Appendix A
Safety Devices and Installation

This document provides an overview of currently available safety devices intended to protect children from injury in and around the home. With any product, look for the Juvenile Product Manufacturers Association (JPMA) safety certification seal, or see if devices comply with Consumer Product Safety Commission standards.

Baby Gates

Baby gates are used to block doorways, to prevent children from entering certain areas of the home, and at the top and bottom of stairs to protect from falls. Baby gates should be used once infants begin to crawl, usually around the age of six months.

Baby gates come in many different styles, shapes and sizes. Some can be fixed width gates, or expansion gates adjustable from 24" to 96" wide. Gate heights can vary from 24" to 32" high. Gate materials range from plastic, wood, mesh to tubular steel. Many models swing in either direction, have easy one-hand latching systems, and can retract to smaller sizes when opened.

The most common baby gates are ones that are permanently mounted and pressure gates. Regardless, all baby gates should be checked for the JPMA Certification seal, which signifies compliance with ASTM F 1004 standard. Never use accordion style gates. Gates without the JPMA-Certified seal can be hazardous.

Safety gates installed at the top of stairs should be permanently mounted directly to wooden frames. For all other situations, moldings (either 1x2" or 1x3") are required to properly secure gates. Gates should be attached to banisters or walls with mounting hardware attached to moldings. All gate types and installation instructions vary, such as gate latching systems that require the gate to be square with the wall or banister. Check with the manufacturer’s recommendations before attempting to install any gate.
If attaching to banisters, moldings can be secured with four to five cable ties. Gates should be mounted no more than 3 1/2 inches from the floor to prevent entrapment of children. Permanent installation gates require a drill or screw driver, and the hardware or mounting brackets provided by the manufacturer.

Pressure gates are ideally suited for a door frame between rooms and do not require permanent installation or hardware. Pressure gates with expanding pressure bars should be installed with the bar side away from the baby and anchored securely in the doorway. Pressure gates can also be used as portable travel gates.

**Latches, Locks and Door Safety Devices**

Latches are used for doors, cabinets and drawers, or anywhere to prevent entry or access by children. Most locks and latches only function when they are set, although some automatically reset or close. These safety devices should be installed as soon as infants start crawling.

**Doors**

Every door that opens outside, to a balcony, porch, deck or stairway should be kept closed and locked or latched. This includes attic, basement, garage, workshop, kitchen, bathroom, laundry room, sewing room, closet, cabinet and storage room doors.

Each door to an off-limits area should be equipped with a back up safety latch, positioned no less than five (5) feet high and out of children’s reach. The most practical locks are the kind that can be opened by adults from either side of the door, such as door top locks. This door latch rests on top of the door and there is a peg that mounts on the door frame. To lock, slide the latch around the peg. To release, slide the latch in the opposite direction. The lock fits most interior doors measuring up to 1 5/8" thick. Installation requires a drill and screwdriver. When installing, check to make sure the device moves freely when the door is closed. To properly align the peg, place the
device over the door, close the door and determine the best location where the latch will work. Place a mark, pre-drill the hole and then attach the peg with hardware provided. The latch should be placed as close as possible to the edge of the door opening side.

A door knob cover prevents children from turning the door knob to enter, or locking themselves in a room. The cover fits most standard style doorknobs. Adults can open doors by tightly gripping the cover and pushing the two points on each side of the cover while turning. Children cannot open the door because it requires more strength than most have to grip the cover and turn. No tools are required for installation, but the attaching device must be securely fastened.

Glass sliding doors should be made of safety glass and should be equipped with a baby-proof bar or latch. Screen doors may also need a safety latch.

A flip lock allows closet doors or any door which swings into a room to remain closed. The flip lock needs a 1/8” space between the door frame and the door. The lock is attached with a drill, screwdriver and hardware provided.

Door locks can be used to prevent children from opening bi-fold doors. The plastic lock fits over the hinged area on bi-fold doors, thus preventing the doors from opening. No tools are required for installation.

