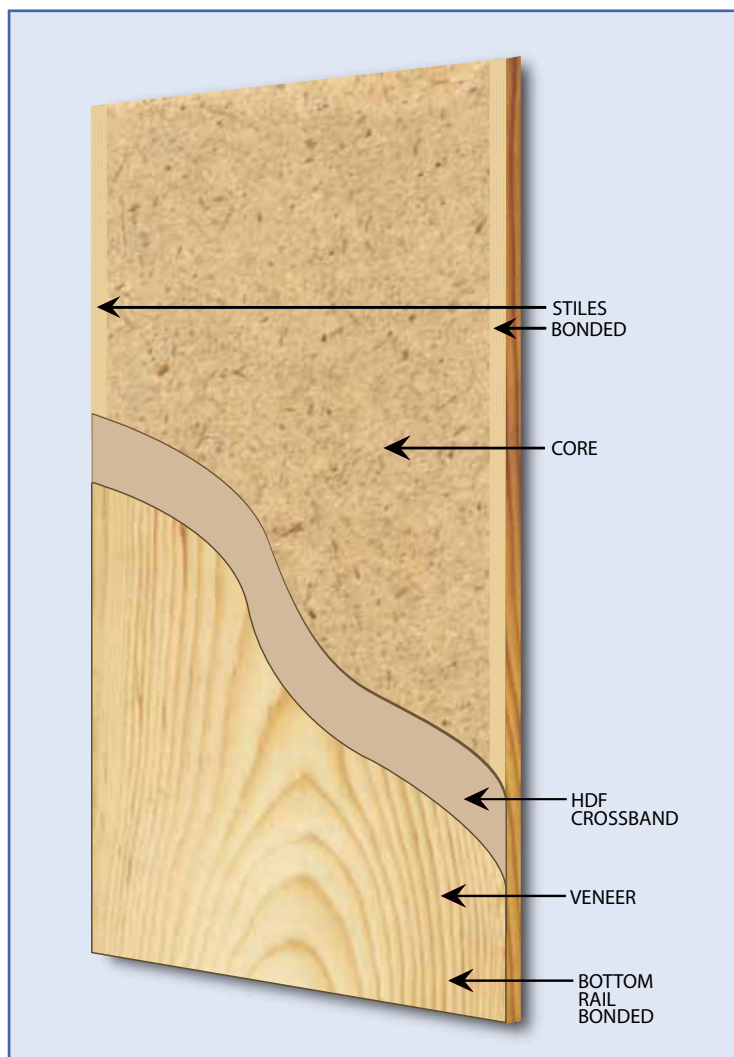


# 5-Ply *Architectural*



## PC5

Perfect for your premier projects our 5-ply door is constructed using bonded core construction and the highest quality frame components. Our door facings used to make our PC-5 doors meet or exceed all industry specifications and standards. Available in a wide variety of veneer species and sizes the PC-5 door from Five Lakes Manufacturing offers quality, performance and beauty without compromise.

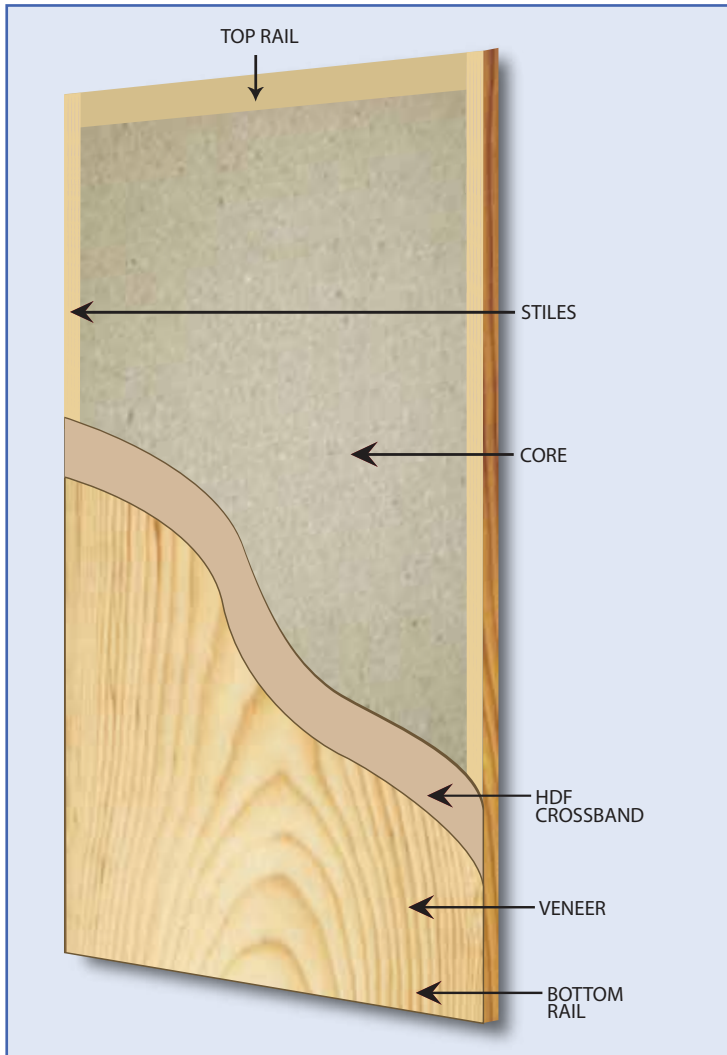


## SCL-5

Structural Composite Lumber (SCL) allows maximum flexibility and strength. SCL doors can be cut down without regard to stile and rail size limitations. SCL doors can also be used when white boards or clothing hooks need to be applied to one surface. FLM recommends that SCL cores be used for all full lite doors. All FLM face veneers and factory finish options are available.

