

Door Locks

Doors and locks are the first step to making your home more secure. Most burglars actually enter through the front door. When the front door is enforced the thief may consequently try to gain access through back doors and garage doors. These are usually not as heavily secured, and, in addition, offer visual protection that allows thieves more time to break in. Burglars prefer to break into a home through a door because it is usually fast. The majority of house thieves will use a little force and easily kick in a door. It's usually the doors strike plate that is the weakest link, but it's not uncommon for a door to be ripped completely off the hinges by a strong kick. Preventing this type of forced entry is fairly simple. Entry doors should be solid wood, have a solid core or have metal clad construction. Exterior entry doors should also have reinforced frames, security strike plates, security hinges and a solid deadbolt lock. In addition, a variety of ornate wrought iron security doors are also available for French doors or when additional security is desired.

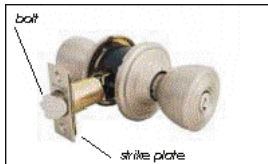
Burglars can gain entrance through a door using a variety of methods. All must be considered when deciding on hardware to protect the home.

- 1) The door can be left unlocked. This may sound easy to correct but old habits can be very hard to break. Remember to always lock your door even when you are at home.
- 2) Doors can be kicked in.
- 3) Locks can be picked.
- 4) Locks can be hammered until they fall off.
- 5) Doors can be pried open or the frames can be spread apart with a crow bar. The intention is spreading the frame enough so that the lock bolts no longer extend into the strike plates in the doorframe. If this can be done, the door can be opened while the door is still locked. The solution to prevent this type of entry is to use not only security striker plates but lock bolts that extend at least 1" or more.
- 7) Locks can be "drilled out" using a power drill.
- 8) Glass in or near the door can be broken, allowing the intruder to reach in and unlock the deadbolt.
- 9) Thieves can obtain a copy of the house key through a variety of schemes and use it to unlock the door.

Locks and doors are the first line defense in home security. Do not skimp when selecting locks. An extra few dollars up front can save the loss of valuables later. Buy the best quality locks you can afford, and remember, you get what you pay for.

Standard Door Knob Locks

Every exterior door should have a knob lock with a bolt that extends from the door knob into the door frame's strike plate. The strike plate is mounted into or onto the door frame. Door knob locks are usually selected by the home builder or contractor. Contractors are of course not "lock experts" and the selection is often based on price. The homeowner can make a much better selection knowing what features to look for and what options are available. In addition, all exterior doors should have a deadbolt. Deadbolts are available as separate units or can be incorporated in a combination with the door knob lock.

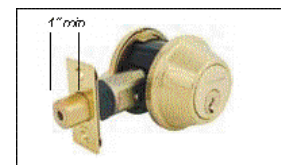


The American National Standards Institute (ANSI) has requirements, developed and maintained by The Builders Hardware Manufacturers Association (BHMA). When replacing exterior door locks, use ANSI Grade 1 locks.

For convenience, knob locks can be matched to open with the same key as dead bolts and locks on other exterior doors, eliminating the need to carry and keep track of multiple entry keys. Knob locks are also available with combination locks.

Dead Bolts

Dead bolts should extend further into the strike plate than a standard knob bolt. At least 1" is recommended. Longer throws makes it more difficult to gain entry by spreading the doorframe. Standard deadbolts utilize a key to open the lock when entering from outside and open from the inside with a single action turn of a knob, thus preventing any entrapment in the event of an emergency. Burglars, however, can easily gain entry through a locked door, even with a dead bolt, by breaking the glass in a window, reaching in, and simply unlocking the door. Standard deadbolts are therefore only recommended for all solid exterior doors without any glass or mail slots within 36" of the lock. If glass panels must be closer, deadbolts can still be used if the glass is covered with a security film, which prevents breakage.



Double Cylinder Deadbolt

Homeowners, in an effort to prevent the above listed type of entry, install what's called a "double cylinder deadbolt". This uses a key on both sides of the door. Unfortunately, when the interior key is not in place the double cylinder deadbolts do not allow quick escape during an emergency. If the internal key is left in place the lock basically functions as a standard deadbolt and provides no additional security.



