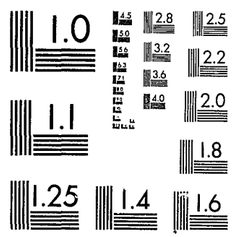

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SECURITY SURVEY GUIDE

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PROGRAM GUIDE

SECURITY SURVEYS *

I. INTRODUCTION

The security survey is one of the basic programmatic tools that is available to a police department for the purpose of hardening burglary targets and thereby reducing the incidence of the crime within a jurisdiction. It also serves as a point of friendly contact between the police department and ordinary citizens in the community who are concerned about their safety or the security of their possessions.

The security survey, while it may be implemented in numerous ways, remains basically a site inspection. The location is visited by a person who has been trained to detect predictable weaknesses. The site is observed systematically, and observations are recorded by the inspector. Normally the survey concludes with certain recommendations being made for improvements. The same process might be followed for purposes of increasing fire protection or evaluating the property's true market value. In this case, the survey is directed toward reducing the chance of burglary or other criminal entry at the inspected site.

Within the context of crime prevention programs, the security survey is frequently linked to Operation Identification programs. The loan of engraving equipment or the scheduling of volunteers to accomplish engraving in the home offers an excellent opportunity to schedule a security survey at the residence.

II. DEFINITION

The premise upon which the security survey program is based states that prospective burglars are attracted to locations where security deficiencies can be observed. The security survey is considered to be a highly effective means for enabling the average citizen to recognize and correct inadequacies in home security before they are observed and acted upon by a prospective burglar.

Goals of the typical security survey program are virtually synonymous with other "target hardening" efforts. These goals might be summarized as follows:

A. Delay any prospective intruder through the installation of appropriate locks on doors and windows and through observance of fundamental security precautions.

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* Major portions of this guide were taken from Law Enforcement and Older Persons published by the National Retired Teachers' Association and American Association of Retired Persons.

B. Deter the prospective burglar through installation of outdoor lighting, removal of screening and landscape features that might permit unobserved entry, or use of devices that give the home an occupied appearance when it is empty.

C. Deny the burglar any reward for an illegal entry by keeping valuables out of sight and well protected in areas that cannot be easily violated.

D. Detect any illegal entry into the home through installation of alarm systems, if appropriate.

III. OPERATION

While police departments in various parts of the nation conduct security surveys in ways that best satisfy their own local needs and are compatible with local resources, a prototype such as the following is generally recognizable.

A. Scheduling

Whether the initial contact is made by the police, a volunteer, or the concerned citizen, a security survey is scheduled at some future date at a time that is mutually acceptable. Frequently, security surveys will be requested by residents in a neighborhood that is experiencing current difficulties with burglary or other forms of illegal entry. When it is possible to group surveys by neighborhood, by all means do so to avoid unnecessary travel time on the part of the inspector.

B. Inspectors

The inspector - who may be a police officer, a special service technician, or a trained volunteer - arrives at the location with crime prevention literature and an approved home security checklist. (See attachment). The inspector is accompanied by the homeowner through the residence in order to observe anticipated security deficiencies. When deficiencies are observed, they are recorded on the checklist. Simultaneously, security weaknesses are pointed out to the property owner, and specific advice is provided to enable the resident to make appropriate improvements.

Frequently, the inspector brings engraving equipment to the survey site in order to mark property designated by the owner. Alternatively, the marking tool may be borrowed by the resident in order to mark his property after the survey has been completed.

C. Compliance

In the best security survey programs, the security checklist used during the survey is then filed in a safe place for a period ranging from 60 days to six months, at which time a "follow-up" contact is made to check on compliance with recommendations. It is the responsibility of the private citizen to carry out recommended improvements at his own discretion. It is not in the role of the security survey inspector to enforce compliance with recommendations, but the "follow-up" contact is made to check on compliance with recommendations. It is the responsibility of the private citizen to carry out recommended improvements at his own discretion. It is not in the role of the security survey inspector to enforce compliance with recommendations, but the "follow-up" contact may be an important impetus to encourage citizen compliance, particularly if inactivity has resulted from simple procrastination or indecision.

D. Incentives

It is quite typical for property owners to take the time to have a security survey conducted and then never follow through with the security recommendations. This may be because of the costs involved, lack of skills and tools to install equipment, or simple procrastination. There are many incentives which can be used to enhance compliance.

1. Free Security Devices

   If the necessary funds can be obtained from public or private sources, security devices can be purchased and given to those unable to afford to purchase them or be sold at reduced costs.

2. Free Installation

   Free installation can be provided to those property owners who lack the necessary skills or tools to install security hardware, such as the handicapped or elderly. Public or private funds can be obtained to contract for these services or a volunteer program can be used to develop a pool of craftsmen.

3. Tax Breaks

   Local governments can support ordinances which give property tax breaks to those property owners who can demonstrate compliance with suggested security recommendations.

4. Building Codes

Many communities now require that security measures be included as part of the building code. In most instances this has applied to new construction only, but can be made retroactive to apply to existing structures.

5. Insurance Breaks

Rate reductions are now offered to property owners who take certain specified steps to enhance security and safety.

E. Types of Security Surveys

Security survey programs are normally divided into three general types, which are identified below:

1. Residential Security Surveys

The inspection is conducted here to identify and correct opportunities for illegal entry onto residential premises. Inspection includes a tour of the interior of the residence and surrounding grounds, if any. Recommendations are provided on the spot to a concerned resident. The person conducting the survey may or may not assist in making some actual improvements. Use of volunteers as residential survey inspectors is very common.

2. Commercial Security Survey

An inspection is made of commercial properties, ranging from storefront establishments and office building suites to industrial or manufacturing firms. The purpose of the survey is to minimize opportunities for illegal entry and to reduce opportunities for theft. This might focus on opportunities for shoplifting or removal of heavy equipment or supplies from the premises.

It will be obvious that a degree of specialized knowledge about business loss problems - in addition to general security fundamentals - is helpful in conducting a useful commercial security survey. For this reason, a greater degree of specialization is helpful when available, and the use of volunteers is correspondingly diminished, except in circumstances where a volunteer brings needed skills to the program.