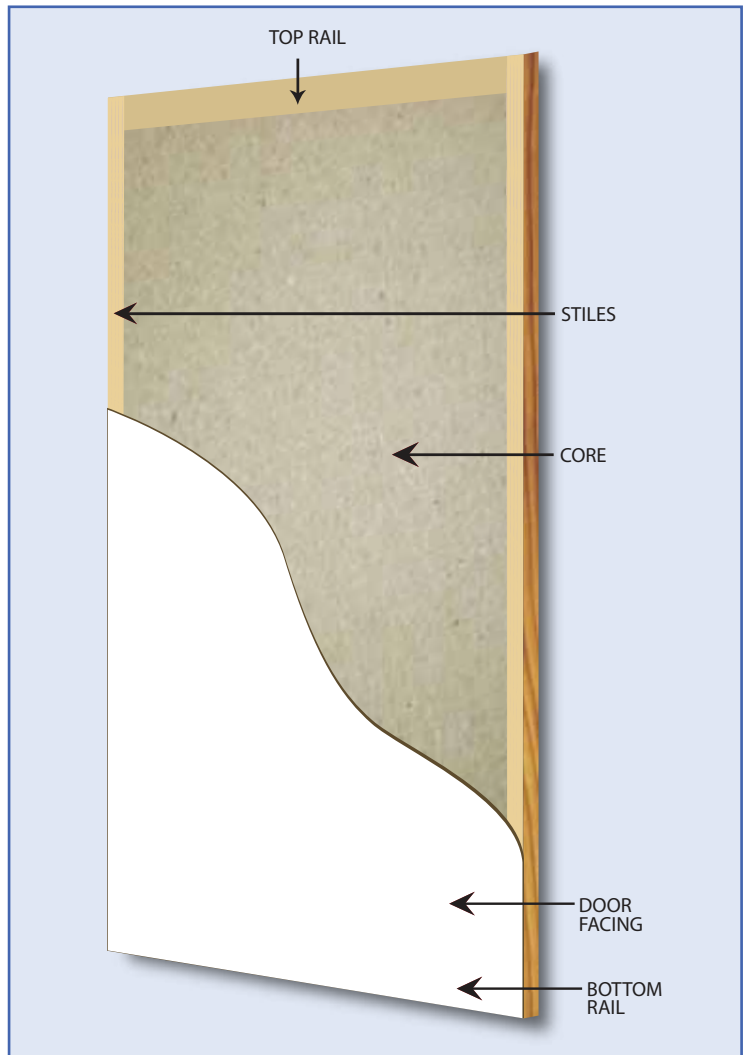


# 5-Ply *Architectural*



## FPC-5 Particleboard

Using the same components used to produce our PC-5 doors, our FPC-5 core is not bonded to the stiles and rails. Our door facings used to make our PC-5 doors meet or exceed all industry specifications and standards. Available in a wide variety of veneer species and sizes the FPC-5 door from Five Lakes Manufacturing offers quality, performance and beauty without compromise.

