ARMI Information	4
ARMI Values	
Barriers	6
Bullet Resistant Barrier Systems Overview  Bullet Resistant Barrier Styles  Arched Window System	7
Art Deco System	9 10
Hole & Backer System	12ca
Winged Backer System	14 15
Barrier/Teller Line Order Information Sheet	
Bullet Resistant Panels	17
Doors	
Various Door Styles Overview	
Bullet Resistant Door Styles	22
Door Selector Page – Aluminum	25
Door Selector Page – Wood	27
UL 3 Aluminum Framing System (A)	29
Bullet Resistant Vision Window Frame For Existing Doors	
Door Hardware	32
Simplex Locks	
Simplex Extra Heavy-Duty Lock Examples	35
Changing Key-in-Lever Cylinder	38 39
Reset a Lost or Unknown Combination	41
Reinstall and Retest	44
SCHLAGE Installation Manual	

	Battery Information	47
	How to Enter Codes	48
	How to Enter iButtons	49
	How to Enter Linked Access iButtons	49
	Credential Recording Sheet	.51
	Hager Door Closer	52
	Hager Surface Door Closer	
	Latch Guard	
	Roton Hinge	
	Model 780-053 HD	
	Model 780-210 HD	56
	Commercial Door Reinforcers	57
	Product Description	.58
	RCI Electric Strike	
<b>~</b>		
Count	ertops	61
	Countertop Introduction	61
	Various Countertops	
<b>~1</b> 1	•	
Check	Desks	63
	Check Desks Introduction	63
	Check Desk Examples	
Г-11	•	
rener	Lines	03
	Teller Line Millwork	65
Voice	Transmission	66
	Thru-Glass Two Way Electronic Communicators	66
	British Style Talk Thru	
	Swiss Style Talk Thru	
	Clear Vision Bullet Resistant 10" Talk -Thru	
Transa	action Devices	70
	Drop-In Model Deal Trays	70
	Counter Top Deal Trays	
	- · · · · · · · · · · · · · · · · · · ·	
	Standard Drop in Deal Tray	
	Countertop Deal Tray – With Side Holes	
	Deluxe Rolled- Lip Deal Tray	
	Specialty Cash Trays	
	Standard Size Transaction Drawer	
	Stainless Steel Standard Package Receiver	
	Package Receiver with Vision Panel	
	Clear Package Receiver	79
Windo	ow Modules	80
	Window Styles	80
	Window Frame Selections	
		0 2

Drive-up Windows	83
Drive-Up Window Styles	
Testing	85
Ratings of Bullet-Resistant Materials  WMFL Testing	
Shotguns	
Testing Definitions	
Technical	
Glazing Cleaning Instructions	
Forms	96
Handout Order Form  Door Quote Request  Window Module Quote Request  Glazing Selection Chart  Barrier/Teller Line Order Information Sheet	
Handouts	101
Bullet Resistant Barriers  Bullet Resistant Doors Styles  Deal Trays  Check Desk Examples  Package Receivers  Teller Line Millwork  Voice Transmission  Window Styles  Drive-up Windows	
Warranty Information	110
Laminated Glass Warranty	

# **ARMI Values**

(It's all about YOU!)

ARMI (Armoured Resistance Mechanisms, Inc.) was started with the objective of providing the levels of customer service and business integrity that we all should be able to expect from every company we deal with, but almost never get.

ARMI's focus is to provide the three "P's" for their customers: **Price, Product**, and **Performance**. We refuse to sacrifice the quality and on-time delivery that our customers can take for granted, while still maintaining extremely competitive pricing. With over twenty years of experience in the industry, Steven and Susan Pretty observe "best practices" that would be familiar in a large company environment, while maintaining the flexibility and speed of action that only a smaller company can provide.

ARMI offers competitive pricing. This allows our customers to choose a quality product without having to sacrifice the customer service they are entitled to or the competitive pricing they demand.

ARMI stands behind their product 100%. ARMI has staff on hand to deal with any questions or issues that may arise and need immediate attention. ARMI warranties for 1 year against defects in materials & workmanship, and 5 years against discoloration and de-lamination in glass and plastic products.

ARMI is committed to ongoing relationships with their customers. Along with a quality product, ARMI works diligently right up to and through installation to assure all products are installed properly and all deadlines are met.

ARMI provides excellent customer service and exceeds expectations, which has allowed the company to grow at a solid pace. ARMI attributes that growth to the continued loyalty of their customers. New customers are added and established ones stay.

ARMI believes if they spend 99% of their time thinking about what they can do for you, they create a "WIN WIN" situation for all. Let ARMI impress you!

Sincerely,

Susan and Steven Pretty

# **Contact Information**

#### **Administrative Offices**

PO Box 329

Fowlerville, MI 48836 Phone: 517-223-7618 Fax: 517-223-7678

Web Site: <a href="www.banditproof.com">www.banditproof.com</a>

### President: Susan Pretty

Email: <a href="mailto:susanpretty@sbcglobal.net">susanpretty@sbcglobal.net</a>
Phone: 517-223-7618 Ext. 4

# **Secretary/Sales Manager:**

**Steven Pretty** 

Email: <a href="mailto:steven\_pretty@hotmail.com">steven\_pretty@hotmail.com</a>

Phone: 517-223-7618 Ext. 1

Cell: 810-599-8795

### Designer: Andy Palmer

Phone: 517-223-7618 Ext. 2

# Bullet Resistant Barrier Systems Overview

ARMI can design, fabricate, and install a complete barrier system to fit your individual needs. Common applications include all types of financial institutions, payment centers, government offices, convenience stores, gas stations, pharmacies, cash handling facilities, court houses, and police stations.

Transparent barrier systems provide a major deterrence to would-be robbers as well as peace of mind that you have provided the safest environment for your employees and customers.

Whether the facility is under construction or needs to be retro-fit, your specific requirements can be met.

Several types of systems are available and a description of each is on the following pages.

- 1) Arched Window System
- 2) Art Deco System
- 3) Baffle System
- 4) Hole & Backer System
- 5) Horizontal Sliding System
- 6) Steel and Glass System
- 7) Winged Backer (Straight Line) System

Regardless of your special needs, a system can be fabricated that will accommodate any requirements you might have. ARMI's goal is your complete satisfaction.

# Bullet Resistant Barrier Styles















# Arched Window System





### Design:

Primarily a 'straight line' system in which larger panels butt up to each other in sealing off the protected area, with structural support provided by 'buttress' sections placed on a 'T' at the joints. Voice transmission is provided through overlapping panels, but the buttresses are too far away to redirect sound waves and the overlap area is reduced because the gap must be less to prevent reaching around. The 'window' section between the teller and customer has a semicircular arch at the top, giving the system it's name.

### Advantages:

With the arched backers, curved cutouts, and large main panels in a straight line, this system has a clean modern look and is largely free of fasteners, panel edges, and joints.

### **Disadvantages:**

Not quite as sturdy as the baffle system, but can still be used as a free standing system. Not nearly as forgiving when installing as a retrofit and may result in some unavoidably large or uneven gaps at joints. ALSO: The reduced overlap area and lack of a sound bouncing surface results in only fair voice transmission characteristics. Risk factors that could result in an unhappy customer include stone or tile floor and wall surfaces on the customer side that result in higher background noise levels, an elderly clientele that cannot hear as well, a larger expected amount of product sales from the tellers that require more talking (preferably in a natural tone of voice), and so forth.

# Art Deco System

Patented Design



### <u>Design:</u>

Composed of both overlapping panels and panels meeting at angled joints. Both structural strength and voice bounce are provided by the angled sections to either side of the 'window' sections directly between the teller and customer.

# <u>Advantages:</u>

Excellent voice transmission characteristics, very close to as good as if no barrier were present. Structurally very strong. Can be installed as a free standing system. A new and different look not seen elsewhere. Allows cameras to get excellent pictures of the customers at the preferred angle, shooting directly through the angled sections to either side of the teller to minimize glare and distortion and still getting a profile view of the customer.

### Disadvantages:

Lots of different panels also means a lot of fasteners, joints, and edges that can be perceived as a cluttered look. Not as forgiving when installing as a retrofit, may result in some unavoidably larger than desired or uneven gaps at the joints.

# Baffle System







### Design:

Composed of both overlapping and opposing panels. Both structural strength and voice bounce provided by the "baffle" pieces placed on a "T" shape to either side of the "window" sections directly between the teller and customer.

# Advantages:

Excellent voice transmission characteristics. Close to as good as if no barrier were present. Structurally strong. Can be installed as a free standing system. Very forgiving when installed on existing millwork that may not be perfectly regular, plumb, and level.

# Disadvantages:

As the first true functional design, it is in very wide use. It may not be perceived as a new, different, architecturally appealing design. Lots of different panels also means lots of fasteners and edges that call attention to the barrier as a barrier

# Hole & Backer System



### Design:

A straight line system, with structural support provided by the 'buttress' section placed on a 'T' at the joints between the large main panels that butt up to each other. Voice transmission is provided by the narrow overlap that is at the perimeter of the hole covered by the backer, which is typically circular or rectangular

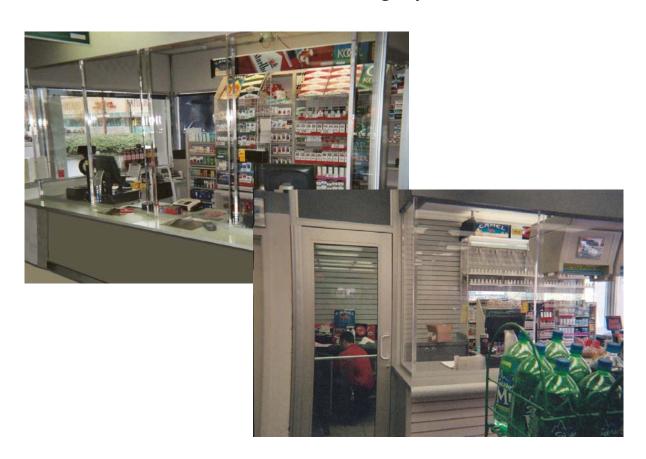
# Advantages:

A very clean look with very few visible fasteners, panel edges, and joints. Uses less material than other designs and therefore is typically slightly less expensive. Slightly better voice transmission than the Winged Backer System since the overlap spans more lineal inches and will be centered at about head height instead of at the slightly lower riser height.

# Disadvantages:

Not quite as sturdy as the Baffle System. Can be used free standing, but is best installed with some kind of reinforcing top attachment. Not as forgiving when installed as a retrofit, may result in larger or uneven gaps at the joints. POOR sound transmission characteristics, albeit slightly better than the Winged Backer System. The hole and backer edges, along with the fasteners at that location, make it distracting to look through since it interrupts the view between teller and customer.

# Horizontal Sliding System



# Design:

Composed of only overlapping panels, with support provided to the outside of the customer transaction area and sliding panels in the transaction area that can be easily rolled out of the way during low risk hours of operation.

# Advantages:

More customer friendly when in the open position. A fairly clean streamlined look with minimal fasteners, supports, and edges in the transaction area.

# Disadvantages:

Moving parts and the structural support required to hold the weight will increase cost slightly. In most cases, the ability to slide horizontally requires a non-ballistic seam at the countertop. Without surfaces to bounce sound off and narrower overlap gaps, sound transmission is Average.

# Steel & Glass System



### Design:

This design uses channels in mullion panels or posts to either side of glass window panels to accomplish voice transmission. Structural strength is provided by ceiling attachment and sturdy counter leg attachments. Typically, this design is only seen in new construction applications where architectural flexibility and appeal are secondary to bullet resistance, cost, and durability.

### Advantages:

Allows the use of glass while maintaining fair voice transmission characteristics. The glass is easier to maintain in near new condition and more resistant to abuse by the customers. Steel has higher bullet resistance value relative to its cost than other materials, and a painted finish is significantly less expensive than plastic laminates, natural woods, and other such finishes.

# **Disadvantages:**

There is not a great deal of design flexibility when using glass and steel. The design does not adapt well to many retrofit situations. The finishes are less attractive and the architectural detail allowed is limited.

# Winged Backer System



### Design:

Also commonly known as the 'butt' system, 'horned backer' system or 'straight line' system, although other designs are technically straight line systems as well. Structural support is provided by the 'buttress' sections placed on a 'T' at the joints between the large main panels that butt up to each other. Voice transmission is provided by a single narrow overlap between the bottom of the main panels where they span the opening between the risers (wickets, hoods) to either side of the teller. A small 'horned backer' is offset to the teller side of the main panel, over the center of the cash tray below.

# Advantages:

A very clean look with very few visible fasteners, panel edges, and joints. Uses less material than other designs and therefore is typically slightly less expensive. The favorite barrier for Mimes and Lip Readers.

# Disadvantages:

Not quite as sturdy as the baffle system. Can be used free standing, but is best installed with some kind of reinforcing top attachment. Not as forgiving when installing as a retrofit, may result in larger or uneven gaps at the joints. POOR sound transmission characteristics, frequently will require modifications to assist voice transmission after installation despite warnings to the customer about the lack of voice transmission.

# **Glazing Selection Chart**

Acrylic	UL1	UL2	UL3	AF	AR	SR	Light%	Weight
1 1/4" Acrylic	х			Х			90%	8 lbs
3/4" PCA	х			Х	х		90%	5 lbs
1 1/4" AR Acrylic	х			Х	х		90%	8 lbs
1 3/8" AR Acrylic		х		Х	Х		90%	8.5 lbs
1 1/4" PCA			Х	Х	х		82%	8 lbs
1 1/4" Polycarbonate			Х	Х	Х		77%	8 lbs
Glass								
3/4" GCP	х					Х	84%	8 lbs
1 1/16" GCP		х				Х	76%	11 lbs
1 1/4" GCP			Х			Х	75%	14 lbs
1 1/16" Glass	х					х	73%	15 lbs
1 5/8" Glass			Х			х	68%	20 lbs

## **Chart Definitions:**

AF: Architectural Flexibility

(Can be cut, drilled, notched, or trimmed in field with ease.)

AR: Abrasion Resistant Coated

SR: Scratch Resistant (glass exterior faces)

GCP: Glass Clad Polycarbonate PCA: Polycarbonate Clad Acrylic

Light %: Percentage of light that gets through UL1, 2, 3: Level of tested Bullet Resistance

Weight: Weight per sq. ft.

# Barrier/Teller Line Order Information Sheet

## FAX TO: ARMI # 517-2523-7678 WWW.banditproof.com

### REQUIRED INFORMATION CONTACT/ DEALER INFO A. Floor to top of counter Contact name: Height of riser Address: C. Riser to Soffit/Ceiling Phone: D. Counter to soffit/Ceiling at ADA —Opening between risers Fax: E-Mail: Left return wall height G. Left return wall length Project Name: Η. – Right return wall height Project Location: -Right return wall length RETURN WALL OR-ALUMINUM CHANNEL Clear or dark brown CEILING EXISTING WALL anodized finish JUMP SHIELD (slotted shown) PACKAGE EXCHANGE (Shown on riser) В TELLER LINE DOOR PACKAGE EXCHANGE (SHOWN ON COUNTER) NATURAL VOICE TRANSMISSION AT BAFFLE SECURE SIDE G. LB.F. FIBER GLASS PANELS Height of barrier above risers desired:\_ Base material required: UL1 UNCOATED/UL1 COATED/UL2 COATED Jump shield desired: SLOTTED / UN-SLOTTED / ROD & RAIL STYLE Package exchanges needed \_\_\_\_\_\_ Number of doors desired: \_\_\_\_\_\_ Alternate upgrades desired \_\_\_\_\_

\*Please call us if you need additional forms

# **Bullet Resistant Panels**

Protective Panels for Lining Doors and Walls Surrounding Security Enclosures Protection to Level 3 In Stock (.44 Magnum S.P.S.A.)