3. Public Building Security Surveys

Inspection is made of public buildings within the community. The purpose of the survey is to reduce opportunities for theft and illegal entry, and also to minimize the opportunity for vandalism or unauthorized use of property or grounds. Locations might include schools, government offices, jcontrolled assembly areas, and other public property of a local government.

Since virtually all improvements to these properties must be documented through bureaucratic channels, the security survey must be conducted in a "professional" manner, with full attention to technicalities that might obstruct compliance with recommendations. Volunteers are infrequently used for this type of survey, since a great deal of time and expertise are required to complete a single survey.

HOME SECURITY SURVEY

Courtesy of:

RESIDENT'S NAME _____ PHONE NO. _____

ADDRESS _____

OFFICER _____ FILE (CASE) NO. _____ ☐ Single Family ☐ Duplex ☐ Apartment

Recommendations for security improvements checked below are in the interest of reducing the opportunity for a crime to occur.

DOOR SYSTEMS

1. HINGED DOORS — F-front S-side R-rear O-other*

F	S	R	O	Recommendations
☐	☐	☐	☐	Satisfactory
☐	☐	☐	☐	Reinforce frame & strike plate
☐	☐	☐	☐	Add auxiliary lock
☐	☐	☐	☐	Single cylinder
☐	☐	☐	☐	Double cylinder
☐	☐	☐	☐	Pin Hinges
☐	☐	☐	☐	Install 190% door viewer
☐	☐	☐	☐	Replace door
☐	☐	☐	☐	Double Door—Install lever extension flush bolts

Other (specify)_____

*Doors leading to living area from basement or garage, hinged doors from garage to outside.

2. SLIDING DOORS

Recommendations

- ☐ Satisfactory
- ☐ Take up slack (panhead screws)
- ☐ Use Charlie bar or stick
- ☐ Pin doors
- ☐ Reverse units (if incorrectly installed)

Other (specify) _____

3. GARAGE DOORS

Recommendations

- ☐ Satisfactory
- ☐ Add auxiliary lock—type
- ☐ Pin track
- ☐ Electronic door opener

Other (Specify) _____

WINDOWS

4. DOUBLE HUNG

Recommendations

- ☐ Satisfactory
- ☐ Pin windows
- ☐ Install auxiliary lock
- ☐ Secure air conditioning unit from inside

5. CASEMENT

Recommendations

- ☐ Satisfactory
- ☐ Replace latching mechanism
- ☐ Adjust latching mechanism
- ☐ Remove crank

6. SLIDING

Recommendations

- ☐ Satisfactory
- ☐ Pin windows
- ☐ Install auxiliary lock
- ☐ Use Charlie bar or stick
- ☐ Let out expanders

7. BASEMENT

Recommendations

- ☐ Satisfactory
- ☐ Decorative grill
- ☐ Interior or exterior security bar

Other (specify)_____

MISCELLANEOUS OPENINGS

8. Attic, basement, outbuildings

Recommendation _____

LIGHTING

9.

Recommendations

- ☐ Exterior—additional lighting
- ☐ Interior—use timer

SHRUBBERY

10.

Recommendations

- ☐ Trim from windows
- ☐ Trim from doors

SECURITY HABITS

11.

☐ Reviewed basic security habits with resident (see reverse)

OPERATION ID

Recommendation

- ☐ Satisfactory
- ☐ Engrave property
- ☐ Display warning stickers
- ☐ Update

HOME OWNER INFORMATION _____

BUSINESS SECURITY SURVEY

Business Name _____

Person Requesting _____ Date & Time Taken _____

Address _____ Desc. of Premises _____

Phone Number _____

Survey Team & Assignment _____

SECURITY SURVEY CHECKLIST

S — Satisfactory
U — Unsatisfactory (See Recommendations)
N — Not Applicable
R — Recommended

* See Attached Pages and Brochures for Detailed Recommendations

BURGLARY

I. DOORS (LOCKS AND CONDITION)	S	U	N	R
A. Exterior:				
1. Front	☐	☐	☐	☐
2. Rear	☐	☐	☐	☐
3. Side	☐	☐	☐	☐
4. Roof	☐	☐	☐	☐
5. Other	☐	☐	☐	☐
B. Interior:	☐	☐	☐	☐

II. WINDOWS:	S	U	N	R
	☐	☐	☐	☐

III. PERIMETER:				
A. Fence	☐	☐	☐	☐
B. Gates	☐	☐	☐	☐
C. Lighting:				
1. Interior	☐	☐	☐	☐
2. Exterior	☐	☐	☐	☐

IV. MISCELLANEOUS:	S	U	N	R
A. Safe				
1. Type	☐	☐	☐	☐
2. Location	☐	☐	☐	☐
B. Operation Identification	☐	☐	☐	☐
C. Key Control	☐	☐	☐	☐
D. Address Clearly Visible	☐	☐	☐	☐
E. Business Card Filed At Precinct	☐	☐	☐	☐

ROBBERY

I. PHYSICAL DETERRENTS	S	U	N	R
A. Visibility:				
1. Lighting	☐	☐	☐	☐
2. Window Signs	☐	☐	☐	☐
3. Store Layout:				
a. Aisles	☐	☐	☐	☐
b. Cash Drawer Location	☐	☐	☐	☐
B. Alarm	☐	☐	☐	☐

II. PROCEDURES	S	U	N	R
A. Money Handling:				
1. Cash in Register	☐	☐	☐	☐
2. Banking Procedures	☐	☐	☐	☐
3. Bait Money	☐	☐	☐	☐
4. Use of Safe	☐	☐	☐	☐
5. Money Policy Signs	☐	☐	☐	☐
B. Employee Training:				
1. Robbery Procedures	☐	☐	☐	☐
2. Security Procedures	☐	☐	☐	☐

SHOPLIFTING

I. PHYSICAL LAYOUT:	S	U	N	R
A. Register Location	☐	☐	☐	☐
B. Aisles	☐	☐	☐	☐
C. Displays and Inventory:				
1. Expensive Items Secured	☐	☐	☐	☐
2. Dummy Displays	☐	☐	☐	☐
3. Inventory Control Tabs	☐	☐	☐	☐
4. Neatness	☐	☐	☐	☐
D. Deterrents:				
1. Mirrors	☐	☐	☐	☐
2. Anti - Shoplifting Signs	☐	☐	☐	☐
3. Cameras	☐	☐	☐	☐
4. Package Control	☐	☐	☐	☐

