



TECHNICAL BULLETIN - Flush Doors

PERFORMANCE DUTY LEVELS

IPIK DOORS BY AVALON’s limited lifetime warranty covers the performance duty levels with our standard construction, as stated below:

DOOR TYPE	SCREWHOLDING	HINGE LOADING	CYCLE SLAM
Particle Board 5-Ply Non-Rated Doors	Extra Heavy Duty - meets requirements when blocking included for screw-attached surface hardware. Heavy Duty - meets requirements without blocking for screw-attached surface hardware.	Extra Heavy Duty	Extra Heavy Duty
Particle Board 5-Ply 20-Minute Fire-Rated Doors	Extra Heavy Duty - meets requirements when blocking included for screw-attached surface hardware. Heavy Duty - meets requirements without blocking for screw-attached surface hardware.	Extra Heavy Duty	Extra Heavy Duty
Mineral Core 5-Ply 45, 60, or 90-Minute Fire-Rated Doors	Heavy Duty - meets requirements with blocking for screw-attached surface hardware.	Heavy Duty	Heavy Duty
Structural Composite Lumber Core Doors	Extra Heavy Duty	Extra Heavy Duty	Extra Heavy Duty
Staved Lumber Core Doors	Extra Heavy Duty - meets requirements when blocking included for screw-attached surface hardware. Heavy Duty - meets requirements without blocking for screw-attached surface hardware.	Extra Heavy Duty	Extra Heavy Duty

Structural Composite Lumber Stiles and Rails used in non-rated Particleboard, Structural Composite Lumber, Staved Lumber Doors and 20-minute Fire Core are as follows:

- Hinge loading is 938 lbs.
- Screw withdrawal is 820 lbs.

Fire Composite Stile and Rails used in 45-, 60-, and 90-minute doors are as follows:

- Hinge loading is 773 lbs.
- Screw withdrawal is 706 lbs.



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EXTRA HEAVY DUTY	Typically involves doors where use is considered heavy and frequent and requires the highest minimum performance standards
HEAVY DUTY	Typically involves doors where usage is moderate and requires intermediate minimum performance standards
STANDARD	Typically involves doors where use is low and requires the lowest minimum performance standards

IPIK Doors by Avalon UV-cured high-performance finish is free of volatile organic compounds (VOCs), eliminating harmful emissions and contributing to better indoor air quality.

IPIK Finish AWS Finishing Systems.

GENERAL PERFORMANCE CHARACTERISTICS OF STANDARD FINISHES

	Lacquer, Nitrocellulose	Lacquer, Pre Catalyzed	Lacquer, Post Catalyzed	Latex Acrylic, Water Based	Varnish, Conversion	Oil, Synthetic Penetrating (available in transparent only)	Vinyl, Catalyzed	Acrylic Cross Linking, Water Based	UV Curable, Acrylated Epoxy, Polyester or Urethane IPIK Door FINISH	UV Curable, Water Based	Polyurethane, Catalyzed	Polyurethane, Water Based	Polyester, Catalyzed
General Durability	2	2	3	2	4	1	4	2	5	5	5	3	5
Repairability	5	4	3	3	3	5	4	4	1*	3	2	4	1
Abrasion Resistance	2	4	4	3	4	1	4	4	5	4	5	4	5
Finish Clarity	5	4	5	2	3	5	3	4	5	5	3	4	4
Yellowing in Time	1	2	3	5	4	2	1	4	3	5	4	4	3
Finish Flexibility	1	2	3	3	4	5	4	3	2	3	4	4	1
Moisture Resistance	3	3	4	1	4	1	5	3	5	4	5	4	5
Solvent Resistance	1	2	4	1	5	1	5	3	5	5	5	4	5
Stain Resistance	2	4	5	3	5	1	5	4	5	5	5	4	5
Heat Resistance	1	2	5	1	5	1	5	3	5	5	5	4	5
Household Chemical Resistance	3	4	5	3	5	2	5	4	5	5	5	4	5
Build/Soils	2	3	3	3	4	1	4	3	5	4	4	3	4
Drying Time	5	5	5	2	4	2	5	4	5	5	3	5	2

5 = Excellent to 1 = Poor. Ther numerical ratings are subjective judgements based on the general performance of generic products. Special formulations and facilities will influence some of the performance characteristics.

*Note - Repairability for IPIK Door finish should be rated higher because you can scuff sand an area and recoat with a spray lacquer to re-clear coat for a repair, UV is not required for repairs. There is a low probability for repair needs due to the superior performance of the finish.



CARE & HANDLING

HANDLING & STORAGE

1. Doors must be sealed as soon as they are delivery to job site.
2. Handle doors with clean gloves. Do not slide doors across one another or across other surfaces.
3. Store doors flat on a level surface in a dry, well ventilated building. Cover with dark opaque material to keep out light, keep clean, but still allow air circulation.
4. Doors cannot be subjected to abnormal heat, extreme dryness or, excessive humidity. Humidity must be maintained between 35%-65%. Doors should be acclimated to the prevailing humidity, prior to installation.
5. Doors must be inspected when received. Written notice of any claim of visible defect must be given to IPIK within 10 days of receipt of doors.