Bullet Resistant Fiberglas Panels are flat sheets of a polyester impregnated woven roving (fiberglass strands) to create a material with superior durability. The densely packed structure of the panel exhibits an excellent capability to absorb multiple impacts from high velocity projectiles, limiting ricochet or shattering. They meet standards of the U.L. 752 Ballistic Performance Requirements Test, as well as all bullet resistant test requirements set forth by the National Institute of Justice.

Typical applications include lining of bank teller counters, ticket booths, judge's benches, doors and walls of secure enclosures, and other structures where concealed panels will add to the safety of service personnel.

Panels are high pressure molded into standard 4' x 8' size sheets. Cutting and drilling can be done using commonly available tools.

	PROTECTION LEVEL	PANEL THICKNESS	PANEL SIZE	PANEL WEIGHT	IMPACT VELOCITIES*
BRF 100	1 M.P.S.A.	1/4"	96" x 48"	83 lbs.	1250 Ft./Sec.
BRF 200	2 H.P.S.A.	5/16"	96" x 48"	115 lbs.	1395 Ft./Sec.
BRF 300	3 S.P.S.A.	7/16"	96" x 48"	156 lbs.	1470 Ft./Sec.

#### Specifications:

Material: Fiberglas – Reinforced Structural Polyester Laminate with Fiberglas Scrim

Finish: Off white. Panels may be painted, covered with vinyl, or clad with plastic laminate if desired.

Cutting: Can be accomplished with a Circular Saw, Table Saw, Panel Saw or Saber Saw. We

recommend the use of a "Grit Edge" blade for ease of cutting.

Drilling: High Speed Drill Bits at a slow speed.

# **Bullet Resistant Fiberglass Panels**

Armor Panels for lining Walls, Doors, Transaction Counters, Judge's Benches, and other structures.

Bullet resistant Fiberglass panels consist of polyester impregnated woven roving (fiberglass strands) in sheet form. This is a stiff, strong material with high resistance to impact and penetration, capable of absorbing multiple impacts from high velocity projectiles including bullets. Bullet resistant ratings vary with thickness. Panels come in a variety of sizes. Fabrication can be done with commonly available tools, although ordering panels pre-fabricated may be desirable depending upon the application.



UL Lvl	Bullet	Thickness	Weight	In Stock Sizes	Available Sizes
1	9mm Handgun*	1/4"	2.6	36x96, 40x96, 48x96,	36x120, 48x120
				60x120	
2	357mag	5/16"	3.6	36x96, 40x96, 48x96,	36x120, 48x120
	Handgun*			60x120	
3	44mag	7/16"	4.9	36x96, 40x96, 48x96,	
	Handgun*			36x120, 48x120, 60x120	
4	30cal Rifle*	1 3/8"	13.9		36x96, 40x96, 48x96,
					36x120, 48x120, 60x120
5	7.62mm Rifle*	1 7/16"	15.0		36x96, 40x96, 48x96,
					36x120, 48x120, 60x120
6	9mm sm Gun*	3/8"	3.9		36x96, 40x96, 48x96,
					36x120, 48x120, 60x120
7	5.56mm Rifle*	1 1/8"	12.0		36x96, 40x96, 48x96,
					36x120, 48x120, 60x120
8	7.62mm Rifle*	1 7/16"	15.0		36x96, 40x96, 48x96,
					36x120, 48x120, 60x120

In-stock sizes ship next business day. Fabricated sizes ship in 2 business days.

Available Sizes ship in less than 3 weeks. Can expedite if necessary.

#### **QUICK SHIP FABRICATION SERVICE:**

Although fiberglass panels can be cut, drilled, and notched in the field as needed, the process does create a large amount of fiberglass dust which causes itching and is quite unpleasant. ARMI will fabricate your panels as needed for a very nominal fee and ship within 2 business days from receipt of your cut lists. Frequently the total cost of the project can end up being less than if you fabricated the panels yourself, given that you don't pay for the cost of the cutoff square footage when having ARMI do the fabrication.

<sup>\*</sup> See the "Testing" section for a more detailed description of the UL 752 testing standard for each level.

# Suggested Fabrication Methods for Bullet Resistant Fiberglass Panels

#### Health and Safety

Per the MSDS sheets (available on request), there is no known Carcinogenicity, Reproductive Toxicity, or Toxicogenicity. However since fiberglass dust produces a serious itching in skin, we would not rule out future known health problems associated with inhalation, prolonged exposure, or high concentration exposure. Use safety equipment and good judgement. Bullet resistant fiberglass panels fall into the category of Fiber Reinforced Plastic (FRP) products, the user is encouraged to seek additional sources of information.

#### **Equipment:**

- 1) Leather gloves, to provide protection from cuts, scratches, and small punctures while handling the material. In addition, they will help keep the fiberglass dust off the skin on the hands.
- 2) Dust and Particle Respirators, to provide respiratory protection against the fiberglass dust associated with cutting and drilling fiberglass materials.
- 3) Protective Clothing, to be worn over work clothes. This is needed to provide protection for the skin from the fiberglass dust that can settle in the clothing or on the skin when cutting, sanding, or drilling. Disposable suits are preferred, since fiberglass dust has a way of transferring itself from one surface to another, following you home, and causing skin irritation even many months later when you come in contact with surfaces or clothing where it was deposited.
- 4) Protective eyewear when cutting, drilling, or sanding. Also avoid rubbing the eyes with anything that has been in contact with or exposed to fiberglass dust. Remember that the fiberglass panels, even immediately after being cleaned, count as fiberglass dust since tiny particles cling to the surface only to be dislodged later. The above items should be worn if workers will be cutting, sanding, or drilling fiberglass materials. Even when just handling the sheets, at a minimum gloves should be worn and care should be exercised to avoid having the sheets come in contact with your clothing. Just reading this has been known to cause itching.

#### **Storage Precautions**

We recommend that the fiberglass panels be stored and moved while flat, covered, and strapped to a pallet to avoid cracking, scraping, chipping, or abrading the panels.

#### Cutting:

A circular saw with a diamond abrasive blade works best, cut slowly and do not overheat or put side pressure on the blade. If dry cutting, remove the blade from the cut every few seconds to allow it to cool. Cutting with a saw designed to work with a water cooling feed and proper electric shock protection devices will provide a cut with much less airborne fiberglass dust. Alternate tooling would be a saber saw and either a grit-edge blade designed for composites or a bimetal blade with small teeth at slow speed.

#### **Drilling:**

Some recommend carbide, cobalt, or Titanium coated bits. We feel that a cheap drill bit is fine, because regardless of the drill bit used you can plan on either sharpening or throwing it out immediately after it is used on fiberglass. It will not cut warm butter after the first use on fiberglass but can be used to drill a few more holes in fiberglass. The same would apply to a saber saw blade with teeth. Self-tapping drywall screws work well when attaching drywall to the fiberglass panels or when attaching the fiberglass panels to steel studs.

#### Sanding:

If you will be laminating other items to the fiberglass panels such as plastic laminate or drywall, it is highly recommended that you first rough up the surface with sand paper. A heavy duty belt sander with 120-grit paper and medium pressure works best. It can take a long time to get a good gluing surface if using a weak sander.

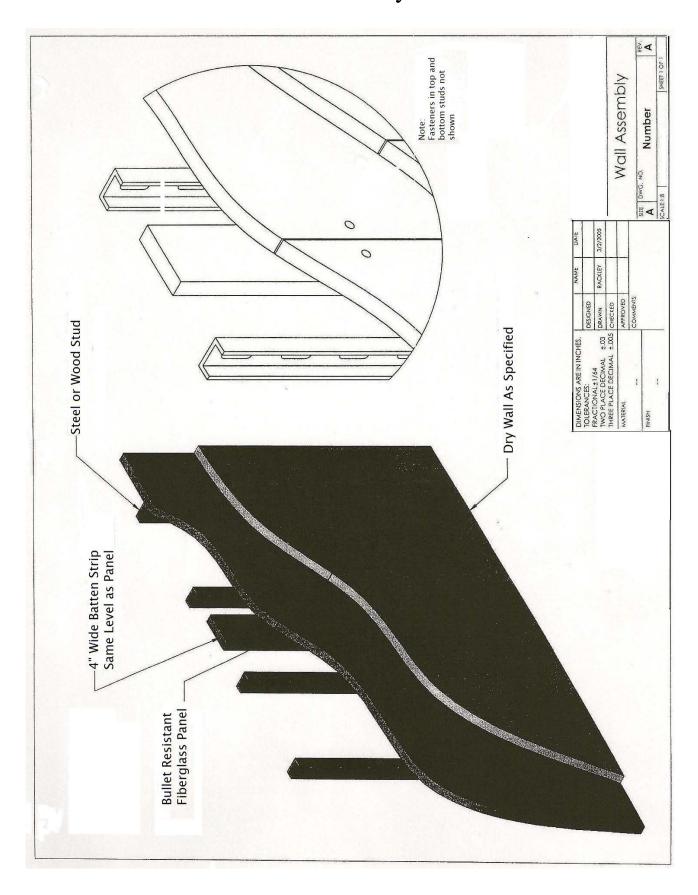
#### **Painting:**

Fiberglass panels can be painted directly if the surface is lightly sanded and a primer base-coat is applied. Either oil or water base may be applied. The surface must be wiped free of all dust, dirt, greases, etc. Since the surface is irregular, a better finish will be achieved with two layers of phenolic backer (vertical grade plastic laminate without the printed pattern on it) or drywall.

#### **Installation:**

See the diagram on the next page regarding typical installation applications. Note that the fiberglass panels are HEAVY, and need to be securely fastened in place to something structural, that is capable of holding the weight in place.

# Wall Assembly



# Various Door Styles Overview

Bullet Resistant doors are an important component in many systems, both from a functional and aesthetic stand point.

Armoured Resistance Mechanisms can design, fabricate, and install doors in a wide variety of styles, sizes, and bullet resistant levels to meet your individual needs.

Several types of doors and frames are available, and a description of each is found on the following pages.

# **Bullet Resistant Door Styles**

Level 1, 2, & 3 Available

Bullet Resistant Doors are for interior or exterior use and are manufactured to meet UL 752 Level 1, 2, or 3 protections. Each unit is customized and fabricated to meet your specific requirements. Available without glazing or with your choice of bullet resistant glazing.

Doors are manufactured from:

- a. Acrylic
- b. Aluminum
- c. Steel
- d. Wood

Vision window frames are fabricated in sizes to fit your specified opening.

Note: Doors must be specified with Left or Right hand hinge, determined from the key side.



Solid Door



Half Vision Aluminum Door



12" x 18" View Window



Baffle Handicapped Transaction Window



Full Vision Aluminum Door



Full Vision Acrylic Door



Peep Hole Door



Glass Handicapped Transaction Window



Arched Handicapped Transaction Window

# Door Selector Page - Acrylic

Bullet resistant all-acrylic doors are manufactured acrylic sheets, with or without an abrasion resistant coating. Half vision doors are made by adhering oversized kick plates in plastic laminate or stainless steel to the lower half of the door. Existing frames can be used, or a selection of ballistic anodized aluminum, steel (welded), or steel (knock-down) are available.



Half Vision (HV) Laminate and Acrylic

Full Vision (FV)
Door with Frame and
Kick Plate

### Specification:

Material: Full acrylic, with or without an abrasion resistant coating.

Glazing: UL1, or UL2 acrylics, with or without an abrasion resistant coating (all styles)

Finish: All acrylic doors can have kick plates, push and pull plates, and door closer dress plates in

either stainless steel or plastic laminate in a variety of colors.

# Door Selector Page – Aluminum

Bullet resistant aluminum doors are manufactured from medium stile anodized aluminum frames lined with bullet resistant fiberglass and reinforced to resist racking. Each door is customized to meet your specific requirements, with a variety of glazing arrangements available. Existing frames can be used, or a selection of ballistic anodized aluminum, steel (welded), or steel (knock-down) are available.







Peep Hole (PH)



Half Vision (HV)

Transaction Station Glass (TS-G)

Full Vision (FV

#### Specification:

Material: Anodized aluminum, medium stile, lined with bullet resistant fiberglass.

Glazing: UL1 Acrylic, with an abrasion resistant coating or UL3 Polycarbonate clad acrylic (in tested framing only).

UL1, 2 (HP B equivalent) or 3 glass clad polycarbonate (UL3 in tested framing only)

Finish: All aluminum doors can be clear or dark bronze anodized (standard).

Powder coated or Kynar painted finishes are available with lengthy lead times and

upcharges.

# Door Selector Page – Steel

Bullet resistant steel doors are manufactured from 16 gauge steel, lined with an additional bullet resistant exterior strike plate. Doors are available with a variety of glazing arrangements, and each door is customized to meet your specific requirements. Existing frames can be used, or a selection of ballistic anodized aluminum, steel (welded), or steel (knock-down) are available. TS-G style doors have a rear retaining flange, available in painted steel or stainless steel. View Windows have clamp-on style retaining flanges, available in painted steel or stainless steel.

Transaction Station Glass (TS-G) Standard Size 14 x 28 View Window (VW) Standard Sizes 10x10, 12x18, 20x30

### Specification:

Material: 16 gauge steel with foam core and steel ballistic plate.

Glazing: UL1, 2, or 3 acrylics with or without an abrasion resistant coating (all styles), or

UL1, 2, or 3 glass clad polycarbonate (TS-G or VW styles only).

Finish: All steel doors are prime painted, with a finish paint color available.

# Door Selector Page – Wood

Bullet resistant wood doors are manufactured from solid wood cores lined with UL1, 2, or 3 bullet resistant fiberglass. Each door is customized to meet your specific requirements. Wood doors are available with a variety of glazing arrangements. Existing frames can be used, or a selection of ballistic anodized aluminum, steel (welded), or steel (knock-down) are available. TS-A, TS-B, and TS-G style doors have a rear retaining flange, available in painted steel or stainless steel. View windows have clamp-on style retaining flanges, available in painted steel or stainless steel.







Peep Hole (PH)

View Window (VW) Standard Sizes 10x10, 12x18, 20x30

Transaction Station Baffle Style (TS-B) Std. Size 20"x37" at Handicap Height Transaction Station Arched Style (TS-A) Std. Size 20"x38" at Handicap Height Transaction Station Glass (TS-G) Std. Size 14"x28" at Handicap Height

### Specification:

Material: High density particle board lined with bullet resistant fiberglass (UL1, 2, or 3) Glazing: UL1, 2, or 3 acrylics with or without an abrasion resistant coating (all styles),

or UL1, 2, or 3 glass clad polycarbonate (TS-G or VW styles only).

Finish: All wood doors are available with a choice of plastic laminate, stained veneer,

or painted phenolic finished.

# Door Selector Page – Frame

Bullet resistant doors can be installed in the existing (usually non-ballistic) frame or a selection of ballistic anodized aluminum, steel (welded), or steel (knock-down) are available. Ballistic frames are lined to the bullet resistant level selected or greater.



Anodized Aluminum

Steel (Knock-Down)

Tested UL3 aluminum – see framing page Steel welded available

### Specifications:

Material: Aluminum or 16 gauge steel.

Armor: UL 2 or 3

Finish: Aluminum frames are dark bronze or clear anodized standard, and can be sent out to be

powder coated or Kynar painted a variety of colors (substantial lead times and charges

apply). Steel doors are prime painted standard, can be painted as desired.

# UL 3 Aluminum Framing System (A)

Proprietary Design. Contact ARMI for specifications and detail drawings.

# UL 3 Aluminum Framing System (B)

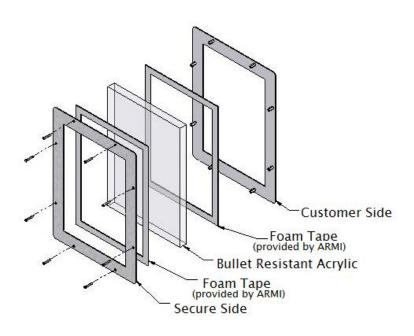
Proprietary Design. Contact ARMI for specifications and detail drawings.