II. EMPLOYEE PROCEDURES:	S	U	N	R
A. Training	☐	☐	☐	☐
B. Alertness	☐	☐	☐	☐
C. Policy Adherence	☐	☐	☐	☐

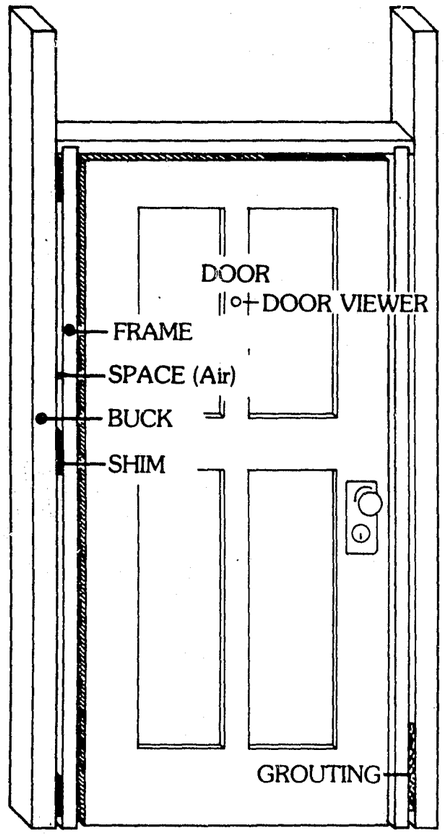
AN INSPECTOR'S GUIDE
TO HOME SECURITY

TAKEN FROM

HOME SECURITY SURVEYS

MARYLAND CRIME WATCH

Door Systems



Door systems have many components. Each component presents problems for which there are different solutions. We must take into account the entire system including the frame, hinges, lock, strike, bolt, structure of the supporting walls, and the hardware (screws, nails, etc.) used to hold the elements together. All the elements of the door system must be designed to work together, providing a solid barrier against the intruder. *If one of the components is weak, the entire system becomes ineffective.*

It is important for the crime prevention practitioner to recognize weaknesses in the door system and have a working knowledge of effective methods of correcting these weaknesses. The crime prevention officer should be aware of cost effective methods of correcting deficiencies in door systems. For example, the officer might be able to recommend corrective measures for existing doors or the officer may find it necessary to recommend replacement of doors or hardware. Cost, as well as effectiveness, must be taken into consideration.

Safety Tip:
All solid doors should be equipped with a wide angle door viewer of 190° or more. Residents should be advised to use the door viewer before answering the door.

The Frame

A secure door, effective locks and other parts of a door system will be less effective if the frame of the door is weak. Securing a door system often requires good carpentry skills. The inspecting officer should *never* attempt to remove the frame or drill holes in the frame to visibly inspect the construction. In all cases the officer should recommend that the homeowner check with a reputable carpenter to assure that a weak frame is properly secured.

To check the frame structure:

- Close the door firmly. If the frame movement is noticeable, recommend that the situation be corrected.
- With the door in the closed and locked position, grab the knob tightly and push sideways, backwards and forward. If the frame moves with the door, the situation should be corrected.

Frames: Problems and Solutions

Problems	Solutions
Frame is loose because of excess play between frame and buck. Allows burglar to spread or rip out.	Strengthen door frame with long nails or bolts about 4" above and below strike plate and at hinge leaves.
Frame is weak at middle. Lock bolt will not hold when frame is spread.	Add shim or grouting to fill air space between frame and buck.
Frame splits near strike when door is kicked.	Strengthen door frame by installing high security strike plate with (minimum) No. 12 3" wood screws.

Reinforcement and strike plates will be discussed later in this book.

Notes:

Types of Exterior Doors

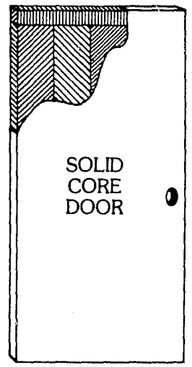
All exterior doors should be either metal or solid core wood. ALL EXTERIOR DOORS MUST BE AT LEAST 1¾" THICK.

Metal or Steel Door

A well constructed steel door is probably the homeowner's best protection against forced entry; however, all steel doors are not constructed the same. Some are constructed with a heavier gauge sheet metal, while others are thinner and can be peeled apart like a tin can. It is recommended that the sheet metal used in the construction of a metal door be no thinner than 18 gauge. Normally, steel doors are filled with foam or some type of insulation material. Horizontal and vertical stiffeners within the door add strength to the door. The steel door should be reinforced at the lock and door knob assembly. This is usually accomplished with heavier metal plates within the door.

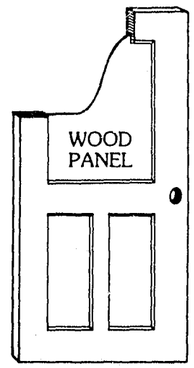
Solid Core Wood Door

The solid core wood door has a solid interior of wood covered by wooden panels. This type of door does not cost as much as the steel door and does offer the homeowner protection against an intruder when properly installed with good security hardware.



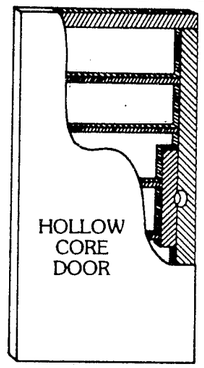
Wood Panel Door

The basic weakness of the wood panel door is in the panels themselves. They can usually be kicked out by the intruder or broken out with a hammer or other blunt tool.



Hollow Core Door

The hollow core door is constructed of thin wood covering a wood frame. It has a hollow center or a center filled with foam or cardboard material. This type of door offers the least resistance against an attack. The intruder can kick the door apart or peel the facing off the door to enter the premises. This door is intended as an interior door and should not be used as an exterior door.