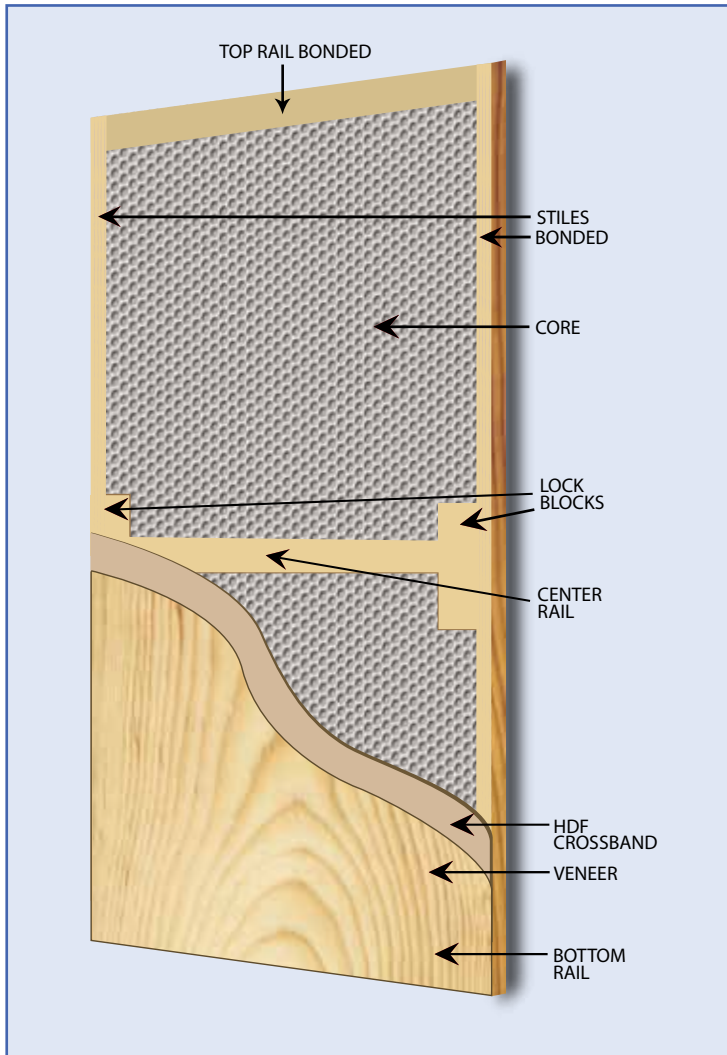


## FPC-PHB

Perfect for painting, primed hardboard by Five Lakes Manufacturing offers engineered performance perfect for your paint grade project. The components used to manufacture FPC-PHB doors meet the same specifications as our PC-5 doors. FPC-PHB is also has economical advantages over "paint grade" wood doors.

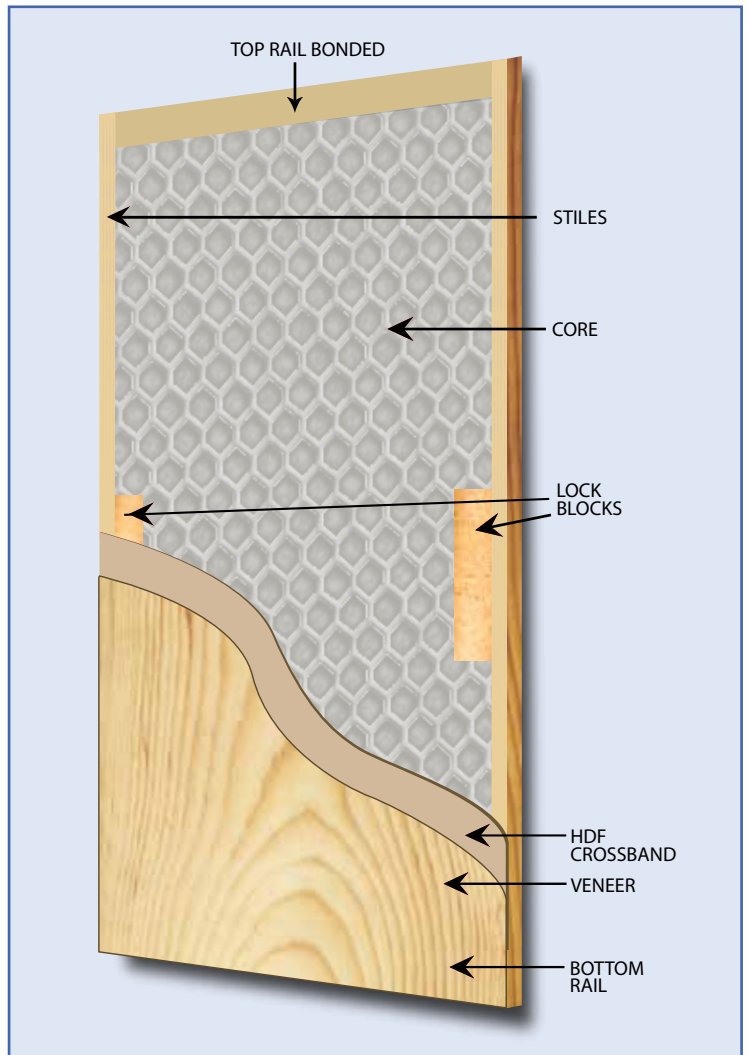


# 5-Ply *Architectural*



## IHC

Sometimes a door needs to be lighter in weight, but still have blocking for complex hardware situations. Institutional Hollow Core (IHC) by FLM is your answer. Our IHC doors weigh 1/3 less than a particleboard door providing the ease of movement needed in certain situations. All FLM face veneer and factory finish options are available.