# UL 3 Aluminum Framing System (C)

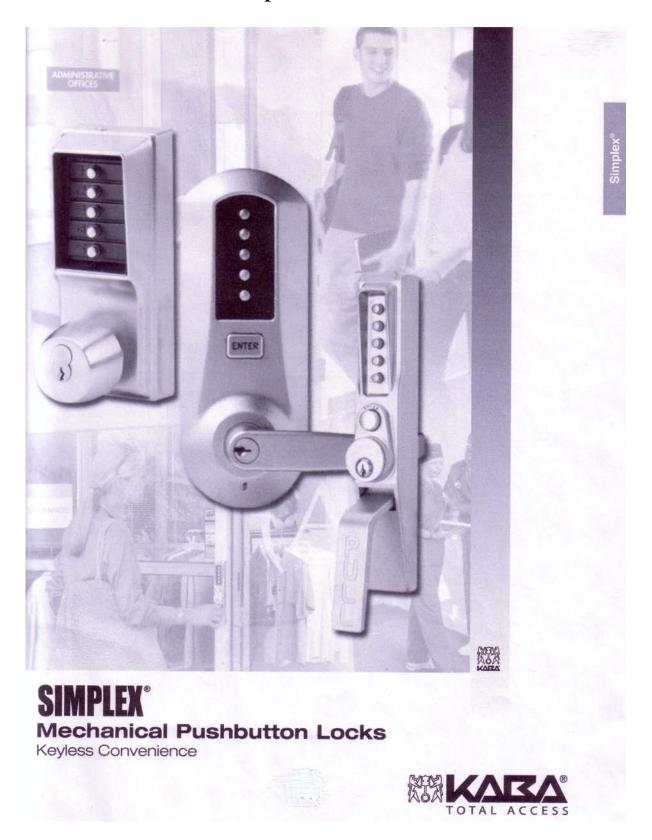
Proprietary Design. Contact ARMI for specifications and detail drawings.

# Bullet Resistant Vision Window Frame For Existing Doors

Each unit is customized and fabricated to fit your specified opening. Available without glazing or with your choice of bullet resistant glazing. Brushed stainless steel or prime painted carbon steel finish. The Level 3 bullet resistant Vision Window Frame allows the addition of a Vision Window to almost any door. Commonly used in security applications, Vision Windows provide a means of viewing people before allowing access into a secured area. Vision Windows are for interior or exterior use, and are available with your choice of bullet resistant glazing. Manufactured from 11 gauge stainless steel with a brushed finish or prime painted 10 gauge carbon steel. Vision Window Frames are fabricated in sizes to fit your specified opening. Standard sizes are 10" x 10", 12" x 18", or 20" x 30". Specify glazing level and door thickness.



# Simplex Locks



# Simplex Extra Heavy-Duty Lock Description

Simplex

# Simplex® 5000 Series

### Extra Heavy-Duty Lock



Simplex® 5000 Series

#### Description

The latest addition to the line of mechanical pushbutton locks, the Simplex® 5000 offers unparalleled strength, convenience, and flexibility. Exterior access is by combination. Egress is by interior lever and is free at all times.

#### Application

Ideal for high-traffic security-sensitive areas where access control is required;

- Commercial
- Industrial
- Educational
- Governmental
- Lodging
- Multi-Unit Residential Settings
- Military
- Institutions

Perfect for high employee-turnover locations:

- · Data processing centers
- Employee entrances
- R&D labs
- Motels
- Dormitories
- Volunteer Fire Departments
- Hospitals
- Airports
- Telephone Companies
- Fast Food Chains
- Banks

#### Features

- Extra heavy-duty: Internal drive parts of cast stainless steel.
- Direct-drive design: Clutch-free, decreasing possibility of internal breakage and the subsequent linkage repairs.
- Non-handed: Fits left and right hand doors changes in seconds.
- · Easy to Install: Fewer parts, better fit, simpler instructions.
- · Three-year warranty.

#### **Optional Features**

Combination change from secure (interior) side of door with special tool for higher security.
 Meets DOD requirements and precludes unauthorized access to combination changes.



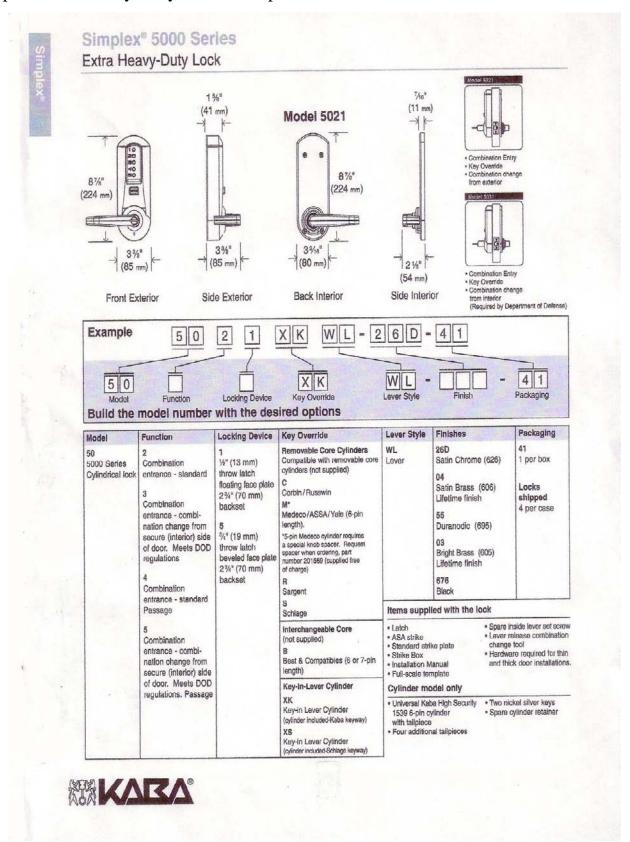
# Simplex® 5000 Series Extra Heavy-Duty Lock

Mec	2000	ani	Coots	*P'00.0
252 2 C Pro	162115	WELL I	12-68-1-6	41.00

Mechanical Features						
Construction:	Extra heavy-duty cylindrica cylindrical drive component		g and solid cast zinc levers, stainless steel			
Installation:	ASA 161 door preparation with 4 additional through bore holes; retrofits cylindrical & tubular locksets with a 2%" (70 mm) backset					
Door handing:	Non-handed, field reversible	e (pre-assembled for left	t-hand door installations)			
Numeric pushbuttons:	Vandal resistant, 5 button,	plus Enter button, anodi	zed aluminum, mechanical			
Weight:	8.0 lbs. (3.65 kg)		and the state of t			
Strike:	ASA and standard strike pl	ates are included				
Backset:	2¾" (70 mm)					
Latch:	1/2" (13 mm) throw latch, flo 3/4" (19 mm) throw latch, be					
Key override:			Taba High security 1539 6-pin cylinder included. I for compatibility with the following cylinders:			
100	Abloy 5277	Abloy 5477	Arrow C 100			
	ASSA 65611	ASSA 65691	Australian			
	Corbin/Russwin 2000-03	Kaba Ilco 1599	Kaba 1539			
	Marks	Medeco 20W200H1	Sargent 10 Line			
	Schlage 23-001	Schlage Primus 20-76	0			
	Models prepared for small format I Models prepared for large format r	the second secon				
Door thickness:	1%" (35 mm) to 21/4" (57 m Pre-assembled to accomm	nm)				
Finish:	Satin Chrome 26D (626), lifetime Satin Brass 04 (606), Duranodic 55 (695), lifetime Bright Brass 03 (605), Black (676)					
Minimum stile requirement:	5" (127 mm)					
Lock Operation						
Combination code:	One code per lock made of any combination of one to five numbers (pressed individually or simultaneously)					
Number combinations:	Thousands of possible con	nbinations				
Code changing:	Accomplish with the lever release combination change tool from the lock exterior (model 5021) or from the lock interior (model 5031)					
Emergency access:	Mechanical key override					
Certification and Test	ing					
Accessibility standard:	Americans with Disabilities Act (ADA)					
Fire rating:	Three-hour UL/ULC Fire ra					
Environmental operating conditions:	Highly weather resistant					
Durability:	ANSI/BHMA A156.2, Grade 1 Certified					
Warranty:	3 years					



## Simplex Extra Heavy-Duty Lock Examples



### **Changing Combinations**

**Note:** The factory set combination of your new 5000 series: Press "2" and "4" at the same time, then release. Press "3", then release. Press the "ENTER" button, then release. For your security, the factory set combination MUST BE changed when lock is installed.

The combination can be easily changed using one to five of the lock's buttons in any order in the combination. Each button can only be used once. **Note: Three or more non-sequential buttons combinations are recommended for higher security.** Also, two or more buttons may be pushed together (at the same time) as part of your new combination.

### **CAUTION:** The door MUST BE open during this entire procedure.

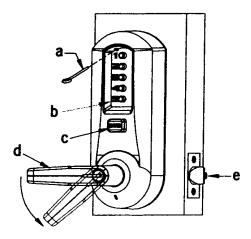
**Note:** The combination change can be done without removing lock from door. Ensure that the door is open during this procedure.

Rotate the outside lever (d) once to stop position and release to reset the lock; the latch should not retract.

Press the **existing combination** (b) followed by the **ENTER** button (c) and release; do **not** turn the lever.

Insert the lever release tool (a) through hole in number pad and gently lift up loop end of the tool to depress the interior code change button until you hear a click; remove tool and do not press any buttons.

\*\*This Step Is Very Important\*\*
Rotate lever (d) once, and only once
to clear the old combination; the latch (e)
will retract; release the lever.



Press in your **new combination** (b) followed by the **ENTER** button (c) and release.

Rotate the lever (d) to verify that the latch retracts confirming the validity of the new combination (if you try the old combination now, it should not work).

IMPORTANT: The "ENTER" buttonmust be depressed and released after entering the combination. The latch will not retract until the "ENTER" button is depressed and released.

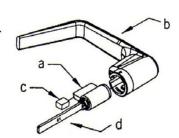
## **Combination Setting Record**

Combination	& ENTER	Date
	& ENTER	

The Simplex 5000 outside lever comes preassembled with Kaba Ilco's key-in-lever cylinder (Kaba Ilco 15395). To use a different key-in-lever cylinder follow remaining steps in this section.

Remove KIL (key-in-lever) cylinder (a) from the outside lever (b) by removing the cylinder retainer (c) using a small flat blade screw driver or small needle nose pliers.

Determine the proper tailpiece (d) from the chart below for your KIL cylinder.

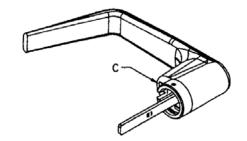


You must use a Kaba Ilco tailpiece. The tailpiece is preassembled with the Kaba Ilco 15395.

Assemble the required tailpiece (d) (supplied) with your KIL cylinder.

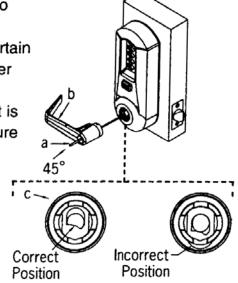
TAILPIECE	KIL CYLINDER
	Abloy 5277, Abloy 5477, Assa 65691, Kaba Ilco 15395
	Assa 65611, Australian, Corbin-Russwin 2000-03, Kaba Ilco 1599, Schlage 23-001, Schlage Primus 20-760
	Medeco 20W200H1
	Arrow C100, Sargent 10 LINE
	MARKS

Insert the KIL cylinder into the outside lever and secure it with the cylinder retainer (c) until the KIL cylinder is snug and unable to move freely.



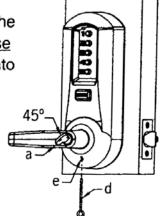
## Installing/Removing Outside Lever

Insert one of the (supplied) keys (a) into the outside lever (b) and rotate key counterclockwise 45 degrees. Make certain the lever catch is up as shown (c). Lever catch should be flush around the entire diameter. Insert the outside lever until it is flush to the outside unit assembly. Secure the outside lever by rotating the key clockwise 45 degrees to horizontal position. Remove key.



Note: To remove the outside lever from the outside unit assembly follow step below.

Insert one of the (supplied) keys (a) into the outside lever and rotate it counterclockwise 45 degrees. Insert lever release tool (d) into the small hole (e) under lever as shown. Gently push lever catch up until it clicks. Remove tool, then remove outside lever.



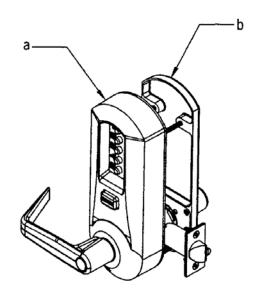
## HOW TO RESET A LOST OR UNKNOWN COMBINATION

There is no way to determine a forgotten, unknown or lost combination code from the front or outside of the lock. However, it can be reset and recovered or reset and changed to a new code by following the steps in this section.

**Warning:** Since this procedure is of a technical nature, only technically traine personnel in the lock and hardware field should undertake this operation. For further assistance, call the Kaba Ilco technical support line at 800-849-TECH (8324) or 336-725-1331 between 8AM and 5PM Eastern Standard Time, Monday through Friday (except holidays).

#### **Removing Lock From Door**

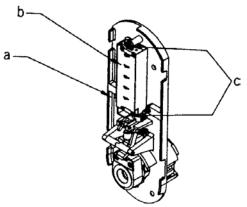
Remove both the outside lock housing (a) and the inside lock housing (b).



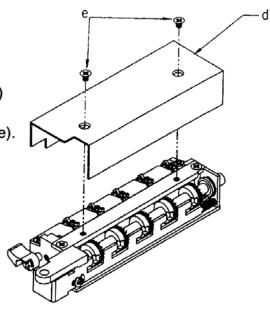
## Removing Combination Chamber Assembly

Carefully remove the base plate of outside lock assembly (a) by removing the 2 Phillips screws (one screw may be found under the serial number). Lay base plate down as shown.

Remove the combination chamber assembly (b) from the base plate by removing the 2 Phillips screws (c).



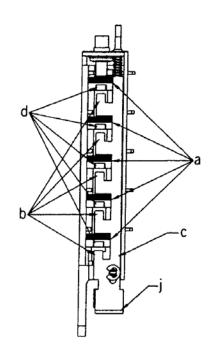
Remove the 3-sided dust cover (d) to fully expose the chamber by removing 2 small Phillips screws (e).

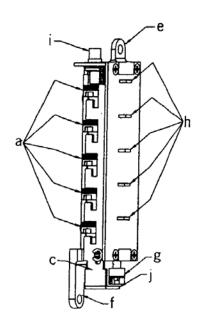


#### Reset and Recover Current Code

## Resetting and Recovery of Current Code

To reset the code gears (a), each one of the 5 "L" shaped legs (b) of the unlocking slide (c) must engage snugly with the corresponding code gear pocket (d) next to it.





Position the chamber in one hand, as shown. Hold chamber by the top screw tab (e) and bottom screw tab (f).

Rotate the reset cam (g) back toward you with your finger, towards the key stems (h) as far as it will go and then release.

Now look at the code gears (a) and the unlocking slide (c). Note that some or all 5 of the code gear pockets (d) are rotated **away** from the "L" shaped legs (b) as if out of alignment. Typically each code gear pocket will be at a slightly different distance compared to the other.

Note: Sometimes two different gear pockets are away from alignment by exactly the same distance – this indicates that the current code uses two different number buttons depressed at the same time as part of the code combination.

Using a small flat blade screw driver or your thumbnail, depress the key stem which corresponds to the gear pocket which has been rotated the **farthest away** (out of alignment) from the "L" shaped leg. When depressed, the key stem(s) should stay down and the corresponding gear pocket(s) should move closer to its corresponding "L" leg, closer to alignment. Record the key stem number. This is the **first** number of your combination. **Note:** If two gear pockets are at the **same distance**, depress **both** of these corresponding key stems **at the same time.** 

Continue by pressing the key stem that corresponds to the gear pocket that was the **next furthest away** (do not include gear pockets that have already been rotated). Record each key stem number that is depressed. Continue this procedure until all five gear pockets are aligned with their corresponding "L" shaped legs on the unlocking slide. The combination is the recorded numbers, in the order recorded.