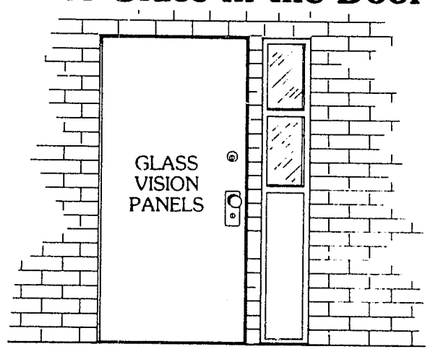


Glass Vision Panels or Glass in the Door

Doors containing windows or with adjacent glass panels can easily be defeated by the intruder who breaks out a pane of glass, reaches in, and unlocks the door. These types of doors should be equipped with double cylinder deadbolt locks[1] (see section on locks), which prevent the door from being unlocked from the inside by the intruder.

The key for the lock should be at least 40" from the glass to prevent an intruder from using the key to unlock the door. (See Safety Tip below.)

The lock mechanism can be further protected by covering the glass with expanded metal grating or polycarbonate material at least 3/16" thick.

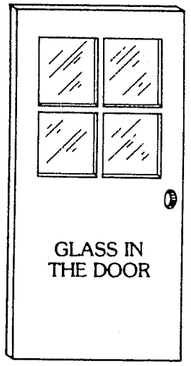


Safety Tip:

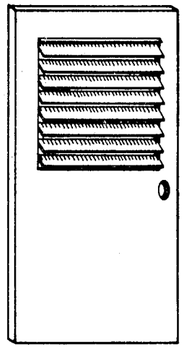
See footnote [1] at the end of this chapter.

In case of fire or other emergency which would require quick evacuation from the home, everyone in the family should know how to use the double cylinder lock.

Further, the key for the lock should always remain at a designated place so that everyone in the family knows its location.

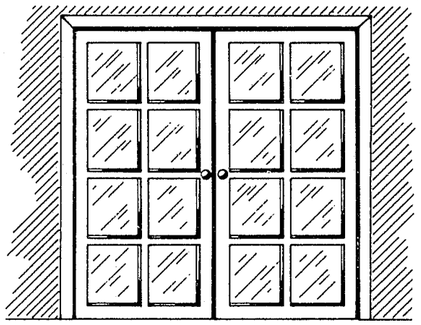


Louvered Glass Door

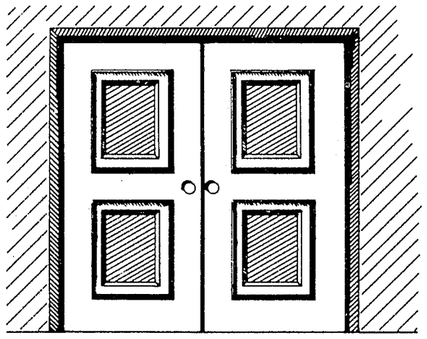


The louvered glass door provides little resistance against the intruder. Glass panels can be broken or pulled out. The glass area should be covered with security bars, grillwork or a polycarbonate at least 3/16" thick. Glass panels can also be epoxyed to their frames to prohibit removal. Lock mechanisms are the same as those used on any doors with glass. (See section on locks.)

French or Double Doors



FRENCH DOORS

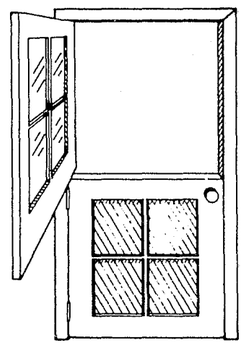


DOUBLE DOORS

The glass in French doors can be treated in the same manner as glass in doors discussed previously. There are additional measures to be taken with French doors or any double door. To secure the double doors, one of the doors must be made stationary by properly installed concealed flush mounted header and threshold bolts. The active door is secured to the inactive door by using a deadbolt lock. (See the section on locks for specific information.) Remember, a double cylinder deadbolt should be used on any door which has glass within 40 inches of the lock.[1]

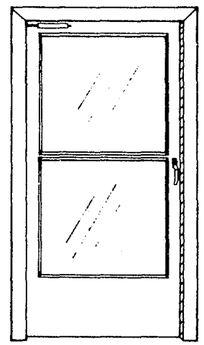
Dutch Doors

The Dutch door should have a concealed header or slide bolt interlocking the upper and lower halves of the door, unless separate deadbolt locks are used to secure both halves of the door. Double cylinder deadbolt locks should be used if glass is within 40 inches of the lock.[1]



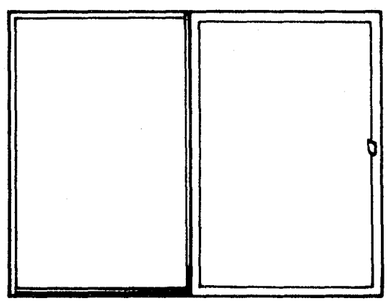
Storm and Screen Door

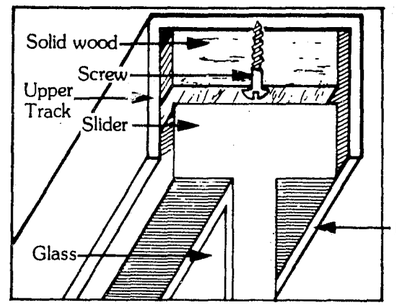
The storm or screen door offers little resistance against attack. Most storm doors can easily be pried open with a screwdriver. Screen doors offer no resistance, as the screen can be cut or pushed out. These doors are very flimsy in construction and lightweight, and will not resist forced entry. They are intended to keep insects from entering the home and to provide an airspace for insulation purposes.



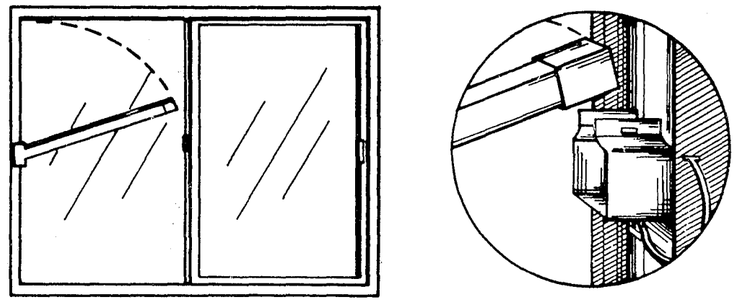
Sliding Glass Doors (or Windows)

Sliding glass doors or windows offer the intruder several means of entry. These include prying the doors open with a screwdriver or prybar, lifting the door or window out of its track, or breaking the glass. To secure the sliding glass door or window, each of these means of entry must be dealt with individually. Little can be done to prevent the intruder from breaking the glass. (Many will not use this means of entry since breaking glass is noisy and dangerous.) To prevent the door or window from being lifted out of the track, a wood or metal bar of the proper thickness can be screwed inside the upper track. This will permit the door to slide properly but will not allow the





door to be lifted out of the track. There are several types of locks available. (See section on locks.) The Charlie Bar or similar device with a retaining bracket should be used as additional security. DO NOT USE THE CHARLIE BAR AS THE ONLY MEANS OF SECURITY.