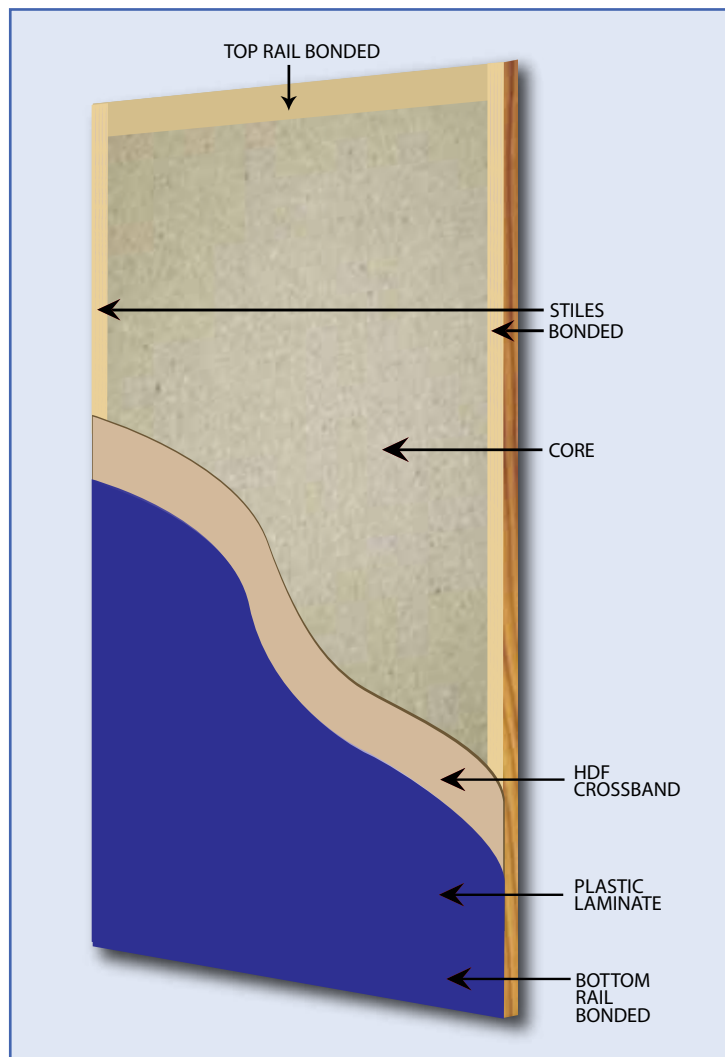


## SHC-5

Standard Hollow Core by Five Lakes Manufacturing provides the lightest weight door available. Weighing about 1/2 that of our PC-5 door, the SHC-5 door allows even further weight savings. SHC-5 doors can be made with extra internal blocking to allow for different hardware configurations. SHC-5 by FLM can also be factory finished to match other doors on your order.



# 5-Ply *Architectural*



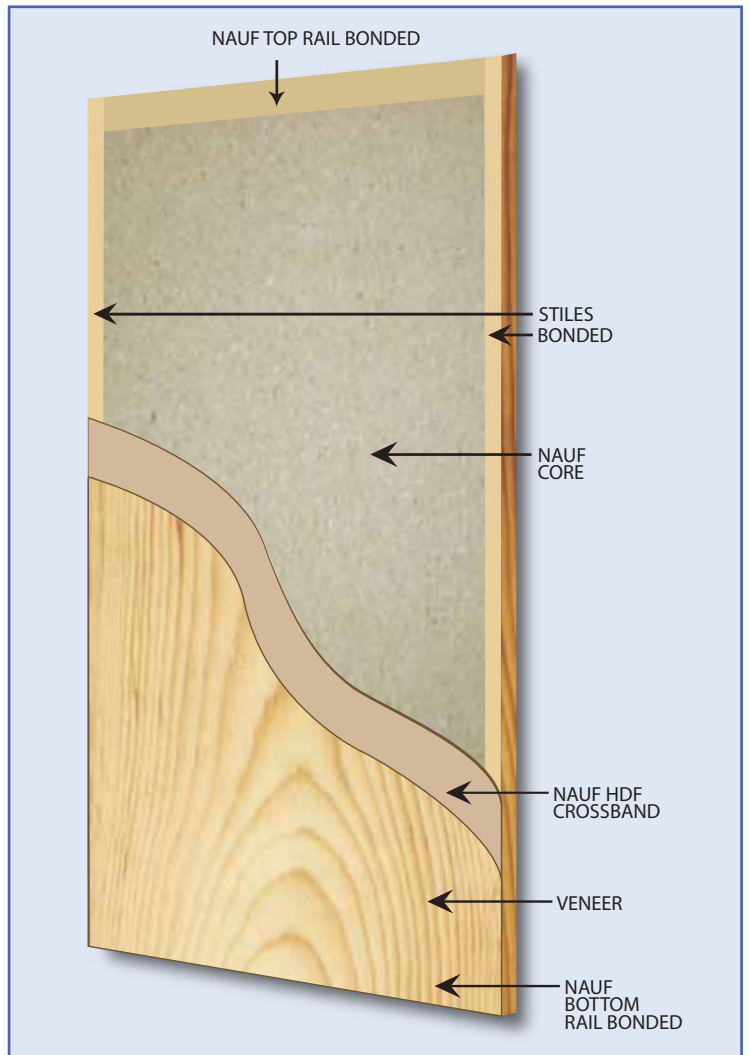
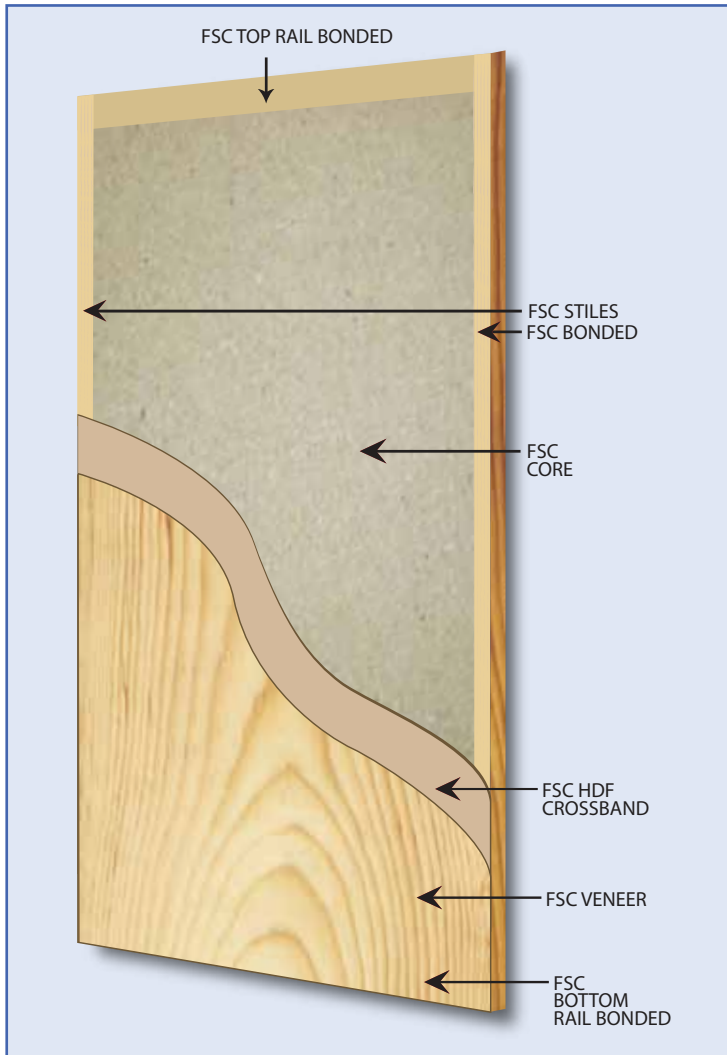
## PLAM Laminate