**Note:** If you depress the wrong key stem by mistake, rotate the reset cam back toward you, (toward the key stems and release). This resets the code gears and you must repeat the above procedure.

#### Clearing the Current Code and Setting a New Code

Perform the above procedure first.

Depress the code change button (i) located on top of the combination chamber once and release.

Rotate the reset cam back toward you with your finger (toward the key stems) as far as it will go and release.

Enter your new combination code by depressing the key stem corresponding to the first number (1 through 5) of your code. For example, if the new code is 3-2-5, then you would depress 3 first, then 2 and finally 5. Record this new combination code for future reference.

Push the shoulder (j) at the bottom of the Unlocking slide up toward the code change button and release. Rotate the reset cam (g) back toward you and release.

If each of the 5 "L" shaped legs of the Unlocking slide engages snugly inside its corresponding Code gear pocket, then it confirms that the new code has been successfully changed.

Note: If all 5 "L" shaped legs do not align fully with their corresponding code gear pockets, repeat the procedures.

#### Reinstall and Retest

#### Reinstalling chamber assembly into lock and retesting

Reinstall the 3-sided dust cover over the combination chamber with the 2 small Phillips screws removed.

Reinstall the combination chamber assembly to the base plate with the 2 Phillips screws removed.

Reinstall the base plate on to the outside lock assembly with the 2 Phillips screws removed.

#### Reinstall lock on door

Retest new code with lock on door by entering the new numbers followed by the "ENTER" button and rotating the outside lever. The lock should open and the latch should retract.

## Trouble Shooting

Symptom	Possible Cause	Remedy
The outside lever always retracts the latch after depressing and releasing the "ENTER" button only (without combination).	Lock is in "ZERO" combination.	Follow the procedure for Changing Combinations except omit steps 1 and 2 (do not enter the existing combination).
The outside lever will not go completely inside the outside lock assembly.	Lever catch is misaligned	Insert lever release tool through small hole on the outside unit assembly (under the lever). Using the tool, gently push lever catch up until it clicks. Refer to Installing and Removing the Outside Lever.
Correct combination is depressed but the latch does not retract.	Failed to depress the "ENTER" button.	Always depress and release the "ENTER" button after depressing the correct combination.
Cannot remove key from outside lever – key is stuck.	Key was rotated 180 degrees in wrong direction.	Rotate key counterclockwise. Insert lever release tool through small hole on the outside unit assembly (under the lever). Using the tool, gently push lever catch up until it clicks. Remove outside lever. Remove key. Then follow steps under Installing and Removing the Outside Lever.

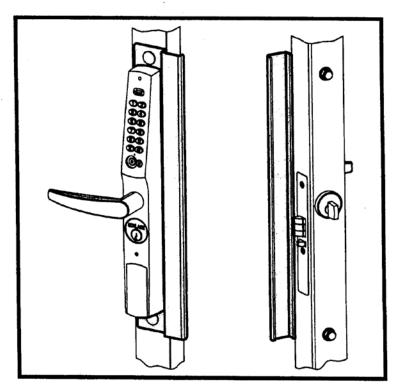
## **SCHLAGE** Installation Manual



## KING COBRA/KING COBRA-2 NARROW STILE SERIES

## INSTALLATION MANUAL

## KC9000-LG



KC9000 Latch Guard

"Option for Medium Stile Aluminum Doors"



#### PROGRAMMING GUIDE

## SCHLAGE KING COBRA - 12 BUTTON

#### Code/iButton Functions:

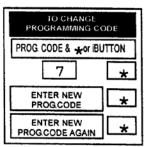
The twelve-button King Cobra family of locks is manually programmable to have up to 120 codes. The codes can have different functions as described below. Several types of functions have factory default values which are operational as soon as the lock is installed. It is highly recommended that the *Programming Code* be changed (this will delete all factory default codes) and new codes be added. In addition, it is recommended that at least one *Freeze/Lockout Code* be added - in case the batteries get completely drained. (See "Battery Information" below.) All codes can be 3-6 digits in length (except the Programming code which must be 5-6 digits.) Keep a log of all issued codes. A sheet is provided for this purpose at the end of this manual. It can be duplicated as required.

FUNCTION:	FACTORY DEFAULT	DESCRIPTION:
PROGRAMMING	97531	The programming code (or iButton) puts the lock into a programming mode. It will not unlock the lock. When a Programming code plus "*" is entered the LEDs alternately flash several times indicating the lock is in a programming mode. If more than 30 seconds pass in between programming entries, the lock returns to a normal operational state.
NORMAL	13579	Normal codes/iButtons unlock the lock for the relock time delay. While the lock is unlocked the green LED will flash. The LED will stop flashing and the lock will relock.
TOGGLE	135135	Toggle code/iButtons unlock the lock indefinitely. When the same (or another) toggle code/iButton is entered, the lock will immediately relock. When a toggle code is entered, the green LED will flash once. (When a lock is toggled unlocked, both LEDs will light each time a button is pressed.)
FREEZE/LOCKOUT	9115	Freeze/Lockout codes prevent other codes from working. The lock can be locked or unlocked when one is entered. If it is locked, a Pass Thru code will unlock it but all other codes will not. Only another Lockout code will reverse the effect.
ONE USE	NONE	One Use codes unlock the lock for the relock time delay. They will only work once and then are deleted from memory. They can be used again it they are programmed (added) into memory again.
SUPERVISED	NONE	Supervised codes require that two different supervised codes be entered in order to unlock the lock for the relock time delay.
PASS THRU	NONE	Pass Thru codes will unlock the door for the relock time delay even if the door is in the lockout mode.

#### PROGRAMMING GUIDE

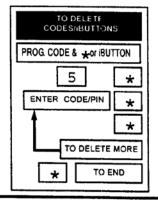
#### SCHLAGE KING COBRA - 12 BUTTON

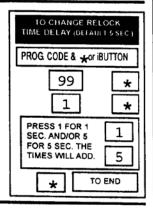
It is highly recommended that the programming code be changed for maximum security. It can be changed to a different 5-6 digit code or to an iButton, if desired.





Codes and iButtons can be deleted using these steps. It is required that the PIN be used to delete an iButton, therefore it is necessary to keep a record of the PINs associated with each iButton.





#### **BATTERY INFORMATION:**

The KC5100/5500 uses four, standard AA ALKALINE batteries. The KC9000 uses four AAA ALKALINE batteries. The batteries should provide enough life for approximately 80,000 lock/unlock cycles (40,000 for the KC9000). When the batteries are running out the lock provides two different modes of low battery indication: First, when a code is entered, the red LED will flash twelve times before the lock executes the command of the code. This is an indication that it is time to replace the batteries. The lock will go for about 500 cycles in this condition. After it reaches a certain point the lock will go into "Low Battery Lockout" mode. A Freeze/Lockout code will need to be entered in order gain access. If the batteries are not changed, the lock will eventually not work and mechanical key override will need to be used.

#### ERROR CODE DESCRIPTION

- 2 Code too long 6 digits max.
- 3 Memory full, must delete some codes
- 4 Can not delete Programming code use Change steps.
- 5 Second entry did not match first (Programming Code)
- 6 Invalid entry, start over. (Verify that any codes entered prior to this error do not operate the lock.)
- 7 Code to be deleted does not exist.
- 8 Code too short 3 digits minimum.
- 9 Duplicate code, code already exists.

#### **CLEARING MEMORY:**

Clearing memory will delete all programmed codes and iButtons and restore factory default codes. The programming code or iButton will also be deleted and the default programming code will be restored. If the memory ever needs to be erased follow the steps below:

- 1. Remove the inside escutcheon. Remove one of the batteries (or disconnect the connector).
- 2. Press any key.
- 3. Hold down the "\*" key and reinstall the battery (or reconnect the connector). Continue holding the "\*" key down. The red LED will flash a few times and then stay on.
- 4. Release the "\*" key.
- 5. Install the inside escutcheon.

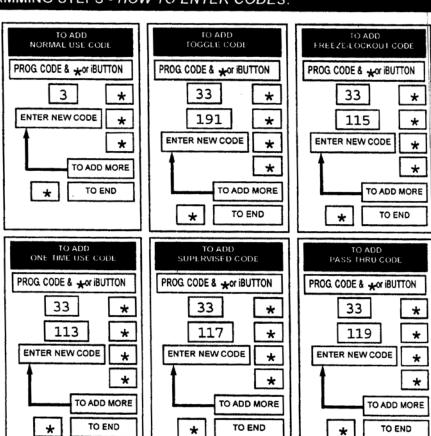
Note: to return the lock to the factory default relock time delay, do steps 1-4 twice in a row.

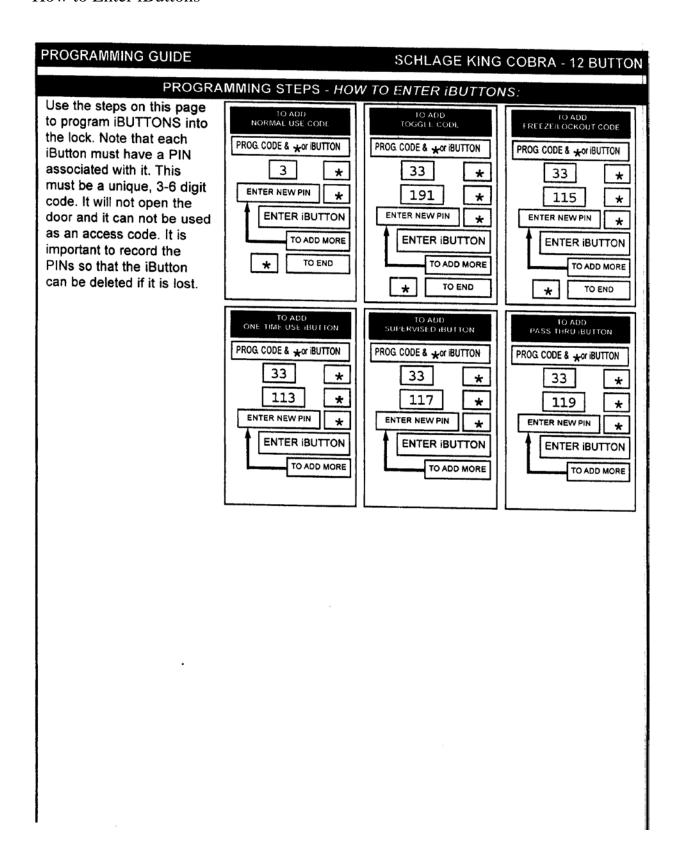
#### PROGRAMMING GUIDE

#### SCHLAGE KING COBRA - 12 BUTTON

## PROGRAMMING STEPS - HOW TO ENTER CODES:

Use the steps on this page to program codes into the lock. The "\*" key is used like the <ENTER> key is on a computer. After pressing the "\*" key, wait for the red and green LEDs to stop flashing before proceeding to the next step. If at any time the red LED stays on while the green LED flashes an error has occurred. The flashing message will repeat three times. Count the number of flashes and consult the error code chart below.





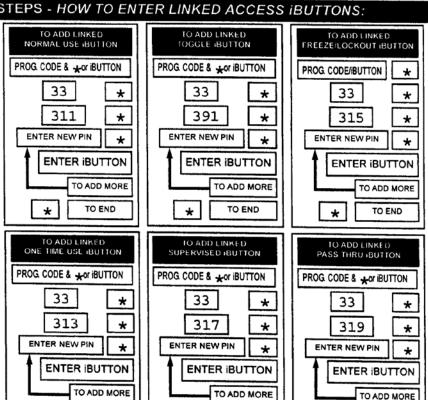
## PROGRAMMING STEPS - HOW TO ENTER LINKED ACCESS IBUTTONS:

TO END

\*

Use the steps on this page to program iBUTTONS with Linked Access. Linked Access adds a higher level of security in case an iButton gets lost or stolen.

To use a Linked Access iButton, enter the iButton into the lock and then enter the PIN associated with it.



TO END

\*

TO END

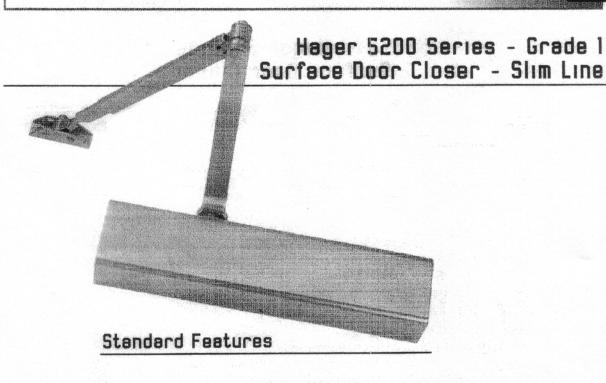
\*

PROGRAMMING GUIDE		SCHLAGE KING COBRA - 12 BUTT					
		CCESS CREDENTIAL RECORDING SHEET					
Building:	Lock '	Lock Type:					
Door/Room Number:	Mana	ger:					
	TYPE OF ACCESS (NORMAL/TOGGLE, ETC.):	CODE/PIN:	iBUTTON (Y/N):				
	(HORMAD FOCUL, E FO.).	****					
			-				
			-				
			-				
	_						

## Hager Door Closer

## Door Closers





- BHMA Certified ANSI A156.4 Grade 1
- Lifetime Warranty
- · UL/cUL Listed for up to 3 hours
- UL10C UBC 7-2 (1997) Positive Pressure Rated
- UL10B Neutral Pressure Rated
- · Aluminum Body
- · Full Plastic Cover
- Non-Handed
- Tri-packed for mounting Regular Arm, Top Jamb and Parallel Arm
- Size Adjustable from 2 to 5
- Size Adjustable from 1 to 4 for Barrier Free



- . Door Thickness 1 3/4"
- · Painted Finishes

## Hager Surface Door Closer

## Door Closers

## Hager 5200 Series - Grade 1 Surface Door Closer - Traditional

#### PRODUCT FEATURES:

Applications:

· Heavy Duty Commercial

Certifications:

• BHMA Certified ANSI A156.4 Grade 1

ADA Compliant ANSI A117.1 Accessibility Code Size 1 to 4

UL/cUL Listed for up to 3 hours
UL10C Positive Pressure Rated
UL10B Neutral Pressure Rated

Closer Body:

Aluminum

Springs:

Double heat treated steel, tempered springs
Precision machined, heat treated steel piston

Triple heat treated steel spindle

Valves:

· Adjustable latching and sweep speed valve

Adjustable backcheck valveDelayed action valve - Optional

Cover:

. Full Plastic Cover - Standard

Handing:

Non-Handed

Arms & Brackets: • Tri-Pack - Regular Arm. Top Jamb and Parallel Arm

Fasteners:

· Self tapping wood and machine screws - Standard

· Sex nuts and bolts - Standard

Door Thickness

• 1 3/4" - Standard

• 1 3/8" - 2" - Optional

Warranty:

Lifetime Warranty

Finishes:

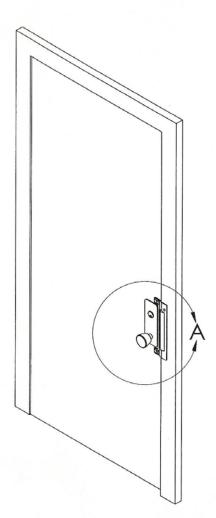
Painted - Aluminum, Bronze Dark Bronze, Gold

## Latch Guard

## LATCH GUARD UNIVERSAL 11-3/4"

- For Out-Opening Doors, With 1" x 8-3/4" Lockset Clearance Cutout All Backsets

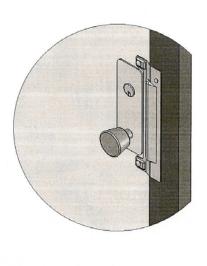
- Single Locks, Double Locks up to 6" on Center Combination Locks, Mortise Locks and Access Control Locks: Protects Latch OR Bolt. Conceals Lip of Existing Strike. Reinforced Mounting Area 12 Ga. Steel Body



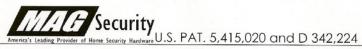
Size: 3-1/2" x 11-3/4"

Available In Three finishes:

PART NO
8849-AL
8850-B
8850-C

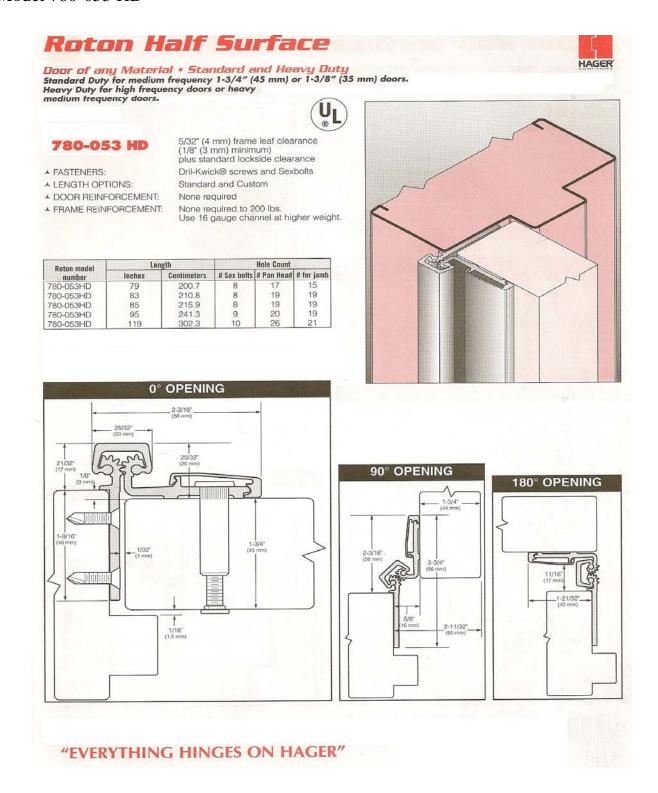


We use only the highest quality products in our systems.