"Charlie Bar"

Garage Doors

Failure to close and lock garage doors presents a serious security problem. This should be emphasized to the homeowner. If an intruder gains entrance to the garage, he or she will be concealed and may find the tools necessary to continue the burglary into the home.

Manufacturers' locks on garage doors are usually poor in quality and can be easily defeated. Thin masonite, wood or fiberglass panels can be kicked out. The homeowner must insure that the garage door will withstand an intruder's attack.

The three basic types of garage doors are overhead track, overhead counterbalanced, and double outswing.

Overhead Track Garage Door

Check the tracks of this type of garage door and make sure they are tight and secure. Heavier screws may be needed to insure that the tracks are secure. Holes drilled into the track above a

roller secured with a pin or padlock provide one method of securing the door. A case hardened hasp and padlock can also be used to secure this type of door (see section on padlocks). Reinforce thin panels by installing metal straps across the panels on the inside of the door.

Overhead track doors can be effectively secured with electronic door openers. The type of electronic door opener that is recommended is the multi-frequency type that can be disconnected from the inside of the garage when the homeowner is away.

Counterbalanced Garage Door
As this type of door has no tracks, it should be secured with two case hardened hasps and padlocks (see section on padlocks) on both sides of the door, either on the outside or the inside. Metal straps bolted to the frame on the inside should be used to reinforce thin panels.

Double Outswing Garage Door
On the double garage door, one of the doors must be made stationary or inactive with heavy duty slide or surface bolts mounted on the inside of the door. A case hardened hasp and padlock can then be used to secure the active leaf to the inactive leaf. Thin panels should be reinforced by bolting metal strips to the frame across the panels on the inside of the door. Attic openings in attached carports or garages should be viewed as a point of entry also. A well-constructed padlock will provide security for these entry points (see section on padlocks).

Notes:

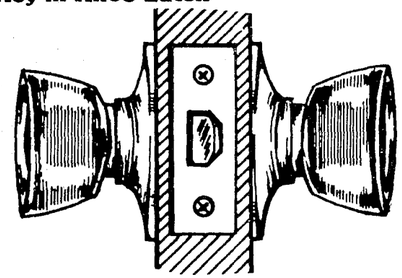
[1]Before recommending or using double cylinder deadbolts, check local building code and fire regulations.

Door Systems Security

Each of the components of the door system requires individual consideration with respect to security. These considerations include the lock on the door, the strike plate on the frame, and the hinges on the door. ***Safety Tip:*** *All exterior doors should be equipped with 190° door viewers or peepholes so residents can check the identity of visitors before opening the door.*

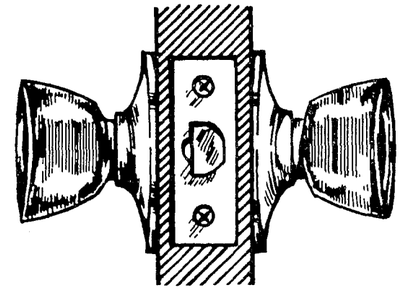
Types of Door Locks

Key-in-Knob Latch*



The majority of all doors are equipped with a standard key-in-the-knob latch which provides little or no security. Note the term "latch," not lock. These devices have a spring which holds a latch in place. These latches can be defeated by wrenching the knob with hands or vice grips; using credit cards to slip the spring latch, kicking the door, or spreading the frame.

Key-in-Knob with Anti-Shim Device*

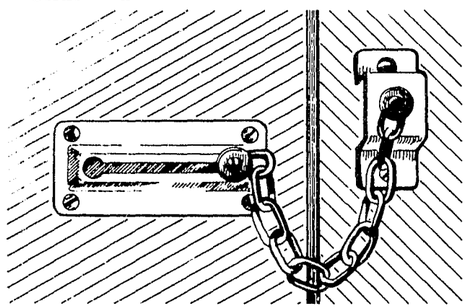


Spring loaded latches can be either mortised (set into the door) or rim mounted (set on the door). Rim mounted spring latches are usually used as auxiliary locks, but provide little security because the latch is short and the jamb can be spread or the screws can be popped out by kicking the door.

Some manufacturers add security features such as anti-shim devices on the key-in-the-knob devices. If properly installed, these devices may prevent slipping the bolt with a card. However, the knob can be easily wrenched off or the jamb can be spread to release the short spring bolt.

*Spring latches are never acceptable for entryways.

Chain Latch



Chain latches also provide false security. They are easily forced off by kicking the door or prying a partially opened door. This includes chain latches which are key operated.

There are many good locks available and, if properly installed, they can provide adequate protection.

IMPORTANT: THERE IS NO LOCK WHICH CANNOT BE DEFEATED BY AN EXPERIENCED BURGLAR USING THE PROPER TOOLS.

When recommending a specific type of lock, the surveying officer should remember that the average home burglary is committed by an unskilled burglar. Any added protection to be recommended must be done so with the idea of slowing down the burglar or causing the burglar to make noise.

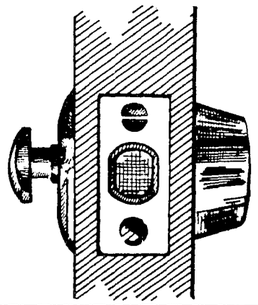
Locks are designed for three specific kinds of installation. One is mortised, that is, set into the door. Another is rim mounted, or set on the interior surface of the door. The third is tubular, with part of the mechanism inside and part of the mechanism outside the door. Single cylinder locks are keyed on the exterior side with a thumb turn operation on the interior surface. Double cylinder locks are keyed on both the interior and exterior surfaces.