High Pressure Laminate opens a whole new way to look at “wood” doors. The end user gets exactly what they are looking for with none of the variations involved with wood. Plastic Laminate is available from Wilsonart, Pionite, Formica, Nevamar and Arborite. FLM constructs all of our Plam doors using a layer of High Density Fiberboard to prevent telegraphing. Edges can be matching laminate or stained / painted.





# FSC & LEED *Doors*



## PC-5 FSC

Protecting the environment has always been important to FLM. To further strengthen our care for our natural resources FLM now offers Forest Stewardship Council (FSC) certified doors. This Chain of Custody (CofC) certification gives end users the assurance that proper procedures have been followed from the forest to the door opening.



## PC-5 NAUF

Specifications often demand that door assemblies be made with "No Added Urea Formaldehyde" (NAUF). Five Lakes Manufacturing has the solution with our PC-5 NAUF Series. Using components and adhesives that have no formaldehyde added you can be assured that these doors will meet these new demands. PC-5 NAUF can also be made FSC Certified.



[www.fivelakesmfg.com](http://www.fivelakesmfg.com)





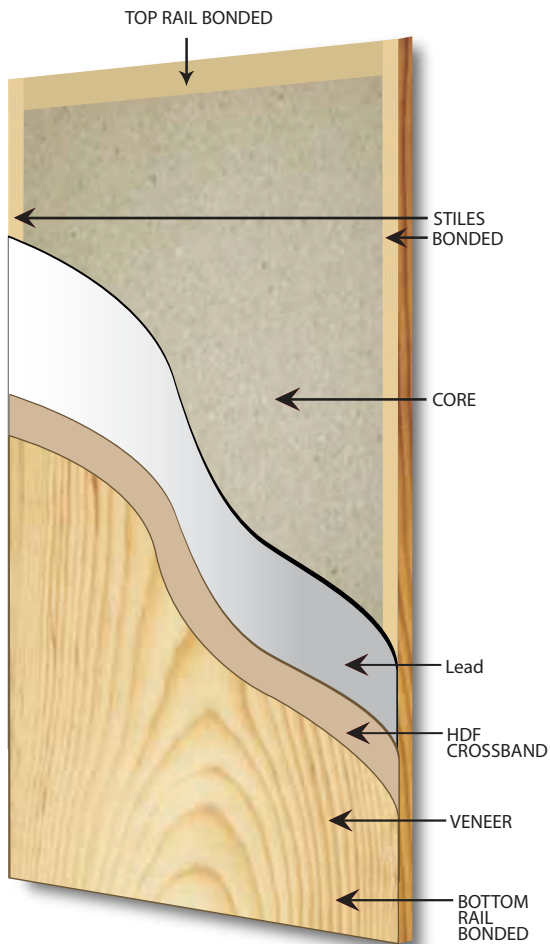
# Applied. *Moldings*







# Leadlined



## PC-5 Leadlined

When radiation protection is needed Five Lakes Manufacturing has the solution with our lead lined door series. We offer 1/16", 3/32" and 1/8" lead thicknesses based on your protection needs. You can pick any species and pre-finish color including plastic laminate and primed hardboard. Purchasing lead lined doors from Five Lakes allows the entire order to ship without waiting for the lead lined doors to arrive from a different manufacturer.

Lead lined from Five Lakes Manufacturing. Simple protection.