A plastic door positioner keeps the door firmly positioned and prevents it from closing on children’s fingers. To use, place the device on the floor, push the door over the stop to lock the door into place, then step on the lock to release the door. No tools are required for installation.

A safety door stop fits over the top or side of the door, leaving a space so fingers don’t get caught between the door and the frame. The device prevents the door from closing. No tools are required for installation.
An emergency door lock release prevents children from being locked inside the bathroom or bedroom. The door lock release keeps the door locked with normal use. If a quick entry to a room is required, a strong, forceful push will open the door. This device works only on wooden doors with a standard inner door catch. To install, remove old door catch and hollow out area where the latch will be placed, using caution not to break out the area where the original door catch was placed. This can be accomplished with a screwdriver or chisel and hardware provided.

**Drawer and Cabinet Latches**

All cabinets and drawers accessible to children, containing cleaning products, alcohol, toiletries, medicines, plant supplies, knives, and other sharp tools and utensils must be locked or secured.

Drawer latches can be a simple spring loaded, push-button one-piece design that prevents toddlers from accessing drawers or cabinets, or a two-piece latch that allows the drawers or cabinets to open about 1", then locks them in place so they won’t close on children’s fingers.

Most latches require installation with a drill and/or screwdriver.

Locks can also be used on side-by-side closet and cabinet doors. These locks secure cabinets with double doors or with side-by-side pulls. By sliding the lock over door handles or through door pulls, the latch is then moved to its tightest position. To release, push in on the lock’s side buttons. No tools are required for installation.

Medicine cabinet locks prevent glass or mirrored doors from sliding. To open, flatten the curved ends, and the sliding door simply slides over the lock. When the sliding doors are closed, it locks automatically. Sliding doors must have a space of less then 3/8" between them. The lock attaches to the glass mirrors with double-sided adhesive. The latch does not adhere well to certain painted wood surfaces. For other style medicine cabinets, an all purpose safety locking strap can also be utilized to prevent the opening of doors that open outward.
Appliance Latches
All purpose locking straps can also prevent children from opening appliances such as refrigerators, freezers, microwave ovens, trash compactors and washing machines. The two-piece latch has a one handed adult release that attaches with two-sided adhesive to the sides or tops of appliances. However, it is not intended for ovens or appliances which give off heat. No tools are required for installation, but the surfaces must be clean and dry before applying the device.

Electrical Devices
The only outlet plate designed which meets an Underwriters Laboratory standard is a sliding outlet cover that closes automatically when a plug is removed. The outlet is always covered, preventing children’s fingers or other objects from entering the electrical socket. To use the outlet, insert a plug slightly and then slide the spring-loaded cover over the socket to the right. The covers come in 2-prong, 3-prong and decora (two hole plate with bottom and top screw) styles. To install, remove existing cover and install new outlet cover with a screwdriver, checking to make sure the sliding outlet cover snaps shut automatically.

Shock locks are outlet caps connected to a flexible strap that attaches onto outlet plates. This device eliminates children’s access to dropped or misplaced caps. One device covers a standard two receptacle outlets by simply removing the existing screw, placing the attachment hole of the strap over the outlet cover and reinserting the screw with a screwdriver. Once installed, place the caps of the device into the empty outlet sockets.

If an outlet has appliances in use, a plug guard provides a cover that completely encloses outlets and plugs, and allows threading of the cords through a bottom opening. To install, remove the existing screw, place the frame over existing plate and insert the screw provided. Plug in the power cords and place the cover box on the installed frame by squeezing the sides together. No other installation is required.
A power strip safety cover is a solution for cords from computers, answering machines, kitchen appliances and power tools. The device holds any standard single row power strip and can accommodate many types of plugs, including most transformers and heavy duty three-pronged plugs. The cover snaps shut with four child-resistant latches, and a separate latchable door allows adult access to the on/off switch. No tools are required for installation.

Other electrical safety devices include cord concealers which store up to 8' of electrical cord inside a durable plastic case. The cord winds up around an inside reel and is held in place by tension. No tools are required for installation.