Standard features to look for in a good lock are:

- minimum 1" bolt throw
- free spinning beveled cylinder guards constructed of case hardened steel
- 1/4" case hardened bolts which hold the two cylinder halves together
- five pin tumbler

Single Cylinder Tubular Deadbolt

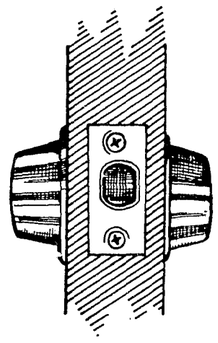
The single cylinder deadbolt lock is key operated from the outside only. The interior operation is a thumb turn. This lock is used where there is no glass in the door or within 40 inches of the lock mechanism.



IMPORTANT: INSTALLATION OF EITHER A MORTISE OR TUBULAR LOCK MAY REQUIRE A SKILLED CARPENTER OR LOCKSMITH.

Double Cylinder Tubular Deadbolt

The double cylinder deadbolt lock (key-way both interior and exterior) should be used on doors where there is glass in the door or within forty inches of the lock.[1] This makes it impossible for the criminal to break the glass and reach inside to unlock the door. A key should be kept further than forty inches from any openings. When the home is occupied, the key should be readily available so that fast exits are possible in the event of emergencies. This key should always remain at the designated place and everyone in the family should know its location and how the lock operates.

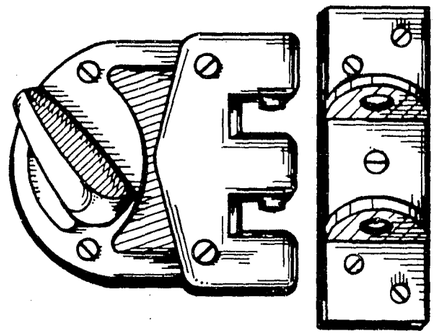


IMPORTANT: INSTALLATION OF EITHER A MORTISE OR TUBULAR LOCK MAY REQUIRE A SKILLED CARPENTER OR LOCKSMITH.

Rim Mounted Locks

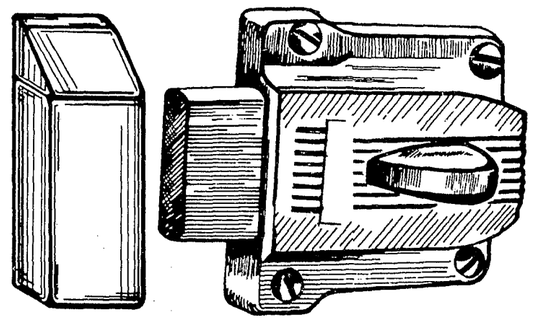
Surface mounted or rim mounted deadbolts, both vertical and horizontal bolts, also provide good security. They mount on the surface of the door and are easy to install. This type of lock is less expensive than single or double cylinder mortise locks.

Vertical Deadbolt

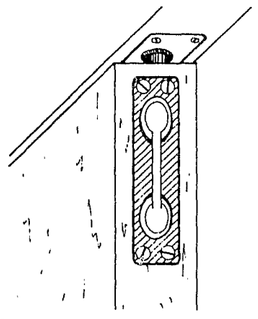


The surface mounted deadbolt locks have either a vertical or a horizontal bolt. The vertical drop has an interlocking principle which locks the bolt into the strike plate.

Horizontal Deadbolt



Concealed Header and Threshold Bolts



These devices are used to secure the inactive door on one side of double or French doors. They may also be used on Dutch doors to secure one half of the Dutch door to the other half.

Remember:

—None of the preceding locks should be recommended for installation on hollow core doors.

—When the bolt of a deadbolt lock is in place, it stays in place. If the bolt can be pushed back into the door, it is not a deadbolt.

—If a double cylinder deadbolt lock is used, the key should be placed more than forty inches from any glass in or near the door.

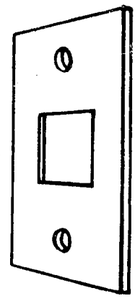
—If deadbolt locks are recommended for more than one door they should always be keyed alike.

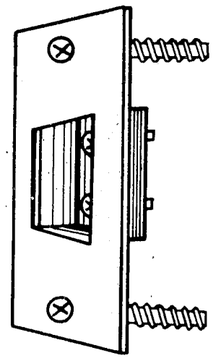
—Single or double cylinder deadbolt locks require various carpentry tools and skill to install.

Notes:

[1]Before recommending or using double cylinder deadbolts, check local building code and fire regulations.

Strike Plates





The weakest point of a good lock may be the strike plate, which secures the bolt when the door is locked. Because of the way the frame is constructed, the strike plate must be reinforced. The door frame is set into an opening at the time of construction, and after the frame is squared, there is air space between the door frame and the door buck (2x4 next to the opening for the door).

To increase security, the air space between the door frame and door buck must be bridged so that the locking system is secured to a structural member, not the trim.

Thin gauge metal strike plates should be replaced with heavy duty strike plates secured with number 12 three inch wood screws. This adds protection to the jamb and is relatively inexpensive. If the frame appears weak, further security can be added by installing the long, high security strike plate or a high security strike box. These should be secured with number 12 three inch wood screws.

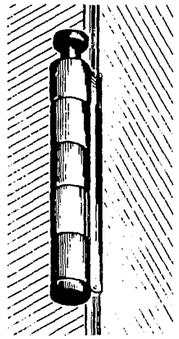
For doors installed next to masonry walls where there is not a door buck, lead anchors must be placed in the wall and the strike plate attached to the lead anchors.

With the addition of the reinforced strike plate, the door jamb is not likely to split when the door is kicked.

Door Hinges

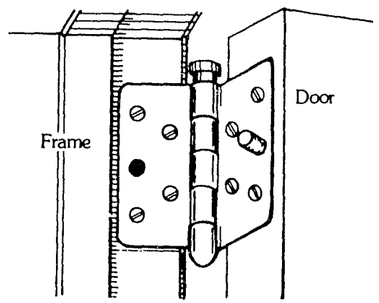
Doors which open outward have exposed hinges. These doors can be unhinged by removing the pins and then lifting the door away from the frame.

There are hinges which have nonremovable pins or hinges containing set screws to prevent pin removal.