## Roton Hinge

#### Model 780-053 HD



## Roton Full Surface



Door of any Material • Standard and Heavy Duty
Standard Duty for medium frequency doors.
Heavy Duty for high frequency doors or heavy medium trequency doors.

#### 780-210 HD

None required for hinge side.

1-5/8" (41 mm) minimum frame face required plus 3/16" (5 mm) rotational clearance

▲ FASTENERS: Dril-Kwick® screws and Sexbolts

▲ LENGTH OPTIONS:

Standard and Custom

A DOOR REINFORCEMENT:

None required to 200 lbs.

▲ FRAME REINFORCEMENT: A SPECIAL FEATURES:

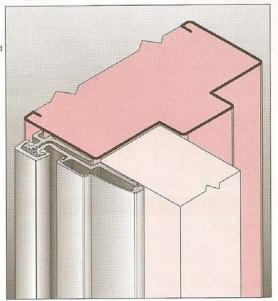
Use 16 gauge channel at higher weight.

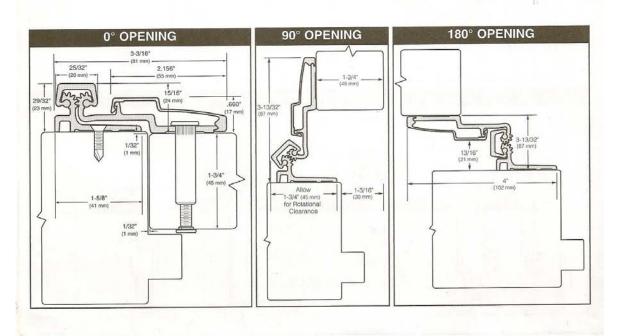
"Zero clearance" required for hinge side. Can be used with any door and frame

THURSTINE.
Security moldings

None required

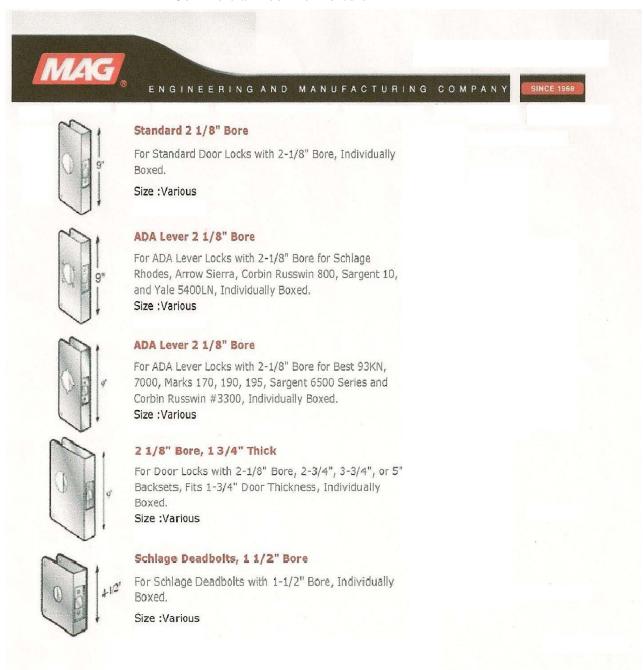
Roton model	Le	ength	Hole Count		
number	Inches	Centimeters	# Sex bolts	# Pan Head	# for jamb
780-210HD	79	200.7	8	17	17
780-210HD	83	210.8	10	17	19
780-210HD	85	215.9	10	17	19
780-210HD	95	241.3	11	18	21
780-210HD	119	302.3	12	24	26





"EVERYTHING HINGES ON HAGER"

#### Commercial Door Reinforcers



## Product Description

America's Leading Provider of Home Security Hardware	ОМІ	MERCI	AL D	OOR	REINF	OR	RCE	ERS
PRODUCT DESCRIPTION	PART NO.	FINISH	BACK SET	DOOR THICKNESS	OVERALL SIZE	SHELF	MASTE PACK	
STANDARD SERIES (BOXED) STANDARD 2-1/8" BORE	1-AB 1-PB 1-S	US5/609 US3/605 US32D/630	2-3/8"	1-3/8"	4" x 9"	1	32	00150 4 00130 6 00120 7
	2-AB 2-PB 2-S	US5/609 US3/605 US32D/630	2-3/8"	1-3/4"	4" x 9"	1	32	00250 1 00230 3 00220 4
	3-PB 3-S	US3/605 US32D/630	2-3/4"	1-3/8"	4-1/4" x 9"	1	32	00330 0 03200 3
	4-AB 4-BN 4-PB 4-S	US5/609 US10/612 US3/605 US32D/630	2-3/4"	1-3/4"	4-1/4" x 9"	1	32	00450 5 00410 9 00430 7 00420 8
Fits Standard Door Locks with 2-1/8" Bore, Individually Boxed	4-S-12	US32D/630	2-3/4"	1-3/4"	5" x 12"	1	20	04122 7
ADA LEVER 2-1/8" BORE  For ADA Lever Locks with 2-1/8" Bore for Schlage® Rhodes, Arrow Sierra, Corbin Russwin 800, Sargent 10 and Yale 5400LN	4-BN-2 4-S-2 4-10B-2	US10/612 US32D/630 US10B/613	2-3/4"	1-3/4"	4-3/4" x 9"	1	18	04021 3 04022 0 04026 8
ADA LEVER 2-1/8" BORE  For ADA Lever Locks with 2-1/8" Bore for Best 93KN, 7000, Marks 170, 190, 195, Sargent 6500 Series and Corbin Russwin #3300	4-S9KN	US32D/630	2-3/4"	1-3/4"	4-3/4" x 9"	1	18	00492 5
ADA LEVER 2-1/8" BORE	45-S	US32D/626	2-3/4"	1-3/4"	6-1/2" x 9"	1	18	00452 9
For ADA Lever Locks with 2-1/8" Bore for Schlage® Rhodes, Arrow Sierra, Corbin Russwin 800, Sargent 10 and Yale 5400LN	55-PB 55-S	US3/605 US32D/626	5"	1-3/4"	6-1/2" x 9"	1	18	00553 3 00552 6

DUCT DESCRIPTION	PROD	UPC (015231)	MASTER PACK	SHELF PACK	OVERALL SIZE	DOOR THICKNESS	BACK SET	FINISH	PART NO.
9" UNIT FOR KEY-IN-KNOB									
CONVERSION OR 14" UNIT		10092 4	18	1	5" x 9"	1-3/4"	2-3/4"	US32D/630	000-98
FOR MORTISE CONVERSION For Simplex 1000 Series 00 Series and Kaba KAA2845	500	10142 6	23	1	5" x 14"	1-3/4"	2-3/4"	US32D/630	000-148
COVERS SIMPLEX PREPARATIONS 2-1/8" BORE 4-1/4" FROM BOTTOM FOR KEY-IN-KNOB		14143 9 14142 2	23	1	5" x 14"	1-3/4"	2-3/4"	US3/605 US32D/630	004-14PB 004-14S
COVERS SIMPLEX PREPERATIONS 2-1/8" BORE 4-1/4" FROM BOTTOM For ADA Lever Locks with 2-1/8" Bore chlage® Rhodes, Arrow Sierra, Sargent 10 and Yale 5400LN	For Sc	04142 5 C	23	1	5" x 14"	1-3/4"	2-3/4"	US32D/630	004-14S2
FOR T2 ALARM LOCK (MODEL #DL2700)  FOR T3 ALARM LOCK (MODEL #3000)		10272 0	23	1	5" x 14"	1-3/4"	2-3/4"	US32D/630	027-14S
FOR SCHLAGE® COBRA LOCK	000	51962 7	23	1.	5" x 14"	1-3/4"	2-3/4"	US32D/630	196-14S

## RCI Electric Strike



## S6514/L6514



S6514 Standard Profile - UL Listed L6514 Low Profile - UL Listed Field Selectable 1-1/4" x 4-7/8" (31.8mm x 123.8mm) Hollow Metal/Wood Frames

- Field selectable lock mode
- Field selectable voltage (12 or 24VDC and 12 to 24VAC)
- Standard version (1-3/16" depth) 3/4" Latch
- Low Profile version (1-1/16" depth) 5/8" Latch
- Horizontal adjustability (up to 1/4")
- Modular plug-in wire connectors
- Optional dual monitor switch (LMKM)
- Manufacturer tested to over 1,000,000 cycles
- Dynamic forces tested to 70 ft. lbs.
- 3 year warranty
- Modular faceplate design for a variety of frame types and cutouts
- Grade 2, 1000lbs Static Strength, 70ft lbs Dynamic Strength, 1,000,000 Endurance Cyles

## Countertops

## **Countertop Introduction**

A large variety of countertops, with a huge assortment of colors awaits your decision.

Whether you are looking for practical laminate, durable solid surface, or luxurious granite, we are able to fit your custom needs.

Reveal your creative spirit and take your worktops to a higher level of sophistication with custom style and finishes.

The possibilities are endless. You provide the idea, and we will do the rest.

The following pages are a sample of the design collection. Always keep in mind that colors and finishes regularly change, so a current and up-to-date color collection will be provided prior to your making any final decisions.

Begin your self expression to enhance and compliment your facility.

## Various Countertops



Radius Solid Surface



Radius Plastic Laminate



Radius Solid Surface



Cherry base Cabinets with Plastic Laminate Countertop



Marble Inserts and Handicap Ledge



Multi-tone Plastic Laminate with Wood Accent Trim



**Solid Surface Inserts** 

## **Check Desks Introduction**

Check desks custom designed for your particular needs.

Wood, laminate, solid surface, as well as marble and granite are all available to custom design a Check Desk that will be an enhancement to your facility as well as fulfilling a necessary function.

On the following pages are examples of the many different styles available. We can fabricate any Check Desk to accessorize your security barrier design.

An elegant and functional result is our goal. Our engineers will design to your budget and taste. Your ideas will become reality when you let us do the work.

## Check Desk Examples



<u>CLYDESDALE</u>: Pictured w/cherry legs, rectangular laminated check slots, painted feet, and solid surface. counter top.

Customize it: w/oval appearance



LARGE DIA. ROUND TOP MODEL:

Pictured with square cherry base, marble top, and check slots in laminated circular sections

Customize it: materials/colors/base designs



<u>SIMPLE CHERRY STYLE</u>: Pictured w/laminated top. Oval tops available.



ROUND GLASS TOP: Pictured w/laminated Check slots and barrel base. Customize it: geometric shape/legs/moldings/natural woods under glass.



<u>WIDE BASED CHECK DESK:</u> Walnut Ply w/solid moldings. Pictured w/solid surface Counter top. Single or double sided slots.



BI-LEVEL BARREL STYLE CHECK DESK: Pictured with aluminum accent trim, laminated base and top.

## **Teller Lines**

## Teller Line Millwork



Plastic laminate – rounded fronts with solid surface counter-tops and integrated bullet resistant barrier



Natural wood - cherry, with basic trim and gate



Natural wood – dark walnut to take a darker "aged" cherry stain. Solid surface inserts, rounded features and detailed veneer accents.



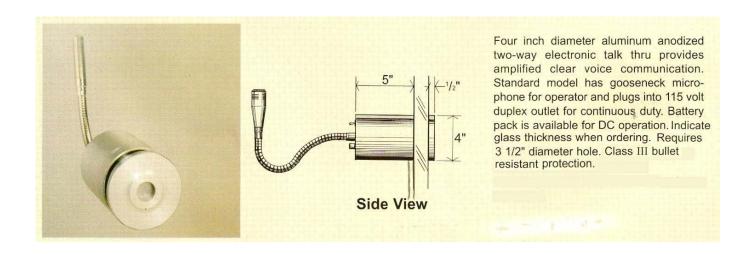
Natural wood – cherry with plastic laminate and painted trim.



Plastic laminate – deco front accents with solid surface countertops & integrated bullet resistant barrier.

# Thru-Glass Two Way Electronic Communicators \*UL Level 3 Only

The Thru-Glass Two Way Electronic Communicator is a self-contained, easily installed device that allows clear, intelligible two-way conversation in locations where security must be maintained. The unit is automatically activated when the clerk speaks for hands-free operation. Incorporating the finest electrical design, you can select either the 115V AC model, or the 12V DC battery powered model. Units are available in Standard or Deluxe Models with satin anodized finish. The Standard Model has a fixed gooseneck microphone.



#### Specifications:

Material: Aluminum Finish: Satin Aluminum Bullet Resistance: Level 3 Instructions Included Glass Fabrication Required

## British Style Talk Thru













Round 6" diameter cast stainless steel talk thru design offers natural voice transmission with evenly spaced concentric louvers.

Talk thru is adjustable for  $\frac{1}{4}$  " to 1  $\frac{7}{8}$  " thick glass. Glass thickness less than

1 3/16" requires optional spacer ring.

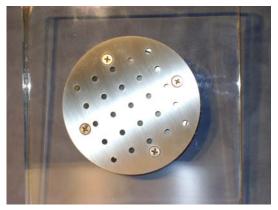
When ordering indicate glass thickness of window.

Requires 5" diameter hole.

## Swiss Style Talk Thru









Six inch round stainless steel Talk Thru has offset holes in front and rear to allow natural voice transmission. Talk Thru is available as interior or exterior model (specify). It fits glass from 1/4" inch to 1 7/8 " thick.

Denote glass thichness of window when ordering Talk Thru.

Requires 5" diameter hole.

Class I or III bullet resistant.