Captured Key Deadbolt

This type of lock is much like a combination between a standard deadbolt and a double cylinder deadbolt. A captured key deadbolt is advertised as a way to prevent a thief from breaking glass within arms reach of the lock and, reaching in to unlock a door while still providing a safe and quick escape for the family during an emergency. On the interior side of the door the deadbolt lock has a thumb turn which can be removed from the lock, leaving only a keyhole. The idea is when no one is home, there is no need to leave the thumb-turn in place. The last person to leave removes the thumb-turn and basically creates a double cylinder deadbolt. This way thieves could not reach in to open the latch. The thumb-turn cannot be removed without having a key to the lock. Therefore, small children cannot remove the thumb-turn key. The thumb-turn can also be used as a house key. It is important that whenever anyone is in the home that the thumb-turn is left in the lock at all times. Otherwise, there will be no escape during a fire or other emergency. In evaluating this type of lock it should be considered that the same results can be obtained with a double sided deadbolt by just leaving the key in place when at home. The problem arises when wanting security while you or your children are at home. In this day and age why would anyone want a criminal to be able to reach in and open a door or have to rely on everyone in the household to remember to leave the interior key in place to be assured a quick exit in an emergency. In my opinion, there are too many things that can go wrong with either the double sided or captured key deadbolt to make either worthwhile.



Automatic Deadbolt



Many rim latch style deadbolts lock automatically when the door is closed. These are great and offer the additional security of not having to remember to always lock your door. The only problem is you can easily get locked out.

Keyless Locks

Fairly new on the market, these locks are an excellent choice and there is no need to worry about losing keys. A simple code opens the lock. This code can be changed from time to time or whenever the code is no longer maintained as a secret. i.e. when household help is terminated. Keyless locks are available on door knob locks, deadbolts and combination deadbolt knob lock sets.



Fingerprint Locks



One step above the keyless lock is the fingerprint (or bio-metric) controlled lock set. Again a great system with no keys to misplace. The main advantage to a fingerprint door lock system is its convenience. These systems are battery powered and come with a low-battery indicator. This system, as well as the keyless lock, are available with an excellent assortment of security features that make them as secure as a deadbolt but a lot more family friendly.

Key Control

Key control is simply a way of controlling who has copies of keys to the home. There are many burglaries where the entry can be traced back to a key that was somehow obtained by the burglar. Most door keys can be easily copied at any local hardware store. Manufacturers now offer locks that use keys that cannot be copied except by locksmiths or the manufacturer themselves.

Key control locks are more expensive and require some extra effort from the home owner. For example, an additional cost is involved in order to get any replacement keys made. The cost and inconvenience of having to go to a locksmith rather than the local hardware store, is weighed against the added security benefits. Key control locks are available in all style deadbolt locks.

Saw-Resistant Bolts

Some deadbolts come with an internal anti-saw pin. The pin spins freely inside the bolt. When a thief tries to saw through a deadbolt with a hacksaw, the pin spins back and forth with every movement of the saw. This system is not fool proof but makes it more time consuming for a burglar to cut through a lock bolt.

Hardened Cased Steel & Beveled Casings

The outside housing of a lock is called the "casing". Many lock manufacturers make their casings out of hardened steel and many make the casing beveled. The hardened cased steel makes the casing more resilient against impact blows. Beveling the casing makes it difficult to keep a wrench on the lock if a thief attempts to twist the lock free with a pipe wrench.

Anti-Drill Feature

Some determined thieves will actually take the time to drill out a lock. Manufacturers combat this by installing hardened steel chips within the lock. When a drill bit hits these hardened steel chips, the drill bit is destroyed.

Remember, the intruder will select the door that looks easiest to break into and that offers the least chance of being seen. Back doors and Garage doors leading into the house offer an intruder privacy and the ability to safely spend extra time breaking in. Extra thought should go into the security at these locations.

Selecting the right door locks and knowing where to install them is only part of a good security plan for your home. When considering security on exterior doors, the strength of the door and doorframe are just as important as the strength of the door lock.

Reinforcing Door Frames



Companies such as Strikemaster in Virginia now offer a simple way to reinforce existing door frames. They have engineered a long metal strike plate with extra long screws. These screws bite into the wall studs surrounding the door frame. An average sized man can easily kick in and break through a standard door casing without much force. The Strikemaster product turns soft wood door frame casings into solid steel casings with simple installation and minimal effort. Strikemaster's patented steel design is constructed to fit on any door casing without the need to paint over or alter your door casing or frame design.

Security Strike Plate

A standard strike plate comes with every door lock. Many times these strike plates are only cosmetic and not intended to provide much security. They come with two short screws that attach it to the doorframe, and are made of thin gauge metal. The strike plate's attachment to the doorframe is usually the weakest point of the entire door system. In order to stand up to an attempted forced intrusion a security strike made of heavy gauge metal should be installed with extra long screws to engage the structural stud behind the doorframe.