Exposed Hinges

The existing hinges may be protected by removing two screws opposite each other from both leaves of the hinge. Insert screw, nail or wooden dowel into the jamb leaf protruding ½ inch. Drill out the opposing screw hole in door. Do this to the top and bottom hinge of the door. When the door is closed the hinge pins may be removed, but the door will remain firmly in place.



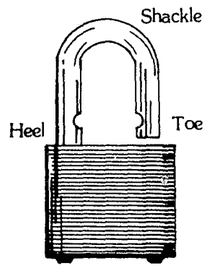
Padlocks

Padlocks are generally used to secure fence gates, storage sheds, cellar doors, etc.

There are many padlocks on the market. A well-constructed padlock will have the following features:

- Hardened steel 9/32" shackle
- Double locking mechanism heel and toe
- Five pin tumbler
- A key retaining feature, if possible. (Key cannot be removed until the padlock has been locked.)

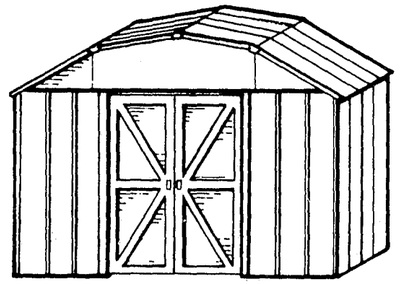
Padlocks should never remain unlocked. This is an invitation to a potential burglar, who can remove the padlock, have a key made, and return the padlock to its original position. Later, he or she can return and enter the home, using the newly made key.



Hinging Hasps

Hinging hasps should be of hardened steel and installed with carriage bolts through the door or gate. Use large washers on the inside. After nuts are secured, deface the threads of the bolt ends to keep nuts from working off or being removed. The hasp should be installed so that when it is closed, all bolt heads are covered.

Detached Buildings



Detached buildings, prefabricated steel or aluminum sheds used for storage are nearly impossible to secure. If high value equipment (electric hand tools, expensive mowing or garden equipment, or bicycles) cannot be securely stored elsewhere, the only practical and inexpensive solution is to slow the burglar down.

The same security suggestions for the home apply to detached buildings — secure sliding doors, pin hinges, lock with a good padlock.

Leaving building doors open and unlocked is an invitation to a potential burglar to steal the valuables stored in them.

Doors: Problems and Solutions

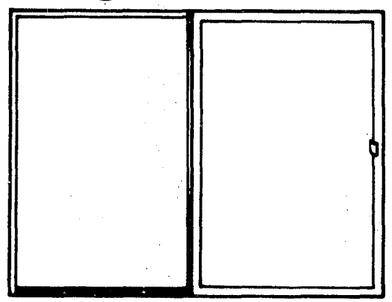
Door Type	Problem	Solution
Metal or Steel Door	Hollow construction. If hit hard, lock bolt will disengage from strike plate.	Use vertical-drop jimmy proof rim lock (see section on locks) or replace with better constructed door.
Wood Panel Door	Panels can be kicked in or broken out with hammer or other blunt instrument. Rails and styles under 1¾" thick.	Replace door with a door at least 1¾" thick.
Hollow Core Door	Door can be kicked apart or facing pulled off.	Replace door with solid door at least 1¾" thick.
Glass in or Near Door	Glass can be broken to gain access to lock mechanism.	Install double cylinder deadbolt locks.[1] Cover glass with metal grating or 3/16" polycarbonate. Keep key at least 40" from glass.
Louvered Glass Doors	Louvered panels easily removed.	Secure mechanism and cover glass with grill work or polycarbonate at least 3/16" thick. Epoxy panels to frames.
French or Double Doors	Glass easily broken; doors easily pried apart.	Cover glass with 3/16" thick polycarbonate; secure both active and inactive door with properly installed locks (see section on locks).
Dutch Doors	Both portions of door not secured.	Install deadbolt locks on both portions of door or lock both parts of door together.
Storm or Screen	Weather-barrier only.	Do not rely on for security.
Sliding Glass Doors	Easily pried open or lifted out of track.	Charlie Bar or similar device with retaining bracket; wood or metal spacers properly installed in upper track; proper locks (see section on locks).
Garage Doors	Doors not closed and/or locked. Inadequate locks.	Close and lock. Install adequate locks (see section on locks).

[1]Before recommending or using double cylinder deadbolts, check local building code and fire regulations.

Types of Windows

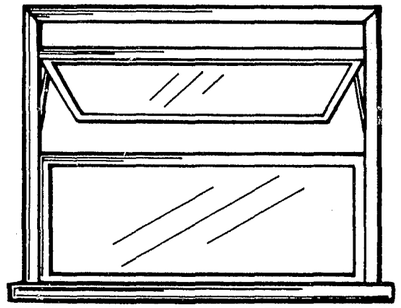
Windows, like doors, provide an opportunity for unwelcome entry. There are many different kinds of windows and a variety of security devices. *All* ground floor windows as well as those easily reached from the roof, porch, carport, etc. should be secured. ***Safety Tip:*** In the event of fire or other emergency, bedroom windows should provide a means of ready escape. Keep this in mind for basement bedrooms also.

Sliding Glass Windows

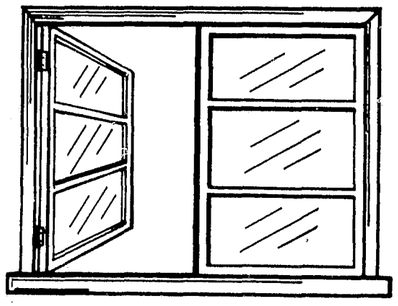


See the section on sliding glass doors. There are Charlie Bars and similar devices available for sliding glass windows. (Security suggestions the same for doors and windows.)

Casement Windows



Awning (Louvered) Type

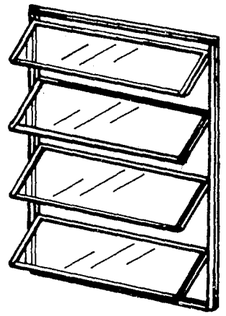


Outswing Type

Casement windows are easy to secure. Make sure that the latches operate properly and that there is no excess play in the crank handle. One measure of security is to remove the handle so that if someone does break the glass, there is no mechanism to open the window. Replace any worn hardware. See the section on locks for locks for casement windows.