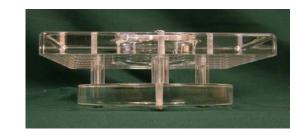
## Clear Vision Bullet Resistant 10" Talk -Thru

UL Level 3

Clear Vision Bullet Resistant Speak-Thru provides a clear field of vision. The unit is easy to install. Just drill a 6" diameter hole in the bullet resistant window, surrounded by three 5/16" holes spaced at 120 degrees on a 7-1/2" diameter circle (template included). Then secure the 10" Backer Disc using the Fasteners and Spacers provided with the unit. The space between the window and disc allows for clear voice transmission. The 10" disc provides enough overlap to prevent direct entry of projectiles. Intended for interior use only. Designed for use with 1-1/4" Acrylic, polycarbonate, or PCA only.

## Acrylic Backers

















#### Specifications:

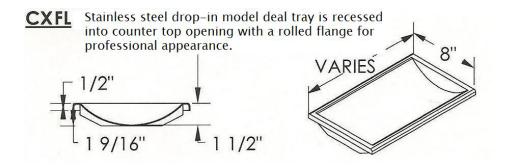
Materials: Clear Acrylic; Clear Lexgard, Clear Polycarbonate, Clear PCA

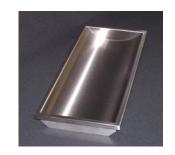
Finish: Studs – Clear

Glazing: Acrylic; Polycarbonate or PCA

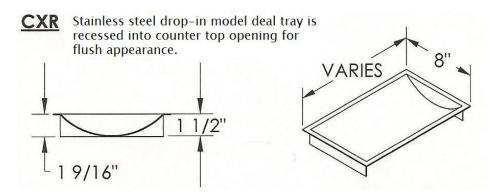
Bullet Resistance: Level 1, 2, 3 Glass Fabrication Required

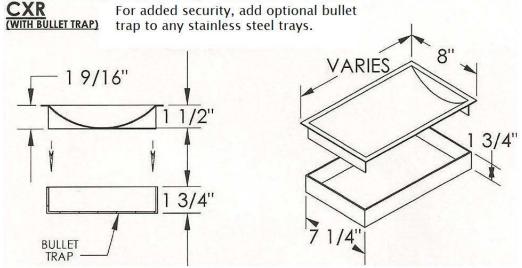
## Drop-In Model Deal Trays









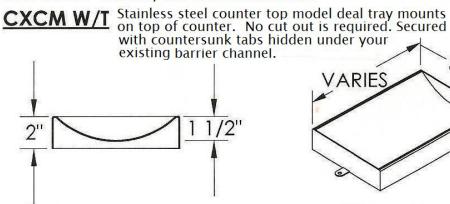


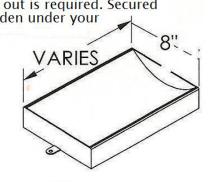


## Counter Top Deal Trays

These trays mount below bullet resistant barrier to allow transfer of money and small merchandise.

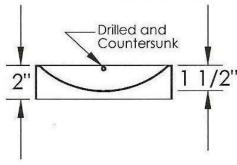


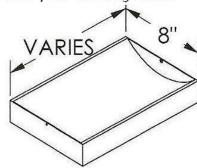




CXCM D&C Stainless steel counter top model deal tray mounts on top of counter. No cut out is required. Secured with screws through countersunk holes into your existing risers.







## Standard Drop in Deal Tray

Standard Drop In Deal Trays are made of a heavy gauge stainless steel with a brushed finish designed to withstand years of exposure while resisting nicks and scratches. The dish section measures 1-1/2" deep with a 1/2" wide perimeter lip all around. Available in any width, this tray makes an excellent choice for ticket booths, service stations and other locations where smaller items are passed. Installation is as simple as cutting a rectangular opening in the counter top, and dropping in the tray that meets your needs. Deal Tray does not have drain holes, so an awning or overhang is recommended when used in an exterior application. Standard sizes range from 8" to 18", and custom sizes are also available.



Tray shown with optional bullet trap

#### Specifications:

Model: CXR

Material: Stainless Steel

Finishes: Polished or Brushed Stainless Steel

Counter Fabrication Required

# Countertop Deal Tray – With Side Holes

(Most used countertop tray)

Counter Top Deal Trays are ideal for use in areas where the counter cannot be recessed or altered to accept Drop in Deal Trays. The tray with side holes has a box shape that allows it to be placed on top of the counter. Notching the glass into the tray provides for secure transactions. Made of heavy gauge brushed stainless steel and available in virtually any size to fit the available opening.



#### Specifications:

Model: CXCM D & C Material: Stainless Steel

Finish: Brushed Stainless Steel

Sizes: Width: Varies Depth: 8" Height: 2" Models: Available with side holes or tabs

Glass fabrication Required

# Deluxe Rolled- Lip Deal Tray

(Most used recessed tray)

The Deluxe Deal Tray is formed from heavy gauge stainless steel with a brushed finish that is resistant to nicks and scratches. Excellent fit to counter. The flush drop in design means that only a simple rectangular recess needs to be cut into the counter top. The rolled flange results in a square tray with little, if any, of the rocking common to the recessed tray models. It also makes pulling coins into the palm easier. Tellers prefer this tray. Deluxe Trays can be fabricated to meet the requirement of any installation. Deal Tray does not have drain holes, so an awning or overhang is recommended when used in an exterior application.



#### Specifications:

Model: CXFL

Material: Stainless Steel

Finish: Brushed Stainless Steel Counter Fabrication Required

# Specialty Cash Trays



Over sized Cash Tray



Flip Top Cash Tray

Many custom cash tray devices are possible, such as flip top trays for frequent use where exterior exposure to drafts and temperature is not desireable.

Another commonly used specialty tray is an oversized tray large enough to pass cartons of cigarettes or large packages of legal documents.

Yet another application is a sliding tray that can be extended while the facility is in operation, then pulled closed and locked at night when the facility is closed.

#### Standard Size Transaction Drawer

Custom sizes available UL Level 2

Transaction Drawers are available in two different configurations; one designed to be installed into a counter, one designed to allow thru-wall installation. Simply choose the drawer that accommodates your installation requirements. Suitable for drive-up and walk up service, this weather resistant drawer has a Lexan lid to allow clear view of contents while preventing direct entry of outside air. Stainless steel front panel pivots up as drawer is extended. Push button latch keeps drawer lid locked when closed.



Top View w/Drawer Closed



Front View w/Drawer Open



Drawer w/Window Assembly

#### Specifications:

Materials: Stainless Steel; Lexan; Bullet Resistant Plastic

Finish: Brushed Stainless Steel

Instructions Included

Counter or wall fabrication required.

# Stainless Steel Standard Package Receiver





(Handle shown in picture would be mounted on outside of unit. Handle mounted on inside for shipping only)

Standard Package Receiver available with Level 1 and Level 3 bullet resistant protection. Receiver accommodates larger items for transfer. It has an interlocking mechanism to allow only one door at a time to open. Front door can be locked from rear side with special locking bar. Closer is furnished on both doors.

Package Receiver mounts into walls up to 10" thick. Adjustable frame on interior side mounts against wall in the field, clamping the unit in place.

Finish options: 1) Stainless steel doors with prime painted carbon steel housing.

- 2) All prime painted carbon steel construction
- 3) All stainless steel construction.

Standard wall opening size: 14 3/4" wide x 14 3/4" high Standard clear inside dimensions: 14" wide x 14" high x 14" deep. Custom sizes available.

# Package Receiver with Vision Panel

This is the same as the stainless steel package receiver except vision panel in rear door enables operator to see contents inside unit.

Construction: Prime painted steel housing and stainless steel doors or all stainless steel.

Vision Panel: Class 1, 2, or 3 in Acrylic or GCP.



Inside view of cart passer sized Package Receiver.



Cart passer sized Package Receiver as viewed from the protected side.

# Clear Package Receiver

Level 1, 2, or 3

The clear package receiver is designed for interior use only. Bottom is constructed of wood covered in plastic laminate. A special interlocking mechanism allows only one door to open at a time. Contents can be clearly viewed from the top and all four sides. Low frequency model is for 1-5 transactions per day. High frequency models for 5-100 transactions per day are available.





Passer Against Wall



Passer in Hood

Class 1, 2, or 3 bullet resistant protection.

Standard exterior dimensions: 14" wide x 14" high x 14" deep.

Other sizes available on request.

# Window Styles

Bullet Resistant Transaction Modules are available with a wide variety of options that allow us to build the window of your choice. You choose from the variety of options and provide the wall opening size into which the window will be installed. It's that simple! We do the rest.

#### **Voice Transmission Windows**

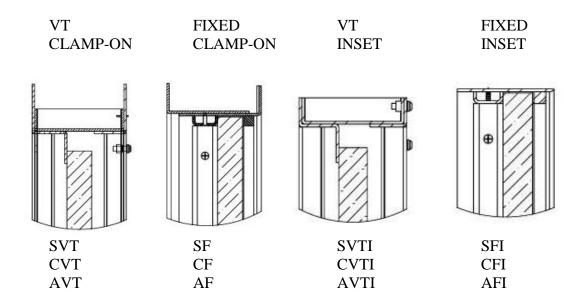


Natural voice transmission is accomplished through pockets in which the frame overlaps the glazing on both sides, blocking ballistic trajectories while allowing a free flow of sound.

Multiple transaction counter sizes and styles are available, as well as cash transaction methods ranging from fixed cash trays to sliding cash trays and the larger sliding cash drawers.

Weather sealing flaps can be added for exterior usage, and a wide variety of glazing options are available.

# Window Frame Selections



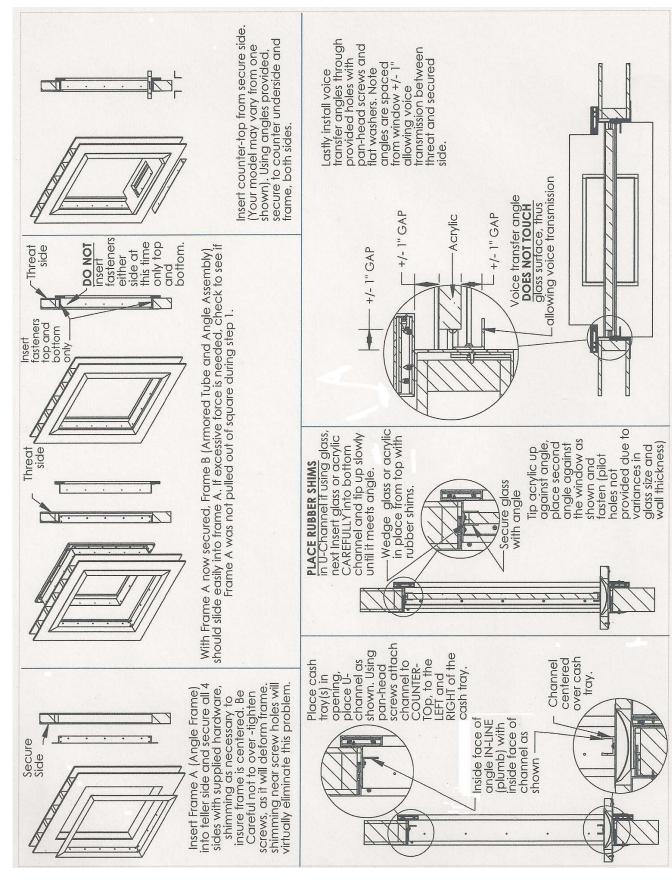
	UL1	UL2	UL3	VOICE	EXTERIOR	ALUM.	PAINT	STAINLESS	TEST
				TRANS.	MODEL	FINISH	FINISH	STEEL	RESULTS
					AVAILABLE			FINISH	AVAILABLE
S/T		Х	Χ	Χ	X			X	Х
CVT		Х	Х	Χ	Х		Χ		Х
AVT		Х	Х	Χ		Х			
SF		Х	Х		Х			Х	
CF		Χ	Х		Х		Χ		
AF		Х	Х		Х	Х			
S/TI		Χ	Х	Χ	Х			Х	
CVTI		Χ	Х	Χ	Х		Χ		
AVTI		Χ	Х	Χ		Х			
SFI		Χ	Х		Х			Х	
CFI		Х	Х		Х		Х		
AFI		Χ	Χ		Х	Х			

S = Stainless Steel Model

C = Carbon Steel Model

A = Aluminum Model

### Window Installation Instructions



# **Drive-Up Window Styles**



Stainless Steel Drive-Up Window



Aluminum Drive-Up Window

Drive-Up windows are available in Stainless Steel and Anodized Aluminum, in both Clamp-On and Inset styles. Painted Steel is also available as a custom option.

The standard level of bullet resistance is U.L. Level 2, although other levels are available. Standard sizes are 4', 5', 8', 10', and 12' wide x 3' high, with custom sizes available.

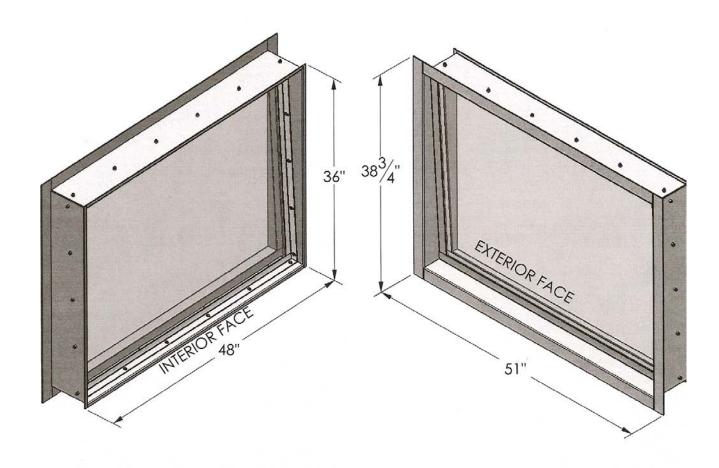
Note: Also available in steel

# Drive -Up Window Illustration

4' X 3' STAINLESS STEEL EXTERIOR MODEL ROUGH OPENING SIZE: 48 1/2" X 36 1/2" EXTERIOR FLANGE WIDTH:

#### **VISION WINDOW FEATURES**

- AVAILABLE SIZES 4' X 3' TO 15' X 3'
  LOW MAINTENANCE STAINLESS STEEL CONSTRUCTION
  GLASS IS ANGLED OUTWARD TO REDUCE GLARE
  GLASS TINTING AVAILABLE UPON REQUEST
  UL1 AND UL2 BULLET RESISTANT MODELS AVAILABLE



# Ratings of Bullet-Resistant Materials

Underwriters Laboratories, Inc. ®

Rating	Ammunition	Grain	(g)	Velocity Min Max fps	mps	No. Of Shots
Level 1	9mm Full Metal Copper Jacket with Lead Core	124	8.0	1175 1293	358	3
Level 2	.357 Magnum Jacketed Lead Soft Point	158	10.2	1250 1375	381	3
Level 3	.44 Magnum Lead Semi- Wadcutter Gas Checked	240	15.6	1350 1485	411	3
Level 4	.30 Caliber Rifle Lead Core Soft Point	180	11.7	2540 2794	774	1
Level 5	7.62mm Rifle Lead Core Full Metal Copper Jacket Military Ball	150	9.7	2750 3025	838	1
Level 6	9mm Full Metal Copper Jacket with Lead Core	124	8.0	1400 1540	427	5
Level 7	5.56mm Rifle Full Metal Copper Jacket with Lead Core	55	3.56	3080 3388	939	5
Level 8	7.62mm Rifle Lead Core Full Metal Copper Jacket, Military Ball	150	9.7	2750 3025	838	5
Supple- mentary	12-Gauge Rifled Lead Slug and	437	28.3	1585 1744	483	3
Shotgun	12-Gauge 00 Lead Buckshot (12 pellets)	650	42	1200 1320	366	3