# Birch Pre-finish



**Amber**



**Brown**



**Chestnut**



**Cinnamon**



**Wheat**



**Harvest**



**Mahogany**



**Pecan**



**Port**



**Clear**



# Red Oak Pre-finish



**Amber Cherry**



**Brown**



**Chestnut**



**Cinnamon**



**Wheat**



**Harvest**



**Mahogany**



**Pecan**



**Port**



**Clear**



# Installation *Instructions*

## Five Lakes Manufacturing

### Installation Instructions

1. These doors are now your responsibility, treat them with care. Keep them dry, clean and in a protected area. Failure to perform any of these steps will result in the doors being ruined without warranty protection.
2. If the doors have been finished by Five Lakes keep the poly bag on the door as long as possible. Dust can be wiped off of a factory finished door with a damp cloth.
3. If the doors are not factory finished use extreme care when handling and preparing the doors. The doors will need to be sanded to achieve the quality level that you desire. How much time and energy it takes to achieve your desired results is entirely your responsibility. Under no circumstances does Five Lakes Manufacturing warrant the results of doors not finished by Five Lakes Manufacturing.
4. Barber Poling – Book matched and other similar veneer cuts will almost always exhibit barber poling when finished.
5. Pre-drilling of screw holes is required to minimize the chances of the wood splitting whether the door is fire rated or not. However, the use of powered screw drivers can and will increase the chance of the wood splitting as the head of the screw seats. Five Lakes Manufacturing does not warrant wood that is splitting from a screw hole.
6. Warping is becoming increasingly rare as more engineered wood products are being used in the manufacturing of the doors. However, if a door does warp we ask that you look closely at the recent changes to the environmental conditions, ensure that frame and installation are true, and that the doors have been properly finished on all 6 sides.
7. Fire Labels – Leave them on the door if the door is being finished in the field. If you take them off the label will be destroyed and we cannot mail you new labels.
8. Hardware – Ensure that the door is swinging freely. Concealed overhead closers and other devices will destroy a door if not installed with precision.



# Warranties

## Standard Warranty Five Lakes Manufacturing

### Standard Warranty

The above manufacturer warrants all doors sold under this warranty (except those doors expressly excluded from this warranty), for 1 year from the date of shipment, and at the time of shipment to be of good material and workmanship and to be free of defects which would render said doors unserviceable or unfit for their ordinary recommended use. This warranty extends only to the first purchaser at retail of said door(s) and may not be enforced by any person to whom the said door(s) are transferred. Any implied warranties which the purchaser may have are limited in duration to 1 year from the date of shipment. This warranty applies to interior use only.

### TELEGRAPHING AND WARP TOLERANCES

1. Stile, rail, and core show-through (telegraphing of flush doors shall not be considered a defect unless the faces of the door vary from the true plain in excess of 1/100 inch in any three – inch span.
2. Warp shall not be considered a defect unless it exceeds ¼ inch in the plane of the door itself. The following warp tolerances are for 1-3/4 inch or thicker doors. Doors wider than 3'6" and higher than 7' in height, the warp shall not exceed ¼" in any 3'6" section by the height of the door. Doors which are 1/8 inch or 1-3/8 inch thick, the warp shall not exceed ¼", other than excluded below.
3. "Warp" is any distortion in the door itself and does not refer to the relationship of the door to the frame or jamb in which it is hung. The term "warp" shall include bow, cup, and twist. Measuring the amount of warp present in a door, the following method shall be used: bow, cup, and twist shall be measured by placing a straight edge, taut wire or string on the suspended concave face at any angle (i.e. horizontally, vertically, diagonally), with the door in its installed position.
4. The measurement of bow, cup and twist shall be made at the point of maximum distance between the bottom of the straight edge, taut wire and the face of the door.

### MATTERS EXCLUDED FROM THIS WARRANTY

1. Unsatisfactory service or appearance caused by failure to follow recommended "Handling, Job Finishing and Installation Instructions," appearing at the bottom of this warranty, is not covered by this warranty.
2. The appearance of field finished doors is not warranted in any event.
3. Natural variations in color or texture of wood are not to be considered defects.
4. The warranty against warp does not apply to the following
  - A. All 1-3/8 inch and 1-3/4 inch thick doors which are wider than 3'0" or higher than 7'0".
  - B. Doors with face veneers of different species.
  - C. Doors that are improperly hung or do not swing freely.
5. This warranty does not cover.
  - A. Doors with cut-outs for lights and/or louvers, any edge of which is nearer than 5 inches to any edge of the door.
  - B. Doors with cut-out areas exceeding 40% of the area of the face of the door.
  - C. Doors with cut-out areas exceeding one-half of the height of the door.
  - D. Doors having less than 5 inches between cut-outs for lights (flush doors) unit locks, closers, and / or other hardware cut-outs.
  - E. Any delamination caused by failure to protect and seal all exposed surfaces of the door.