A cord control kit, is flexible plastic tubing which organizes cords and wires and conceals them from children. The tubing is available in 1" or 1 1/2" diameter, and has a full length opening so wires and cords can easily be inserted. Tubing can be cut to appropriate size with scissors. No tools are required for installation.

Other devices to protect against electrical shock include a VCR lock and VCR guard to prevent fingers or objects entering the VCR. The lock fits snugly into the VCR tape deck opening. The guard covers the front panel of the VCR and installs by simply sliding the guard under the VCR. No tools are required for installation.

**Bathroom Devices**

The bathroom is potentially one of the most dangerous rooms in the home. Keep the bathroom door latched when not in use, and never leave an infant alone in the bathroom.

**Toilets**

Keep toilet lids closed and use toilet latches to guard against drowning. Toilet or potty latches may have either a one or two point latching systems. The one point latching system simply rotates the latch out of the way to open the lid. Lower the lid
and the latch snaps back automatically. This device is installed by using the double-stick tape provided and cannot be used on padded lids. The two-point system requires adults and older children to push in the side and bottom at the same time to lock. To release, push up on two buttons on the side of the latch. These devices mount easily to standard and padded toilet seats.

No tools are required for installation, but the area should be disinfected and allowed to dry prior to adhering adhesives to the toilet.

**Bath Mats and Decals**
Use non-slip mats or non-slip decals to prevent falls in bathtubs and showers. When not in use, hang the mat on the side of a tub to dry and minimize development of mold and mildew.

**Bath Thermometer**
Set the water heater thermostat to 120 degrees F or below. Bathtub thermometers (floating or cards) measure the temperature of bath water, usually around 98 °F.

**Bathtub Spout Cover**
A cushion on the tub spout protects children from bumps. The sleeve fits securely over the tub spout and has a top opening for the shower diverter switch. The device can be used for just about any tub spout. If the bath spout is too small, attach or tighten with a cable tie.

**Stove Devices**
A stove guard is a heat resistant polycarbonate plastic shield that fits on the stove to prevent children from pulling down hot pots, control hot grease splatters, and touching hot burners. The device installs on the front, side or top of standard stoves with a high-temperature adhesive. No tools are required for installation, but all surfaces must be cleaned with a degreaser and allowed to thoroughly dry. Once clean and dry, remove backing of doubled sided adhesive and press the device onto the stove surface. Follow manufacturers’ instructions and observe the 24-hour adhesive bonding time.
Stove knob covers prevent children from turning on stove burners. These clear plastic covers fit on both gas and electric stove knobs up to 2 1/4" diameters. To install, remove stove knobs and place the bottom of the device over the stove knob area. Replace the stove knob and place the clear plastic cover over the stove knob and squeeze to lock the cover into place.

An oven lock helps prevent children from opening conventional and microwave ovens. It attaches to the front and side of the oven with a special heat-resistant adhesive. To unlock, squeeze the two prongs and swing out the front part of the latch. No tools required for installation, but clean surfaces (oven door and side) where the device attaches with a degreaser and allow surfaces to dry thoroughly. Remove backing of doubled sided adhesive and press the device onto the surface.

**Window Devices**

Infants can fit through a small open gap in a window less than four inches high. Install simple window latches and guards on all windows, especially those above the first floor. Certain cities have laws concerning windows, so check city codes/ordinances.

**Window Cords**

A cord wrap or cord cleat keeps long blind cords out of children’s reach. The cord wrap or cleat is mounted to the wall or window frame, which allows the cord to be wrapped around the object at a minimum height of 5 feet. To install, attach wrap or cleat to the wall or window frame with the use of a screwdriver and/or drill.

A blind cord shortener is commercially available to roll window blind cords up or down. An interior spool draws out or retracts the cord at the push of a button. The device fits vertical and horizontal blinds. No tools are required for installation. Follow manufacturers’ instructions.
Blind cord windups are made of plastic and store excess blind cord inside a plastic case. To install, separate the two parts of the device and wind the cord around the inside spool. Reattach the two parts of the case and store the cord out of children’s reach. No tools are required for installation.

