

## **Not all locks created equal**

**Category: Information**

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Door locks come in many different security grades. It's important to understand that all locks are not created equal. To the average consumer, shopping for a new lock can be as basic as selecting the right colour. Not too much thought is given to the quality of the lock making the consumer vulnerable if an intruder does come calling.

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Locks are available in different grades which are determined by their construction and durability and are tested by the BHMA (Builders Hardware Manufacturers Association). The BHMA is accredited by the American National Standards Institute (ANSI) to develop and maintain performance standards for builders hardware.

A couple of tests performed by the BHMA are the strength test and the cycle test. The strength test examines how much forcible turning a lock in the locked position can withstand. To be graded, a lock must stay locked after the minimum force has been applied. For example, a grade 1 key in knob must hold up to 300 lbs.-in and a lever lock must withstand 450 lbs.-in. A grade 2 key in knob must hold up to 150 lbs.-in and a lever must hold up to 225 lbs.-in. A grade 3 requires a key-in-knob to withstand at least 120 lbs.-in and a lever lock must withstand at least 180 lbs.-in.

The cycle test examines how many times the lock can be operated before it fails. A grade 1 lock must complete 800,000 cycles. A grade 2 lock must complete 400,000 cycles. Grade 3 locks must complete at least 200,000 cycles.

Most commercial applications require either grade 1 or grade 2 locking hardware. Grade 1 not only meets commercial building requirements, it also provides the best security available against vandalism and heavy usage. Because of the overall performance of these locks, they are highly recommended for problem areas.

Some products available as grade 1 include, key in knobs, mortise locks, deadbolts, electronic locks or access control hardware. You can usually spot a grade 1 lock by its size because it's usually much larger than a cylindrical lock.

Grade 2 meets light commercial requirements and exceeds residential building requirements. These locks are adequate for lighter duty doors where security is less of

an issue. They will stop unauthorized personnel from walking through the door, but will have less of an effect on deliberate force than grade 1 products.

Grade 3 meets residential building requirements by providing standard residential security. This grade of lock should not be used for any commercial application and their appropriateness for certain residential uses is also being disputed by many locksmiths.

Grade 2 certainly seems to offer excellent security and durability for residential applications and some grade two locks offer many grade 1 features.

So, remember to ask your retailer about the grade of lock as well as its features and functions before making a purchase.