# Warranties

## EXECUTION OF WARRANTY

1. If warranted doors are found to contain defects as stated above, the manufacturer, may, at its option, either: (A) repair the door(s) without charge; (B) replace the door(s) without charge, in the same stage of fitting and / or finishing as it was originally supplied: or (C) refund the price paid to it for the door(s). The manufacturer will perform its obligations under the warranty within 30 days after an appropriate notice is given by the purchaser to it.
2. The procedure which the producer should follow in order to obtain performance of any warranty obligation is as follows;
  - A. *If at the time a door shipment is received, said door(s) is found to have a defect(s) which can be reasonably discovered by inspection of each door(s), the purchaser must, prior to hanging or fitting, and within 30 days, send written notice of said discovered defect(s) to the manufacturer.*
  - B. *If a defect is discovered or occurs after a door is fitted and hung, written notice of said defect(s) must be sent to the manufacturer within one year of the date of shipment.*
  - C. *The manufacturer will not be liable for any door(s) repaired or replaced without its prior consent.*
3. Action on any claim for warp or for telegraphing defects may be deferred, at the option of the manufacturer, for a period not to exceed 12 months from the date of claim. If a door has been installed prior to such a claim being made, the door must remain hung in the original installation during the period of deferment to permit conditioning to humidity and temperature.
4. The manufacturer's sole responsibility under this warranty is as stated herein, and it shall not be liable for consequential, indirect, or incidental damages, or for any amount in excess of its price for the shipment involved, whether the claim is for breach of warranty or negligence.
5. This warranty gives the purchaser specific legal rights. The purchaser also has implied warranty rights. In the event of a problem with warranty service or performance, the purchaser may be able to go to small claims court , a State court, or a Federal district court.

## **FIVE LAKES MANUFACTURING, INC.** **LIMITED LIFETIME WARRANTY FOR WOOD DOORS**

The manufacturer warrants all doors sold under this warranty (except those doors expressly excluded from this warranty) to be of good material and workmanship and to be free of defects which would render said doors unserviceable or unfit for their ordinary, recommended use. This warranty only extends to the first purchase at retail of said door(s) and may not be enforced by any person to whom the said door(s) are transferred.

## TELEGRAPHING AND WARP TOLERANCES

1. Stile, rail and core show-through (telegraphing) on flush doors shall not be considered a defect unless the faces of the door vary from a true plane in excess of 1/1000 inch in any three-inch span after 1 year has passed.
2. Warp shall not be considered a defect unless it exceeds ¼" in the plane of the door itself. The following warp allowances are for 1-3/4 inch or thicker doors. For doors wider than 3'6" and less than 7' in height, the warp shall not exceed ¼" in a section 2'6" by the height of the door. Doors wider than 3'6" and



# Warranties

higher than 7', the warp shall not exceed ¼" in any 3'6" by 7' section. Doors up to and including 3'6" wide and over 7' in height, the warp shall not exceed ¼" in and 7' by width of door section. Doors that are 1-1/8" or 1-3/8 inch thick, the warp shall not exceed ¼" other than excluded below. "Warp" is any distortion in the door itself and does not refer to the relationship of the door to the frame or jamb in which it is hung.

The term "warp" shall include bow, cup and twist. Measuring the amount of warp present in a door, the following method shall be used: bow, cup and twist shall be measured by placing a straight-edge, taut wire or string on the suspected concave face of the door at any angle (i.e. horizontally, vertically, diagonally), with the door in its installed position. The measurement of the bow, cup and twist shall be made at the point of maximum distance between the bottom of the straight-edge, taut wire or string and the face of the door.

## MATTERS EXCLUDED FROM THIS WARRANTY

1. Unsatisfactory service or appearance caused by failure to follow recommended "Handling, Job Finishing and Installation Instructions", appearing below this warranty, is not covered by this warranty.
2. The appearance of field finished doors is not warranted in any event.
3. The appearance of a birch faced door which has been painted is not warranted in any event. (See Number 12 of the Handling, Job Finishing and Installation Instructions below).
4. Natural variations in the color or texture of wood are not to be considered as defects.
5. The warranty against warp does not apply to the following:
  - a. All 1-1/8 inch and 1-3/8 inch thick doors which are wider than 3'0" or higher than 7'0".
  - b. All 1-3/4 inch thick stile and rail doors wider than 3'0" and higher than 7'0".
  - c. Doors with face veneers of different species.
  - d. Doors that are improperly hung or do not swing freely.
6. This warranty does not cover:
  - a. Flush doors with cutouts for lights and/or louvers, any edge of which is nearer than 5 inches to any edge of the door.
  - b. Flush doors with cutout areas exceeding 40% of the area of the face of the door.
  - c. Flush doors with cutouts exceeding one-half the height of the door.
  - d. All doors having less than 5 inches between cutouts for lights (flush doors), unit locks, closures and/or other hardware cutouts.
  - e. Any delamination caused by failure to protect and seal all exposed surfaces of the door.

If warranted doors are found to contain defects as stated above, the manufacturer may, at its option either: (1) repair the door(s) without charge; (2) replace the door(s) at no charge, in the same stage of fitting and/or finishing as was originally supplied to an amount to cover the purchaser's cost in finishing and hanging the door(s), which amount shall not exceed the manufacturer's selling price of the door(s); (3) refund the price paid for the door(s) together with an additional amount to cover the purchaser's cost in finishing and hanging the door(s), which amount shall not exceed the manufacturer's selling price of the door(s). The manufacturer will perform its obligations under the warranty within 60 days after an appropriate notice is given by the purchaser to it. The procedure which the purchaser should follow in order to obtain performance of any warranty obligation is as follows:



# Warranties

1. If at the time a door shipment is received said door(s) is found to have a defect(s) which can be reasonably discovered by inspection of each door(s), the purchaser must prior to hanging or fitting and/or finishing, and within 30 days, send written notice of said discovered defect(s) to the manufacturer.
2. If a defect is discovered or occurs after a door is fitted and hung, written notice of said defect(s) must be sent to the manufacturer within one year from date of shipment.