Safety tassels are installed by cutting the cord above the end tassel (the item that looks like a small wooden or plastic thimble). Remove the equalizer buckle, then add new tassels for each cord, or replace it with a safety break away tassel. Do not retie the cords in a knot, as this only recreates a new loop.

**Window Guards**

Window guards come in a variety of sizes for double hung and sliding windows. Mount the device in the frame beneath the upper window panel or vertically for sliding windows. To install, align the guard so that it is placed no more than 3 1/2" from the bottom of the window sill. Using a drill and screwdriver, attach with the screws provided.

Stopping devices can also be installed on the inside of window frames to prevent the window from opening more than 4 inches. Requires the use of a drill and screwdriver for installation.

**Other Safety Devices**

**Furniture**

Furniture braces prevent injuries from furniture tip overs. These devices can be either durable nylon straps with a heavy duty metal buckle or metal brackets that attach to the furniture and the wall.

It is recommended that two straps or metal connectors be used for each piece of furniture. Most straps hold more than 200 lbs. of pressure and can be removed for easy cleaning. Attach the devices to wall studs and an area on the furniture. Installation requires the use of a drill and screwdriver.
**Door Stop**
A one-piece-door stop is safer than conventional door stops with springs or tips that can be hazardous to young children. Position the door stop in an appropriate location on the baseboard or bottom of the door. Installation requires a drill and wrench. To install, drill a pilot hole, insert the door stop and tighten in place using a wrench.

**Fireplace**
Fireplace hearth gates include interlocking sections that prevent children from gaining access to the fireplace hearth. Most gates have a one-handed adult release and open in either direction. Follow manufacturers’ instructions; installation varies depending on fireplace design, construction and layout.

Fireplace padding is a soft padded cushion to protect children from rough edges and sharp corners on hearths. With an adjustable, sturdy metal frame that’s covered with fire resistant padding, the cushion stays in place when the fireplace is used. The device works best on brick or stone fireplaces with square corners. A screwdriver is required for installation. Follow manufacturer’s instructions based on the type of fireplace design.

**Protective padding**
Protective padding devices include wrap around cushions to protect children from sharp corners and hard edges on dining room, coffee and end tables. Edge cushions and corner cushions attach with double-sided adhesives to glass, formica and tile. No tools required for installation, but clean surfaces with a degreaser and allow the surface to dry thoroughly.

**Small Parts Tester**
A small parts tester ("choke tube") is an easy way to test the size of small toys and other objects. 16 CFR Section 1501 requires that toys and objects for children less than three years of age not have parts that fit completely into the tester. If any object fits completely in the tester, it is small enough to be a choking hazard. Dimensions are 1" X 2 1/4" with a 1 1/4" diameter opening.
First Aid Kit
A first aid kit contains a complete assortment of products for emergency use. It should contain adult and child size bandages, alcohol cleansing pads, antiseptic cleansing wipes, aspirin, burn relief gel packs, roll bandages, latex gloves, finger splints, first aid tape, instant cold compresses, scissors, patch bandages, sponge dressing pads, sterile eye pads, sting relief pads, trauma pads, triple antibiotic ointment packs, tweezers, ipecac syrup and activated charcoal.

When someone has swallowed a poison, the Poison Control Center (PCC) or a doctor may advise to make the victim vomit by giving ipecac syrup. Ipecac syrup can be purchased at local drug stores. It usually comes in a 30-ml bottle. Two tablespoons followed by two glasses of water, are the normal doses for children older than 12 years of age. For children ages 1 to 12, the normal dose is one-teaspoon followed by two glasses of water. The victim usually vomits within 20 minutes.

For caustic poisons, the PCC or doctor may advise to the use of activated charcoal. Activated charcoal absorbs the poisons. Activated charcoal can be purchased in both liquid and powder forms from drug stores. Before use, the powder should be mixed in water to form a solution that has the consistency of a milk shake. For a person 12 years of age or older, follow the directions on the bottle.