INSTALLATION

1. The structural strength of a door must not be impaired during fitting, either by application of hardware, or by any cuts made for lights, louvers, or other special details.
2. Job site fitting is limited to 1/8 inch on each vertical edge and 1 inch at top and bottom. Clearance between door and frame of 1/8 inch is standard at top, lock and hinge edges.
3. Doors over 3' wide or over 7'-6" high require 4 hinges.
4. When doors are factory prepared for hardware:
 - all drilling for screws and bolts will be done in the field by others.
 - correctly sized pilot holes must be field drilled for all screws.
 - Doors must be installed in the openings numbers marked on the top of each door.

FINISHING

Face veneer will vary in color and in grain characteristics within the species and cut specified. When doors are stained or clear-finished, any color and grain variations that existed prior to finishing will show, after finishing. These variations in color, tone and grain should be expected. Door finish requires periodic maintenance. Doors may require refinishing from time to time depending on use and location.

FIELD FINISH

IPIK cannot warrant the appearance of field-finished doors. Doors are not ready for finishing until properly field prepared. Field preparation must include block sanding with fine grit sandpaper. Door faces have been thoroughly sanded at the factory, however, subsequent handling marks and raised grain must be removed by a thorough block sanding. Sanding and finishing must be done when door is in a horizontal position. **DO NOT USE STEEL WOOL.**

FACTORY FINISH

1. Factory finished doors should be wiped with a silicone-free polish. We suggest Guardsman Furniture Polish.
2. If factory-finished doors are cut in field, edges must be field-sealed.

FIRE DOORS

DO NOT REMOVE METAL FIRE LABELS FROM STILES OF DOORS! Do not trim the top end of a fire door.

20, 45, 60 and 90 minute fire doors are prefit in width and beveled. No further width trimming is allowed. Fire doors may be undercut up to 3/4" for floor clearance.

Only a **LICENSED COMPANY** may mortise or cut light openings in fire rated doors!

PAIRS OF FIRE DOORS

Approved 18-gauge, metal edges and astragals are required for pairs of 45, 60, and 90 minute doors except for "A" Category positive pressure doors which already have intumescent material imbedded in tops and edges. 20 min rated pairs may be specified to have fire treated wood stiles so that metal edges are not required.



LIMITED DOOR WARRANTY

You have purchased an excellent door manufactured by a company dedicated to the quality of its product.

IPIK doors are warranted to be serviceable for normal use and to be free of manufacturing defects.

Interior doors are warranted for the **Life of the Installation**.

Fire rated doors with ratings of 45 , 60 or 90 minutes are warranted for 2 years.

Doors must have been handled, stored, finished, installed, and maintained in accordance with: (1) established industry practices, AND (2) IPIK'S written installation and handling instructions.

When IPIK determines that a door is defective, within the meaning of this warranty, it will be repaired or replaced with a new door, as originally supplied. If this replacement isn't practical, IPIK may refund the purchase price of the door.

IPIK Doors' sole responsibility under this warranty is as stated herein. IPIK shall not be liable for consequential, indirect or incidental damages or for any amount in excess of the original purchase price of the door for breach of warranty or for negligence.

IPIK Doors will not be liable for any doors repaired or replaced without its prior written consent.

TOLERANCES

Size tolerance is + 1/16 inch in length, width and thickness. Squareness tolerance shall not exceed 1/8 inch.

Stile, rail and core show-through on flush doors shall not be considered a defect unless the face of the doors varies from a true plane in excess of 1/100 inch in any 3-inch span.

Warp is any distortion in the door itself, from a true plane. Warp shall not be considered a defect unless it exceeds 1/4 inch in any 3'-6" by 7'-0" section of the door. If the door is smaller than these dimensions, the actual door dimension will be used.

IPIK Door may defer action on any claim of warp or show-through for 6 months from date of claim to allow the door to acclimate. If a door was installed prior to such claim being made, the door must remain be installed for a six month period.

EXCLUSIONS

1. We make no warranty for the appearance of field finished doors.
2. We make no warranty for damage to a door.
3. We make no warranty for normal use and wear.
4. We make no warranty for natural variations in the color, grain or texture of wood.
5. The warranty against warp does not apply to:
 - a) Doors less than 1-3/4 inch thick.
 - b) Doors with face veneers of different species or types.
 - c) Doors that are improperly installed or do not swing freely.
 - d) Doors installed on pivots or hinges spaced more than 30" apart.
6. We make no warranty for doors with cutouts closer than 5 inches to the edge of the door, or from hardware mortising.
7. We make no warranty for doors with cutout exceeding 40 percent of the face area of the door or more than 1/2 the height of the door.
8. We make no warranty for any delamination or warpage caused by failure to protect and seal all surfaces of the doors.
9. We make no warranty for the appearance of high gloss finished wood or plastic faced doors.
10. We make no warranty for doors with any hardware preparation that leaves less than a 1/4" thickness of wood
11. We make no warranty for doors installed in an exterior setting.