The manufacturer will not be liable for any door(s) repaired or replaced without prior written consent. Action on any claim for warp or for telegraphing defects may be deferred, at the option of the manufacturer for a period not to exceed 12 months from the date of the claim. If a door has been installed prior to such claim being made, the door must remain hung in the original installation during the period of deferment to permit conditioning to humidity and temperature.

THE MANUFACTURER'S SOLE RESPONSIBILITY UNDER THIS WARRANTY IS AS STATED HEREIN, AND IT SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL INDIRECT, OR INCIDENTAL DAMAGES OTHER THAN AS SPECIFIED ABOVE, INCLUDING BUT NOT LIMITED TO, ANY COSTS INVOLVED OR ASSOCIATED WITH REHANGING, REPAINTING, REFITTING, OR REFINISHING ANY DOOR, REGARDLESS OF WHETHER THE CLAIM IS FOR BREACH OF WARRANTY OR NEGLIGENCE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

This warranty gives the purchaser specific legal rights. The purchaser also has implied rights. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

## HANDLING, JOB FINISHING AND INSTALLATION INSTRUCTIONS

1. Deliver door(s) to building site after plaster of cement is dry. If doors are stored for more than one week, all edges should be sealed.
2. Handle with clean gloves and do not drag doors across on another or other surfaces.
3. Store flat on level surface in a dry, well ventilated building. Cover to keep clean, but allow for air circulation.
4. Doors should not be subjected to abnormal heat, extreme dryness, humid conditions or sudden changes therein. They should be conditioned to average prevailing relative humidity of the locality before hanging.
5. The utility or structural strength of the door must not be impaired in the fitting of the door, the application of hardware, or cutting or altering the door for lights, louvers, panels or any other special details.
6. For exterior doors, use three hinges on doors 7' in height or less, and four hinges on doors over 7' in height.
7. For all interior doors use three hinges, except two hinges may be used for hollow core doors weighing less than 50 pounds or 6'8" or less in height. All doors 7'5" or higher require four hinges. Allow a fitting clearance of 1/16 inch on the hinge side and 1/8 inch on the lock side.
8. When light or louver cutouts are made in exterior doors, they shall be properly protected to prevent moisture from leaking into the core. When installed for outdoor swing with no protection from the elements, door must be properly protected by flashing or other suitable means.





# Warranties

9. Before finishing, remove handling marks or effects of exposure to moisture with a thorough, final sanding over all surface of the door using 3/0 and 5/0 sandpaper and clean before applying sealer or finish. Some species of wood (oak particularly) contain a chemical which reacts unfavorably with certain finishes. Where possible, the surface should be tested for such unfavorable actions. Application of a sealer before finishing will usually prevent this difficulty. The full beauty of wood is best emphasized by the use of a satin or semi-gloss finish.
10. Immediately after fitting or cutting for closures, weatherstrip and/or threshold, and before hanging any interior or exterior door on the hob, the entire door, including the top and bottom edges, must receive an application of primer and two coats of a good grade of paint, varnish or lacquer. Adequate drying time must be allowed between coats. For job-site finishing, do not use a water thinned paint unless an oil-based prime coat is first applied. Exterior finishes shall be used on the exterior face and all edges of exterior doors.
11. Dark colored finishes should be avoided on exterior surfaces of exterior doors.
12. Latex or oil-based paints do not always cover spaces on the face of birch doors. Therefore, birch doors should be finished only with stain and varnish. If a painted surface is desired, a hardboard faced door should be used.
13. Before machining check all six sides for damage. Damaged doors which are machined by customers, are not returnable for credit.





**MC** = Mineral Core

**PC** = Particleboard Core (Bonded)

**FSC** = Forest Stewardship Council

**FPC** = Particleboard Core (Non-Bonded)

**IHC** = Institutional Hollow Core

**SHC** = Standard Hollow Core

**MDF** = Medium Density Fiberboard

**HDF** = High Density Fiberboard

**NAUF** = No Added Urea Formaldehyde

**SCL** = Structural Composite Lumber

**AWI** = Architectural Woodworking Institute

**ITS** = Intertek Testing Service

**WHI** = Warnock Hersey International

**LEED** = Leadership in Energy and Environmental Design

**HWE** = Matching Vertical Edge (Veneer or Plastic Laminate)

**SWE** = Standard Wood Edge (Mill Option)

**AGF** = Agrifiber Core

**WDMA** = Window and Door Manufacturers Association

**ANSI** = American National Standards Institute



**Five Lakes  
Manufacturing**

*Architectural, Commercial and Institutional Wood Doors.*

24400 Capital Blvd.  
Clinton Township, MI 48036  
Phone: 586/463-4123 • Fax: 586/463-4142

[www.fivelakesmfg.com](http://www.fivelakesmfg.com)