Stairs, Balconies and Landings
Clear banister shields made of shatterproof plastic are used for indoor balconies lofts and landings. The material is flexible enough so it curves around a banister and can be easily trimmed to any length with scissors. Using a hole punch, attach one side of the plastic to a banister or wall using cable ties. Then unroll the plastic, punch holes and attach to the banister in approximately two to three foot increments, secure using cable ties. Make sure the plastic is stretched tight when making holes for attaching the cable ties. If a space exists at the
bottom of the banister, greater than 3 1/2 inches off the floor, secure the plastic to the floor with eyelet screws and cable ties. This technique requires installation with a drill, screwdriver, pliers and hole punch.

Deck netting is made of plastic mesh that’s designed for outdoor use. The netting can be attached with screw eyes and cable ties and can be easily trimmed to size with scissors. Attach one side to the banister or wall. Then unroll netting and attach to banisters in approximate two foot increments, making sure the netting is stretched tight before attaching the cable ties. If an opening exists at the bottom of the banister greater than 3 1/2 inches off the floor, secure the netting to the deck with eyelet screws and cable ties. The netting requires installation with a drill, screwdriver and pliers.

Sheets of plexiglass 0.08 to 0.125 inches thick can be attached to a banister to create a solid barrier for balconies with openings more than 3 1/2 inches between banister railings. Measure banisters to determine size of plexiglass. Measure the length and height of the banister in several areas, as this distance may change over the length of the banister. To determine size of plexiglass sheets, subtract 0.25 inches from both the length and the height measurement of the banister. This spacing allows for expansion and contraction of materials. To mark holes for attaching the plexiglass, place the pieces in their approximate final positions. Use a magic marker to mark where the holes will be drilled. Use an acrylic drill bit to make the holes. Attach plexiglass with cable ties or screws.

**Warning Devices**

**Smoke and Fire Alarm**

New lithium-powered battery operated smoke alarms last up to 10 years, and provides a new feature, a “hush button.” This special silencer button decreases sensitivity for 10 minutes to reduce nuisance alarms. The smoke alarm sounds a loud 85 decibel alarm that responds immediately to smoke or fire, and has an indicator light that flashes every 45 seconds during normal operations. A low battery signal beeps when the battery needs replacement.
A conventional smoke alarm uses the same principle, but only requires a regular 9-volt battery that should be replaced every year. It is recommended that when clocks are changed in the fall for daylight-saving time, that smoke alarm batteries also be changed. All smoke alarms must be replaced every 10 years.

Smoke alarms should be installed on the ceiling or wall (not in the kitchen or bathroom), with the edge of the alarm no closer than 4" from the wall or ceiling. Do not place smoke alarms in direct line with air vents or near openings that could divert smoke away from the alarm. Depending on the wall or ceiling materials, a drill and screwdriver will be required for installation.

**Carbon Monoxide Detector**

Carbon monoxide detectors operate on batteries or plug into a 120-volt electrical outlet. All CO detectors continuously monitor the air for carbon monoxide. CO detectors should be installed on the wall or ceiling in utility or sleeping areas.

Some detectors have a self-test feature, test/reset button and a digital readout of the highest CO levels detected. CO detectors must meet the requirements of Underwriters Laboratories Standard 2034. Detectors that meet the UL standard measure both high CO concentrations over short periods of time, sounding a loud 85 decibel alarm, and low CO concentrations over long periods, activating an intermittent warning alarm.

For devices that do not plug into an electrical outlet, wall or ceiling mounted CO Detectors require a drill and screwdriver for installation.
Gun Locks

Gun locks are safety devices designed to prevent the unauthorized use of firearms. When correctly installed and secured on a firearm, a gun lock prevents that firearm from being discharged without the lock first being removed.

The Safe T Lock is designed to be used on semiautomatic pistols, remove the magazine and empty the chamber. Lock the slide back and insert the gun lock in the pistol’s ejection port. Lock in place with the turn of a key. Since the chamber can’t fully close, the firearm cannot be fired.

The Safe T Claw is designed as a universal gun lock, for all types of guns, including long barrel rifles and shotguns) and handguns (pistols and revolvers). Unload the firearm, insert the gun lock into the empty chamber and lock in place with the turn of the key. Since the chamber can’t fully close, the firearm cannot be fired.