# WMFL Testing

#### Level III – 30 Minute Physical Attack

- 1. 2 lb. claw hammer, claw end; 5 minutes
- 2. Cold chisel/screwdriver; 5 minutes
- 3. 10 lb. sledge hammer; 5 minutes
- 4. Fire extinguisher dry chemical type for an NBC fire class with 4A-60DC UL rating; 5 minutes
- 5. Propane burner of temp. approximately 2,200 degrees F with tip of burner 4" from glass surface, and with nozzle diameter as required to result in heat source approximately 1" in diameter; 5 minutes.
- 6. 4 lb. hammer, 5 minutes

#### Level II – 60 Minute Physical Attack

- 1. 2 lb. claw hammer, claw end; 5 minutes
- 2. Cold chisel/screwdriver; 5 minutes
- 3. 10 lb. sledge hammer; 5 minutes
- 4. ASTM A500 grade B 1-1/2" diameter pipe 3 feet long along with ASTM 36 2" angle iron 3 feet long; 5 minutes
- 5. ASTM A615 grade 60 deformed #8 rebar for concrete reinforcement, 3 feet long; 5 minutes
- 6. 4" x 4" table leg/chair leg (oak) 3 feet long; 5 minutes
- 7. Fire extinguisher dry chemical type for ABC fire class with 4A-60BC U/L rating; 5 minutes
- 8. 10 lb. sledge hammer; 5 minutes
- 9. Heated clothes hanger along with heated knife 10" blade from ¼" thick cold chisel steel); 5 minutes
- 10. Propane burner of temperature approximately 2,200 degrees F with tip of burner 4"from glass surface, and with nozzle diameter as required to result in heat source approximately 1" in diameter; 5 minutes
- 11. 4 lb. hammer; 5 minutes
- 12. ASTM A500 grade B 3" diameter pipe 3 feet long or 1" x 1" angle iron 3 feet long; 5 minutes

#### Level 1 – 60 Minute Physical Attack Plus .44 Magnum

1. Same test as 60 minute above, plus 24 rounds from a .44 magnum at 30 yards.

# **HP White Testing**

	PROTECTI	ON LEVEL TI	EST REQUIRE	MENTS				
	Phase I - Ballistics							
	Level A 38 Special	Level B	Level C	Level D 7.62mm	Level E .30-06 AP			
	After the sample has successfully resisted one the ballistic threat of the Phase I test, follow numerical sequence (1-54) below.							
· ·		Phase	II - Force	ed Entry				
<del>-</del>	Level I	Level II	Level III	Level IV	Level V			
Blunt Impacting (impacts)								
Sledgehammer/Wedge(25)	1,4	8,10	18,24,26	29,32,39	42,45,48,51,54			
4" Dia. Pipe/Sledge(25)	2	7	17	28	41			
Ram(10)	na	6	16	27	40			
Pinch Bar(a)								
Sharp Tool (impacts)								
Chisel/Hammer(25)	na	12	21,23	33,36,38	47,52			
Angle Iron/Sledge(25)	na	13	22	na	na			
1-1/2"Dia.Pipe/Sledge(25)	5	na	na	na	na			
Fire Axe(25)	na	na	na	35	44,50			
Wood Maul (25)	na	15	20	31	46,53			
Keyhole Saw(b)	7.00		2703.		A. C.			
Hacksaw(b)								
Thermal Stress (minutes)								
Extinguisher, CO <sub>2</sub> (1)	3	9	na	na	na			
Propane Torch(5)	na	11	19	30	na			
Acetylene (5)	na	na	na	na	43			
recellence (5)	114	110	110	AACA	20			
Chemical Deterioration (An	nount)							
Gasoline (1/2 pint)	na	14	na.	na	na			
Gasoline (1/2 pint) Windshield Washer(1/2pin			25	34	na na			
Acetone (1/2 pint)		na		37	49			
Acetone (1/2 pint)	na	na	na.	37	*3			
Total Forced Entry								
Sequences	5	1.5	26	39	54			

<sup>(</sup>a) Pinch or ripping bars may be substituted for any portion of Blunt Impacting Sequence at rate of 1 minute for each 5 impacts (Test Director option).

<sup>(</sup>b) Additional sequences of one minute intervals in conjunction with all Sharp Tool Sequences (see Paragraph 3.5.7-3.5.8, Section 3.0.)

# Summary of Ballistic Threat Levels and Ratings

### Table X1.1 ASTM F 1233

### Handguns (Automatic Pistols and Revolvers

Standard	Threat Level,	Weapon Calibar	Bullet Weight	Bullet Velocity	Bullet Velocity	Number of	Range,
	Rating		(Grains)	fps. Min.	fps Max	Shots	Feet
NU	I	.22LR. ©	40	1010	1090	5	16.0
HPW	Α	.38 spec.	158	700	800	3 (d)	20.0
NIJ	I	.38 spec.	158	800	900	5	16.0
NIJ	II-A	9 mm by 19 LV	124	1050	1130	5	16.0
DIN	CI-SF	9 mm by 19 (HV)	124	1166	1199	3	9.84
HPW	В	9 mm by 19 (HV)	124	1100	1180	3 (d)	20.0
NIJ	II	9 mm by 19 (HV)	124	1135	1215	5	16.0
ANSI/UL	M.P.S.A.	.38 super auto.	130	1152	1344	3	15.0
ASTM	.38 super	.38 super auto.	130	1230	1330	3 (e)	25.0
NIJ	II-A	.357 mag. (LV)	158	1200	1300	5	16.0
HPW	В	.357 mag.	158	1250	1375	3	15.0
ANSI/UL	H.P.S.A.	.357 mag. (HV)	158	1305	1523	3	15.0
BSI	GI	.357 mag. (HV)	158	1378	1574	3	9.84
DIN	C2-SF	.357 mag. (HV)	158	1363	1396	3	9.84
ANSI/UL	S.P.S.A.	.44 mag.	240	1323	1544	3	15.0
ASTM	.44 mag.	.44 mag.	240	1400	1500	3 (e)	25.0
BSI	G2	.44 mag.	240	1451	1647	3	9.84
DIN	C3-SF	.44 mag.	240	1429	1461	3	9.84
HPW	С	.44 mag.	240	1350	1450	3 (d)	20.0
NIJ	III-A	.44 mag.	240	1350	1450	5	16.0

### Carbines and Sub Machine Guns

Standard	Threat Level,	Weapon Caliber	Bullet Weight	Bullet Velocity,	Bullet Velocity,	Number of	Range,
Α	Rating		(Grains)	fps Min.	fps Max.	Shots	Feet
ASTM	sub. m.g.	9 mm by 19 (HV)	124	1350	1450	3 (e)	25.0
BSI	GO	9 mm by 19 (HV)	115	1247	1443	3	9.84
NIJ	III-A	9 mm by 19 (HV)	124	1350	1450	5	16.0
SD	minimum	9 mm by 19 (HV)	115	1350	1450	3 (f)	30.0

# Rifles (Center Fire)

Standard	Threat Level,	Weapon Caliber	Bullet Weight	Bullet Velocity,	Bullet Velocity,	Number of	Range,
Α	Rating		(Grains)	fps Min.	fps Max.	Shots	Feet
ANSI/UL	H.P.R.	.30-06	220 SRP	2169	2531	1	15.0
SD	Rifle	5.56 by 45 mm	55 (M193)	3135	3235	3 (f)	30.0
ASTM	Rifle	7.62 by 51 mm	147 (M80)	2750	2850	3 (e)	25.0
BSI	G3	7.62 by 51 mm	147 (M80)	2609	2805	3	32.81
DIN	C4-SF	7.62 by 51 mm	147 SRP	2578	2611	3	32.81
HPW	D	7.62 by 51 mm	147 (M80)	2725	2825	3 (d)	20.0
NIJ	III	7.62 BY 51 mm	147 (M80)	2700	2800	5	16.0
SD	Rifle	7.62 by 51 mm	147 (M80)	2700	2800	3 (f)	30.0

# Rifles (Center Fire Armor Piercing)

Standard	Threat Level,	Weapon Caliber	Bullet Weight	Bullet Velocity,	Bullet Velocity,	Number of	Range,
Α	Rating		(Grains)	fps Min.	fps Max.	Shots	Feet
DIN	C5-SF	7.62 by 51 mm	150 AP	2627	2660	3	82.02
SD	rifle, AP	7.62 by 51 mm	150 (AP,M61)	2700	2800	3 (f)	30.0
ASTM	rifle (AP)	.30-06	165 (AP,M2)	2725	2825	3 (e)	25.0
HPW	E	.30-06	165 (AP,M2)	2725	2825	3 (d)	20.0
NIJ	IV	.30-06	165 (AP.M2)	2800	2900	1	16.0
SD	rifle, AP	.30-06	165 (AP,M2)	2750	2850	3 (f)	30.0

# Shotguns

Standard	Threat Level,	Weapon	Bullet/Load	Bullet Load	Bullet Load	Number of	Range,
	Rating	Caliber/Gauge	Weight (Grains)	Velocity, fps Min.	Velocity, fps Max.	Shots	Feet
ANSI/UL	AJI (g)	20 (2-3/4 in.)	# 7-1/2 LD,Shot	1115	1215	1	15.0
SD	AJI (g)	12 (2-3/4 in.)	#4 buck shot	1275	1375	3 (f)	30.0
ASTM	shotgun (m)	12 mag. (3 in)	#00 buck shot	1265	1365	3 (e)	25.0
BSI	S/	12 mag. (3 in)	#6 lead shot	1295	1395	2	9.84

#### **Testing Definitions**

#### a Standards:

**ASTM** – American Society for Testing and Materials. Test Method for Security Glazing Materials and Systems. F 1233

**NIJ** – National Institute of Justice, U.S. Department of Justice, Ballistic Resistant Protective Materials, NIJ Standard – 0108. 01, September 1985.

**ANS/UL** – American National Standards Institute/Underwriters Laboratories, Inc., Standard for Bullet-Resisting Equipment, ANS/UL 752-1985, Rev. 13 May 1988.

**SD**-U.S. Department of State, Ballistic Resistance of Structural Materials (Opaque and Transparent) Test Procedures and Acceptance Criteria, SD-STD-02.01, March 1986.

**HPW**-H.P.White Laboratory, Inc. Transparent Materials and Assemblies for Use in Entry or Containment Barriers, HPW-TP-Q 0100.00 Rev. B, December 10, 1983.

**BSI**-British Standards Institution, Security Glazing, Part 1. Specification for Bullet-Resistant Glazing for interior Use, BS 5051, October 1973.

**DIN**-Deutches Institute for Normung e.V., Security Glazing, DIN 52 290, Part 2, May 1981.

b – The various standards specify different locations to measure the bullet velocity. They are as follows: ASTM-15 ft. from weapon muzzle. ANS/UL-at muzzle; BSI-strike face of the target; DIN-8.20 ft. from weapon muzzle; HPW-15 ft. from weapon muzzle; NIJ-6.60 ft from weapon muzzle; and SD-10 ft. from strike face of the target. For meeting the various velocity measurement requirements, the use of custom (special) powder loads may be required.

#### c – Abbreviations:

AP Armor Piercing

HV Higher Velocity

LD Lead

LR Long Rifle

LV Lower Velocity

Mag. Magnum

Spec. Special

SRP Soft Round Point

M2, M61, M80, M193 -U.S. Military Ammunition, Full Metal Jacket, Spire Point

- d Three shots required for the base materials and twelve shots required for assemblies.
- e Minimum number of shots.
- f Minimum of three shots required for the glazing and six shots required for other parts of the assembly.
- g All ratings require the use of a shotgun in addition to the other specified weapons.
- h The shotgun is only used in an adjunct role and is non-rated weapon in this mode.

# Forced Entry Sequence of Testing

Table 2 ASTM F1233

Test Implements	Class II	Class II	Calss III	Class IV	Calss V
	Sequence	Sequence	Sequence	Sequence	Sequence
Blunt Impacting (Impacts)					
Sledge Hammer (25)	Α	5	10, 16	19,22,27	30,33,36,39
4" (10cm) Diameter Pipe/Sledge (25)	Α	Α	9	18	29
Ram (10)	Α	Α	8	17	28
Ball Peen Hammer (10)	1	2	Α	Α	Α
Sharp Tool (Impacts)					
Ripping Bar (10)	Α	7	12	23	Α
Chisel/Hammer (25)	Α	Α	13	25	35,40
Angle Iron/Sledge (25)	Α	Α	15	Α	Α
1-1/2" (4cm) Diameter Pipe/Sledge (25)	Α	3	Α	Α	Α
Fire Axe (25)	Α	Α	Α	24	32,38
Wood Splitting Maul (25)	Α	Α	Α	21	34,41
Thermal Stress (Minutes)					
Extinguisher, CO2, (1)	Α	4	Α	Α	Α
Propane Torch (5)	Α	6B	11C	20C	31C
Chemical Deterioration (Amount)					
Gasoline (1/2 Pint) (1/4 L)	Α	Α	14	Α	Α
Methylane Chloride (1/2 Pint) (1/4 L)	Α	Α	Α	26	37
Total Forced Entry Sequences	1	7	16	27	41

#### A = Not Applicable.

B = For Class II, The flame shall be extinguished with a fine mist of water immediately after the propane torch application.

C= For Classes III, IV, and V, if the sample continues to burn after removal of the flame (self-sustaining), it shall be allowed to burn an additional 10 minutes and then extinguished with a fine mist of water.

# Glazing Cleaning Instructions Cleaning B/R Acrylic & Polycarbonate – Coated & Uncoated Surfaces

For frequent cleaning, use a plastic cleaning solution specifically designed for use with plastics (available at plastic supply stores) and a soft cloth or chamois.

To clean acrylic in interior installations:

First, lightly dust (not wipe) the surface with a soft clean cloth. Next, wipe carefully with a soft, wet cloth or chamois. Dry with soft cloth or chamois.

To clean acrylic in exterior installations:

First, wash with plenty of non-abrasive soap or detergent. Use a soft cloth or sponge as a way of applying solution to the surface. Use bare hands to find and remove any caked mud or dirt. Rinse with clean water and dry with cloth or chamois.

Fresh paint, grease, and oil can be removed with kerosene or aliphatic naphtha, (no aromatic content). Clean surface as described above per your installation.

#### Some Important "DON'Ts" for Acrylic and Polycarbonate

- **1.** Do NOT use Paper Towels they are a wood product, which is abrasive to plastics.
- 2. Do NOT use solvents, such as common window cleaners (Windex), acetone, benzene, carbon tetrachloride, fire extinguisher fluid, dry cleaning fluid, lacquer thinners, or gasoline. They start a delayed chemical reaction that sends cracks through the plastic material; a process known as "crazing".
- 3. Do NOT tape anything to the barrier with cellophane or other adhesive tapes. In a short time, a chemical reaction will occur that bonds the tape permanently to the plastic.
- 4. Do NOT ever scrape acrylic with razor blades or other sharp instruments.
- 5. Do NOT use rough cloths, kitchen scouring pads, or any other abrasive product that will scratch the acrylic or polycarbonate.
- 6. Do NOT clean acrylic or polycarbonate in hot sun or elevated temperatures.

# Glass Handling

#### Glass Handling

Care needs to be taken during handling and glazing to ensure that glass damage does not occur. Do not allow the security glass edges to contact the frame or any hard surfaces during installation. Damaged glass edges can ultimately result in delayed glass breakage as the units encounter in-service thermal and mechanical stresses. ARMI assumes no responsibility for glass breakage.

#### Glass-Clad Polycarbonate

Once security glass is installed, the glazing contractor should make provisions to ensure the security components are protected from possible damage caused by the construction practices of other trades.

Take special care during the initial cleaning, the construction period or when glass surfaces are severely soiled. This prevents glass damage caused by abrasive contaminates. First, flush glass surfaces with a clean water to remove as many contaminates as possible. With the glass surfaces still heavily wetted, carefully work a squeegee from top to bottom removing excess water. Ensure that any remaining abrasive materials do not become trapped between the glass surface and the rubber squeegee; otherwise, the glass surfaces may become scratched.