Louvered Windows

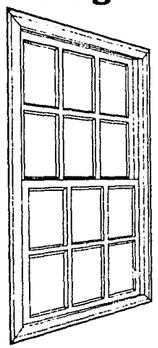
Louvered windows are security risks. Remove and replace them with solid glass or cover the opening with a polycarbonate material 3/16" thick. Panels can also be epoxyed to their frames.



Double Hung Windows

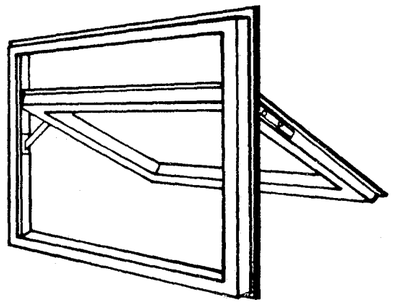
One of the most common problems on double hung windows is the crescent latch used to "lock" the window. This is not a lock; its primary purpose is to keep the top and bottom sashes closed. There are several methods available for securing double hung windows. Key locks which pin the upper and lower sashes together are available (see the section on locks).

Another method is pinning the windows. This is an inexpensive method and one which can offer adequate security. (See section on window security.)



Basement Windows

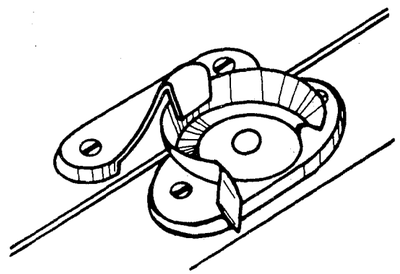
Basement windows can be pried open easily or the glass broken and entry made. One method to prevent entry through the basement window is to install grill or bars across the windows. Grillwork which fits the metal window well is also available. When attaching the grill be sure to round the heads of the bolts and strip the threads so the nut cannot be backed off to remove the grill. There are commercial locks which will work on some types of small basement windows.



Window Security

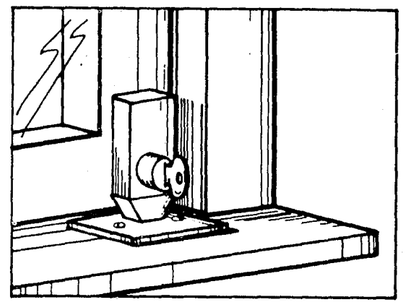
Security devices for windows vary, depending on the type of window and its location.

Crescent Latch



The crescent latch found on double hung windows is not a security device. Its function is to keep the upper and lower windows together. A keyed crescent latch is not to be considered a security device either.

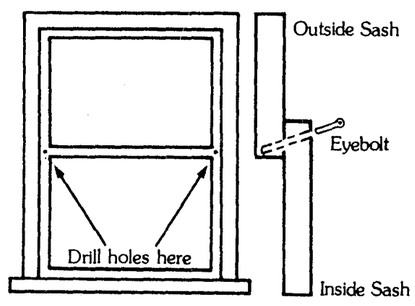
Barrel Bolt Lock



This lock is installed in the corner of the window and requires a key to open it. The key should be placed no closer than 40" to the window. This lock can be used on most windows.

> ***Safety Tip:***
> *In case of fire or other emergency which would require quick evacuation from the home, everyone in the family should know how to use the lock. Further, the key for the lock should always remain at a designated place so that everyone in the family knows its location.*

Pinning

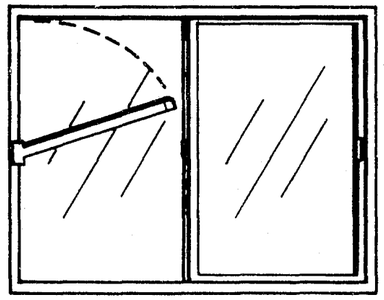


To pin double hung windows: at each top corner of the inside sash, drill a hole through the inside sash and three quarters of the way through the outside sash at a slight downward angle. Insert two 5/16" diameter eyebolts, one on each side of the window. The bolts should fit loosely enough in their holes so that they are easy to insert and remove.

A separate set of holes can be drilled into the outside sash approximately three to four inches above the inside sash so that the window can be left open for ventilation. This prevents the window from being opened further than the three or four inches allowed.

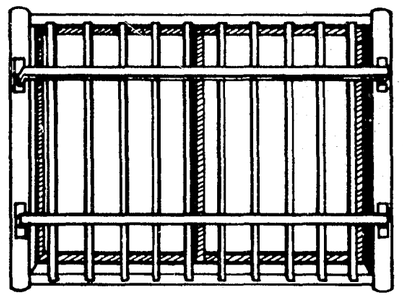
This removable drop bar prevents lateral movement of sliding glass windows. It is the same kind of device used on sliding glass doors.

Charlie Bar (or similar device)



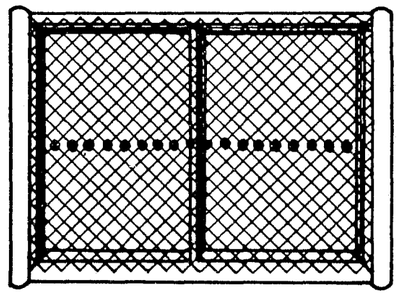
For some windows and doors, bars and decorative grillwork may be necessary for added protection. Quick release mechanisms which can be released from the inside should be installed.

Bars and Grillwork



Recommended construction or design of grillwork must include:

- bars of ½" diameter, 5" on center
- steel straps of ½" by ¼" flat steel, 5" on center
- mesh or expanded metal screen 1/8" thick with openings less than 2"



Windows: Problems and Solutions

Window Style	Problem	Solution
Sliding Glass Windows	Easily pried open or lifted out of the track.	Secure with Charlie Bar or similar device; install wood or metal spacers in upper track to prevent upward movement.
Casement Windows	Play in crank handle. Play in locking handle.	Tighten locking handle to prevent excess play; remove crank handle. Make sure all locking handles fit and operate properly.
Louvered Windows	Louvers easily pried apart or removed from frame.	Remove and replace with solid glass, cover window with polycarbonate 3/16" thick, or epoxy glass panels to frame.
Double Hung Windows	Crescent latch provides NO security.	"Pin" windows or add a barrel bolt lock.
Basement Windows	Easy access by prying open or breaking glass.	Install bars or grill work.

Notes:

END