WDMA Performance Duty Levels — Architectural Flush Wood Doors

Forest Bright's Limited Lifetime Warranty covers the performance duty levels achieved with our standard solid-core construction, as stated below. Duty levels are defined under ANSI/WDMA I.S.1-A, the North American performance standard for architectural wood flush doors.

01 DUTY LEVELS BY CORE TYPE

CORE TYPE	SCREWHOLDING	HINGE LOADING	CYCLE SLAM
Structural Composite Lumber (SCL)	**Extra Heavy Duty**	Extra Heavy Duty	Extra Heavy Duty
Particleboard (PB)	**Extra Heavy Duty** †	Extra Heavy Duty	Extra Heavy Duty
Composite Particleboard (CPB)	**Extra Heavy Duty** †	Extra Heavy Duty	Extra Heavy Duty
Mineral Core, Non-combustible (MN)	**Extra Heavy Duty** †	Extra Heavy Duty	Extra Heavy Duty
Composite Sound Core (CS)*	**Extra Heavy Duty** †	Extra Heavy Duty	Extra Heavy Duty
Agrifiber Core (AG)	**Extra Heavy Duty** †	Extra Heavy Duty	Extra Heavy Duty

† With blocking included for screw-attached surface hardware; Heavy Duty without blocking.

** Blocking availability subject to Composite Sound Core construction. Field cutouts are not permitted on CS-series doors.*

Foam Core (FO), Tubular Particleboard (TPB), and Hollow Core (HC) doors are Standard Duty products and are outside the scope of this document; FO and TPB are upgradeable to Heavy Duty with added blocking.

02 FACTORY TESTING & FINISH

All Forest Bright solid-core door systems are factory-tested to a minimum of 1,000,000 operating cycles following WDMA TM-7 methodology. Forest Bright's standard factory finish systems — TR-6 (transparent) and OP-6 (opaque) — meet the finish requirement for Extra Heavy Duty as standard, regardless of the duty level specified.

03 DUTY LEVEL DEFINITIONS

Split resistance test standards are obsolete and no longer required per ANSI/WDMA I.S.1-A. If the performance duty level is not specified, Heavy Duty is the default under the standard.

Extra Heavy Duty	Typically involves doors where use is considered heavy and frequent, requiring the highest minimum performance standards.
Heavy Duty	Typically involves doors where usage is moderate, requiring intermediate minimum performance standards.
Standard Duty	Typically involves doors where frequency of use is low, requiring the lowest minimum performance standards.

04 ANSI/WDMA I.S.1-A MINIMUM PERFORMANCE STANDARDS (incl. July 2022 errata)

PERFORMANCE ATTRIBUTE	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	2440 N (550 lbs.)	2110 N (475 lbs.)	1780 N (400 lbs.)
Door Finishes, various ASTM test methods	TR-6 / OP-6 or equal[(a)]	TR-4 / OP-4 or equal[(a)]	TR-2 / OP-2 or equal[(a)]
Screwholding, WDMA TM-10 Door Face (blocked or unblocked) Vertical Door Edge[(b)] Horizontal Door Edge[(b)]	 2440 N (550 lbs.) 2440 N (550 lbs.) 1330 N (300 lbs.)	 2110 N (475 lbs.) 2110 N (475 lbs.) 1060 N (240 lbs.)	 1780 N (400 lbs.) 1780 N (400 lbs.) 810 N (180 lbs.)
Telegraph, Section T-1	Maximum 0.25 mm in any 76 mm span (0.010 inch in any 3 inch span)		
Warp Tolerance, Section T-2	Maximum 6.4 mm in any 1050 mm × 2100 mm (0.25 inch in any 3'-6" × 7'-0") door section		
Squareness, Section T-3	Diagonal variance 3.2 mm (1/8 inch)		

(a) Other formulations may exhibit similar performance characteristics, but must meet or exceed the performance levels for the systems specified to be considered as equal. (b) Horizontal and vertical door edge screwholding applies when hardware is to be attached; blocking configuration per core construction.

05 TYPICAL DUTY LEVEL APPLICATIONS

Partial list per ANSI/WDMA I.S.1-A. Applications may be upgraded or downgraded by the specifier.

EXTRA HEAVY DUTY

Hotel / Motel Room Entry
Classroom · Dorm Room
Patient Rooms · Trauma Centers
Surgical Entry
Public Bathroom
Assembly Areas · Auditorium Entry
Gymnasium / Locker Room

HEAVY DUTY

Apartment / Condo Entry
Assisted Living Room Entry
Office — Interior Passage
Stairwell · Hallway
Medical Examination Room
Acoustic · X-Ray
Mechanical · Storage

STANDARD DUTY

Closet · Wardrobe
Private Bathroom
Service
Small, Low-Usage Office