



DOOR HARDWARE GRADES

While the following considerations are very important in determining the grade of hardware to use, the financial budget can also be a major factor in this decision. Always try to use the grade of hardware best suited for the application using the considerations below.

EXAMPLES OF GRADE APPLICATIONS	GRADE	OPENINGS
Hospitals, Schools	1	All Openings
Apartment, Dormitories, Hotels, Motels	1	Common Areas, Stair Towers, Unit Entries, Electrical, Mechanical, Storage Rooms, Other
	2	Interior Unit Openings, Bedrooms, Bathrooms, Closets, etc.
Office Buildings	1	Main Entrances, Public Bathrooms, Elevator Lobbies, Common Areas, Stair Towers, Unit Entries, Electrical, Mechanical Storage Rooms, Other
	2	Inside Tenant Spaces (Offices, Conference Rooms, Closets, etc.)
Industrial/Manufacturing Plants	1	Areas subject to abuse from equipment or environment. Main Employee Entrances, Bathrooms, Locker, Electrical, Mechanical, Storage Rooms. Exterior/Perimeter Openings.
	2	Offices, Conference Rooms, Closets, etc.

ANSI/BHMA CYCLE TESTS	GRADE 3	GRADE 2		GRADE 1	ANSI Grade 3 – Typically residential grade products. ANSI Grade 2- Light to medium commercial grade products. ECONOMY: Some manufacturers have an economy line of products that meet Grade 2 requirements. ANSI Grade 1 – Heavy duty industrial, commercial and institutional products. * = Without Back-Check (Back-Check is the last 5–15 degrees before the door is completely open).
	Basic Level	Intermediate		Highest Level	
	GOOD	ECONOMY	BETTER	BEST	
Butt Hinges (A156.1)	350,000	1,500,000	1,500,000	2,500,000	ANSI Grade 2- Light to medium commercial grade products. ECONOMY: Some manufacturers have an economy line of products that meet Grade 2 requirements.
Bored Locks (A156.2)	200,000	400,000	400,000	1,000,000	
Mortise Locks (A156.13)	800,000	N/A	800,000	1,000,000	ANSI Grade 1 – Heavy duty industrial, commercial and institutional products. * = Without Back-Check (Back-Check is the last 5–15 degrees before the door is completely open).
Door Controls (A156.4)*	500,000	1,000,000	1,000,000	2,000,000	
Exit Devices (A156.3)	100,000	250,000	250,000	500,000	

BUTT HINGES:

- > Grade 1: Heavy Weight Ball & Concealed Bearing. Thickness: 0.180" (4.57mm).
- > Grade 2: Standard Weight Ball & Concealed Bearing. Thickness: 0.134" (3.40mm).
- > Grade 3: Light Weight Plain Bearing.