Then clean the glass with a clean, soft, grit-free cloth and a mild, non-abrasive, non-alkaline cleaning solution. Rinse immediately with clean water and remove any excess water from the glass surfaces with a squeegee.

For routine cleaning, use mild soap or detergent and lukewarm water.

### Laminated Polycarbonate

Exposed polycarbonate or spallshield surfaces require additional care to avoid damage and scratches. Do not use abrasive cleaners or cleaning products that can mar or gouge the surfaces. Wash polycarbonate surfaces with a mild soap or detergent and luke warm water, using a clean sponge or soft cloth. Rinse well with clean water. Dry thoroughly to prevent water spots.

Fresh paint splashes, grease and smeared glazing compounds can be removed easily before drying by rubbing lightly with a quality grade isopropyl alcohol. Afterward, finish with a warm wash, using mild soap or detergent solution and ending with a thorough rinsing with clean water.

# Approved Sealants For Installation

The following is a list of approved sealants for use on glass/clad polycarbonates and all glass laminates.

The use of any sealant other than those specified will void any warranties. If a sealant other than those listed is to be used, we will need a tube of that sealant and the applicable MSDS sheets for that product. We will then have the product tested for compatibility.

<u>TYPE</u>	<u>MANUFACTURER</u>	PRODUCT NAME
Silicone	GE	Ultrapruf, silpruf Construction 1200, Contractors 1000
	Dow-Corning	Dow 795, Dow 999 Trademate
Gasket	Tremco	Silicone (70D) EPDM (60, 70D)
Butyl Tape	Schnee-Morehead	Isocryl 5600 Series
	KPT	303
<u>PHONE</u>		
GE	1-800-255-8886	
Dow-Corning	1-517-496-4000	

ANY SILICONE SPRAY LUBRICANT IS  $\underline{\textbf{NOT APPROVED FOR USE ON THESE}}$   $\underline{\textbf{LAMINATES}}$ 

1-800-724-8833

1-800-321-6357

1-800-543-7570

1-214-438-9111

Norton Company

Schnee-Morehead

Tremoc

KPT

# Glazing guidelines

All security products that incorporate glass must be supported by two or more setting blocks. The blocks should have a shore A Durometer of 85 +/-5 and be silicone compatible. They should be no less than 4" in length.

Locate the setting blocks at quarter points. Ensure that they are manufactured of santoprene, silicone, EPDM or any polycarbonate compatible material. Avoid neoprene, since it can be incompatible with polycarbonates.

Adequate clearances must be maintained to prevent glass damage or breakage as a result of glass-to-frame contact. Provide uniform face clearances by installing a cushioning material between the framework and the security components. Avoid excessive edge engagement clamping pressure, since it can result in glass breakage or premature delamination.

Apply a silicone Cap bead between the laminate face and retention frame. The cap bead is required for the sill and approximately 6" up from the bottom. The cap bead is optional on the balance of interior applications. The silicone bead is critical as a weather seal for exterior applications and the sill for interior application to prevent moisture and cleaning solutions from entering the glazing channel.

For additional glazing information, refer to the Flat Glass Marketing Association (FGMA) glazing manual, or the Glass Association of North America (GANA) standards manual.

# Glass Storage

Schedule security glass shipments to minimize storage time at the project site. Maximum of 30 days whenever possible. Store crates indoors and ensure that the products are kept dry. In order to prevent condensation and subsequent glass staining while in storage, the temperature of the stored glass must remain above the dew point temperature of the air.

# Handout Order Form

Contact Information:	
Name: Company: Address: City, State, Zip:	
Phone:	
Cell Phone:	
Fax:	
Email:	
Sample Handouts:	Quantity
Barriers:	
Doors:	
Deal Trays	
Check Desks:	
Package Receivers:	
Teller Line Millwork:	
Transaction Drawers:	
Voice Transmission:	
Window Modules:	

Fax Form to: 517-223-7678 Attention: Steven Pretty

### Door Quote Request

### **Contact Information:** Name: Company: Address: City, State, Zip: Phone: Cell Phone: Fax: Email: Door Type: (Circle Selection) Wood - Steel - Acrylic - Aluminum Swing Style (Circle Selection): Door Style: (from selector pages): Glazing Type (if applicable): Glazing Size (if applicable): Glazing Frame Type (if applicable): Door Finish or Color: Frame Style (from selector pages): Frame Finish or Color: Bullet Resistant Level: (circle selection) UL 1 UL 2 UL 3 Hardware Package: Hinge (Roton 780-210HD Standard): Hinge Color (Circle Selection): Clear Anodized Dark Bronze Anodized Door Closer (Hager 5200 Standard):

Lockset (Simplex 5000 Standard):

Other Hardware:

# Window Module Quote Request

<b>Contact Information:</b>			
Name:			
Company:			
Address:			
City, State, Zip:			
Phone:			
Cell Phone:			
Fax:Email:			
Frame Model (Circle Selection ):	Voice Transmission	Fixed	
Frame Model (Circle Selection ):	Clamp-On	Inset	
Frame Model (Circle Selection ):	Aluminum	Steel	Stainless Steel
<b>UL Level (Circle Selection):</b>	UL1	UL2	UL3
Glazing Selection:			
(See Glazing Selection Chart on foll	owing page to make se	election	)
Glazing Testing Level Required (c HP White Equivalent To	heck Selections): ested to The UL Standa	ard	Tested by UL
<u> </u>	y HP White		& Labeled
<b>Testing Results Required (Circle S</b>	Selection)	Yes	No
Note: Test results available CVT &			
The designs and materials used on o	ther models are equiva	lent.	
Transaction Counter Material and	l Style (Check Selecti	on):	
Plastic Laminate			
Stainless Steel Box			
Plastic Laminate w/Armor Strip	& Cash Pan Bullet Tr	ap	
Stainless Steel Countertop Stainless Steel Sliding Tray			
Stainless Steel Sliding Tray			
Options (Check Selections):			
Weather Sealing Flaps for Voice			
Substitute a Sliding Drawer Ass	embly for the Transact	tion Co	unter

# Glazing Selection Chart

Acrylic	UL1	UL2	UL3	AF	AR	SR	Light%	Weight
1 1/4" Acrylic	х			Х			90%	8 lbs
3/4" PCA	х			Х	Х		90%	5 lbs
1 1/4" AR Acrylic	х			Х	Х		90%	8 lbs
1 3/8" AR Acrylic		х		Х	Х		90%	8.5 lbs
1 1/4" PCA			Х	Х	Х		82%	8 lbs
1 1/4" Polycarbonate			Х	Х	Х		77%	8 lbs
Glass								
3/4" GCP	х					Х	84%	8 lbs
1 1/16" GCP		х				Х	76%	11 lbs
1 1/4" GCP			х			Х	75%	14 lbs
1 1/16" Glass	х					Х	73%	15 lbs
1 5/8" Glass			Х			х	68%	20 lbs

#### **Chart Definitions:**

AF: Architectural Flexibility

(Can be cut, drilled, notched, or trimmed in field with ease.)

AR: Abrasion Resistant Coated

SR: Scratch Resistant (glass exterior faces)

GCP: Glass Clad Polycarbonate PCA: Polycarbonate Clad Acrylic

Light %: Percentage of light that gets through UL1, 2, 3: Level of tested Bullet Resistance

Weight: Weight per sq. ft.

### Barrier/Teller Line Order Information Sheet

#### FAX TO: ARMI # 517-2523-7678 WWW.banditproof.com

#### REQUIRED INFORMATION CONTACT/ DEALER INFO Floor to top of counter Contact name: \_\_ В. Height of riser Address: C. Riser to Soffit/Ceiling D. Phone: \_\_\_Counter to soffit/Ceiling at ADA E. Fax: ———Opening between risers ——Left return wall height E-Mail: G. ---Left return wall length Project Name: — Right return wall height Project Location: —Right return wall length ALUMINUM CHANNEL CEILING RETURN WALL OR-EXISTING WALL -Clear or dark brown an odized finish — JUMP SHIELD (slotted shown) PACKAGE EXCHANGE (Shown on riser) Н TELLER LINE J PACKAGE EXCHANGE (SHOWN ON COUNTER) NATURAL VOICE TRANSMISSION AT SECURE SIDE G. B.F. FIBER GLASS PANELS Height of barrier above risers desired:\_\_\_\_\_ Base material required: UL1 UNCOATED/UL1 COATED/UL2 COATED Jump shield desired: SLOTTED / UN-SLOTTED / ROD & RAIL STYLE \_\_\_\_\_\_ Package exchanges needed \_\_\_\_\_\_ Number of doors desired: \_\_\_\_\_ Alternate upgrades desired \_\_\_\_\_\_

<sup>\*</sup>Please call us if you need additional forms.

### Handouts

# **Bullet Resistant Barriers**















# **Bullet Resistant Doors Styles**

Level 1, 2, & 3 Available

Bullet Resistant Doors are for interior or exterior use and are manufactured to meet UL 752 Level 1, 2, or 3 protections. Each unit is customized and fabricated to meet your specific requirements. Available without glazing or with your choice of bullet resistant glazing.

Doors are manufactured from:

- e. Acrylic
- f. Aluminum
- g. Steel
- h. Wood

Vision window frames are fabricated in sizes to fit your specified opening.

Note: Doors must be specified with Left or Right hand hinge, determined from the key side.



Door



Full Vision Aluminum Door



Half Vision Window



Full Vision Acrylic



12" x 18"



Peep Hole



View Window



Glass Handicapped Transaction Window



Baffle Handicapped Transaction Window



Arched Handicapped Transaction Window

# **Deal Trays**



CXFL. Stainless Steel drop-in deal tray recessed into countertop with flange for professional appearance.



CXR .Stainless Steel drop-in deal tray is recessed into countertop opening for flush appearance.



For added security, add optional bullet trap to any stainless steel cash tray.



CXCM WT. Stainless steel countertop deal tray mounts on top of counter. No cut-out is required Secured with countersunk tabs hidden under your existing barrier channel.



CXCM D & C
Stainless Steel counter top model mounts on top of counter. No cut-out is required. Secured with screws through countersunk holes into your existing risers.

# Check Desk Examples



<u>Clydesdale</u>: Pictured w/cherry legs, painted feet, rectangular Laminated check shots, and Solid Surface countertop. Customize it: w/oval appearance



<u>Large Diameter Round Top Model</u>: Pictured with square cherry base, marble top, and check slots in laminated circular section.

Customize it: materials/colors/base designs.



<u>Simple Cherry Style</u>: Pictured w/laminated top. Oval tops available



Round Glass Top: Pictured with laminated check slots and barrel base Customize it: w/geometric shape/legs/ moldings Natural woods under glass.



<u>Wide Based Check Desk</u>: Walnut ply w/solid moldings. Pictured w/Solid Surface countertop. Single or double sided slots..



<u>Be-Level Barrel Style Check Desk</u>: Pictured with aluminum accent trim, laminated base and top.

# Package Receivers





Stainless Steel Package Receiver available in Level 1 and Level 3 bullet resistant Protection. Handle shown is mounted inside for shipping only.





Package Receiver with Vision Panel is the same as Stainless Steel Package Receiver except vision panel in door enables operator to view contents inside unit.



Clear Package Receiver is designed for interior use only. Special Interlocking mechanisms allow only one door to open at a time. Contents can be clearly viewed from top and all four sides.

# Teller Line Millwork



Plastic laminate – rounded fronts with Solid Surface countertops and integrated Bullet Resistant Barrier.



Natural wood – Cherry, with basic trim and gate.



Natural wood – Dark walnut to take a darker "aged" cherry stain. Solid Surface inserts, rounded features and detailed veneer accents



Natural wood – Cherry with plastic laminate and painted trim



Plastic laminate – Deco front accents with solid surface countertops and integrated Bullet Resistant Barrier.



Plastic laminate with integrated Bullet Resistant Barrier.

### **Transaction Drawers**

Transaction Drawers are available in two different configurations; one designed to be installed into a counter, one designed to allow thru-wall installation.

Simply choose the drawer that accommodates your installation requirements.

Suitable for drive-up and walk up service, this weather resistant drawer has a Lexan lid to allow clear view of contents while preventing direct entry of outside air.

Stainless steel front panel pivots up as drawer is extended. Push button latch keeps



drawer lid locked when closed.

Top View w/Drawer Closed



Front View w/Drawer Open



Drawer w/Window Assembly

# **Specialty Trays**





Many custom cash tray devices are possible, such as flip top trays for frequent use where exterior Exposure to drafts and temperature are undesirable. In addition, oversized trays are large enough To pass cartons of cigarettes or large legal document packages.

# Voice Transmission

### British Style Talk-Thru













Swiss Style Talk-Thru









Clear Vision Talk-Thru

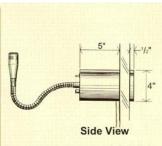






Thru-Glass Electronic Communicators





Four inch diameter aluminum anodized two-way electronic talk thru provides amplified clear voice communication. Standard model has gooseneck microphone for operator and plugs into 115 volt duplex outlet for continuous duty. Battery pack is available for DC operation. Indicate glass thickness when ordering. Requires 3 1/2" diameter hole. Class III bullet resistant protection.

# Window Styles

#### Voice Transmission Windows



# Drive-up Windows



### Laminated Glass Warranty

ARMI warrants its laminated glass for a period of five (5) years from date of manufacture against defective materials or workmanship which could result in delamination.

In the event that a laminated glass unit is found to be defective, ARMI will replace the unit without charge, FOB nearest shipping point to the place of installation, or at ARMI's option refund the purchase price of the glass. If ARMI elects to replace the defective glass, ARMI will not be liable for any other expenses involved in the removal of said unit, installation of replacement unit, or any other incidental or consequential charges. Further the warranty of the replacement glass will be limited to the remainder of the Warranty period of the original laminated glass.

ARMI assumes no responsibility for glass breakage, product failure due to improper usage, incompatibility with other coatings, sealants, gaskets, insulation, or any other materials; faulty installation or building construction or design, scratches or abrasions to the product due to abnormal weather conditions, or discharge caused by cleaners, solvents, acids, or any other chemical used on or around the glass. The manufacturer reserves the right to inspect in the field, any laminated glass that is alleged to be defective.

ARMI's warranty will be void in the event full payment is not received for goods and services within the agreed time frame.

# Simplex 5000 Limited Warranty

Kaba Ilco warrants the Simplex 5000 to be free from defects in material and workmanship under normal use and service for a period of two (2) years from date of purchase. Kaba Ilco will repair or replace, at our discretion, Simplex 5000 Locks found by Kaba Ilco analysis to be defective during this period. Our only liability, whether in tort or in contract, under this warranty is to repair or replace products that are returned to Kaba Ilco within the two (2) year warranty period.

This warranty is in lieu of and not in addition to any other warranty or condition, express or implied, including without limitation merchantability, fitness for purpose or absence of latent defects.

ATTENTION: This warranty does not cover problems arising out of improper installation, neglect or misuse. All warranties implied or written will be null and void if the lock is not installed properly and/or if any supplied component part is substituted with a foreign part. If the lock is used with a wall bumper, the warranty is null and void. If a doorstop is required, we recommend the use of a floor secured stop.

The environment and conditions of use determine the life of finishes on Kaba Ilco products. Finishes on Kaba Ilco products are subject to change due to wear and environmental corrosion. Kaba Ilco cannot be held responsible for the deterioration of finishes.

#### .Authorization to Return Goods.

Returned merchandise will not be accepted without prior approval. Approvals and Returned Goods Authorization Numbers (RGA Numbers) for the Simplex 5000 are available through our Customer Service department in Winston-Salem, NC (800) 849-8324. The serial number of a lock is required to obtain this RGA Number. The issuance of an RGA does not imply that a credit or replacement will be issued.

The RA number must be included on the address label when material is returned to the factory. All component parts including latches and strikes (even if not inoperative) must be included in the package with return. All merchandise must be returned prepaid and properly packaged to the address indicated.