The screw holes in a security strike plate should also be staggered so the screws don't penetrate into the same grain of the wood in the doorframe or wood wall framing. This helps to prevent the wood from splitting during an attempted forced entry. Security strike plates are inexpensive and should be added to every exterior door.

Auxiliary Chain Locks



Auxiliary chain locks on doors, typically a sliding piece attached by a chain to the door frame, are not very effective security devices. Almost any intruder can force open a door secured only with a chain. These chains were designed to allow residents to see who is at the door while still being protected. A wide angle viewer or peep hole would be a much wiser choice.

Burglar Bar

Burglar bars fit securely under any door knob. The bottom of the bar has a hard rubber floor pad which wedges onto wood, tile or carpet floors. These are easy to install. Most are telescoping and adjustable to fit any door. When traveling they come apart for convenient carrying in luggage and offer instant release in emergency situations by just kicking the bottom of the brace away from the door. These bars are often used when traveling but should also be considered for extra security in high crime areas.



Mail Slots

If possible try to avoid having a mail slot in the door. They can provide a thief with an opening through which the lock can be reached and manipulated. Unless your door has a double side dead bolt a mail slot should be avoided. If the door already has a mail slot, a letterbox cage can be installed to prevent thieves from manipulating the door lock.

Peep Hole



If there is no glass panel in the front door, or the glass is not transparent, a wide angle peep hole should be installed. Wide angle door viewers give a nice field of view and allow residents to see who is on the other side of the door before opening it. For security, the wider the field of vision the better.

Safety Hinges

Exterior doors should swing inward to prevent any attack on the hinges. When doors swing in the hinge pin of the doors hinges are then safely mounted on the interior of the home. If local building codes require a door to swing outward, it should be installed on non-removable pin hinges or the hinges should be "pinned". To pin hinges remove the screw from opposing positions on both top and bottom hinges, and drive a pin or nail into one of the holes so the head sticks out just enough to stay within the drilled out hole of the opposite side. When the door is closed, the head of the nail engages the matching hole, and holds the door in place even if the hinge pin is removed.



Sliding Doors

Sliding doors are inherently less secure than standard swinging doors and should be avoided when possible. If sliding doors are already in place, make certain the sliding panel is mounted on the inside. If it's mounted on the exterior then it could be lifted off the track and removed. A security device such as a "Charley-Bar", which is a solid bar that latches in place between the sliding panel and the frame is suggested for additional security on sliding doors. Homeowners could also install a pin-lock by drilling a hole completely through the sliding panel so that a removable solid metal pin can be inserted to secure the sliding to the fixed panel.

French Doors



French Doors, or any paired doors which do not have a center post, are inherently insecure, and if possible should not be used on the exterior entrance to a home. If an existing home has French doors, security can be enhanced by installing heavy-duty vertical bolts to secure the inactive side of the set to the threshold and the top frame. Additional security is obtained by installing a quality deadbolt on the live door to secure it to the inactive one. An alternative solution would be to install ornate wrought iron exterior security storm doors.

Steel Security Doors

Steel security doors provide additional security especially on hard to secure doors like sliding doors and French doors. These doors are available in a variety of ornate designs. Steel security doors should have a heavy duty 2 inch steel frame, a quality deadbolt and be pre-hung on a metal jamb.



Security Shutters

Another option for additional security on windows or doors is installing roll-a-way security shutters. These shutters provide a formidable barrier, not only against intruders, but also against hurricane damage. Security shutters can be set up to work on timers as well as automatic garage door style openers. Just be sure they have a quick release that allows the shutters to be opened from inside the home in the case of fire.

Attic Hatches

Access to a home's attic should only be located inside the home. If an external access door exists, consider having it professionally removed or use a good quality pad lock mounted inside the attic. If possible, protect the attic space with a motion detector alarm.

Keys

Sometimes thieves can take advantage of a security system by accessing a set of keys. Never leave a spare key under the doormat, or in a flowerpot. Burglars know all the standard hiding places. If a spare key must be left outside, purchase an external key lock box with a combination code. These miniature safes can be kept out of sight and also can be mounted firmly to fence post or other solid structure.



When moving into a new home, it's advisable to change all the exterior door locks immediately. Never leave your house or car keys near a door or window. Burglars may break in just to steal the car keys. A good security measure is to mount a combination key box in a convenient space within your home. These boxes not only protect your keys from theft but also help keep all of your keys organized.

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