

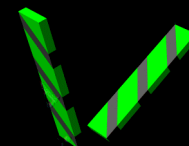
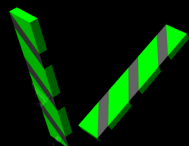


A MOE University Course

**MOE U courses are made available for the
benefit of the FIRST robotics universe by:**

The Miracle Workerz, FIRST Team 365

**First State Robotics, Inc.
Wilmington, Delaware
www.moe365.org**





SAFETY & SECURITY

at

Beech Street Engineering

**Betty Jo Turner
D&Z Security
Site Supervisor**

**Sue Hilts
DuPont
Site Safety**

Access



- ◆ You must enter and exit the site at the Lower Gate House.
- ◆ All students must sign in and out. No Exceptions
- ◆ All Bags are subject to search for contraband and unauthorized property.
- ◆ Please park your vehicle in the lot near the Lower Gate House

FIRE ALARM SIGNAL

If you discover a fire, pull this
plant fire alarm.
Then stay put until help arrives.

FIRE PULL BOX

LOCATED HERE



HVF - National Industries Plant Co.

ANCHORAGE ST.

GUARD HOUSE
(Alternate Command Point)

Key Box

OAK ST.

BEECH ST.

Snow Equipment
Storage Area

MUSTER
LOCATION
SAFE ZONE

Recycle
Area

TRUCK ROUTE

MARYLAND AVE.

SOUTH ST.

BIRD ST.

BLDG

Patio

CS #1

GUARD HOUSE
(Command Post)

NS #1

W/S PARKING

Fire Pump House

MUSTER
LOCATION
SAFE ZONE

Visitor Parking

MUSTER
LOCATION
SAFE ZONE

MUSTER
LOCATION
SAFE ZONE

W/S

Visitor/Handicapped
Parking

Beech St. Center
EMERGENCY MAP

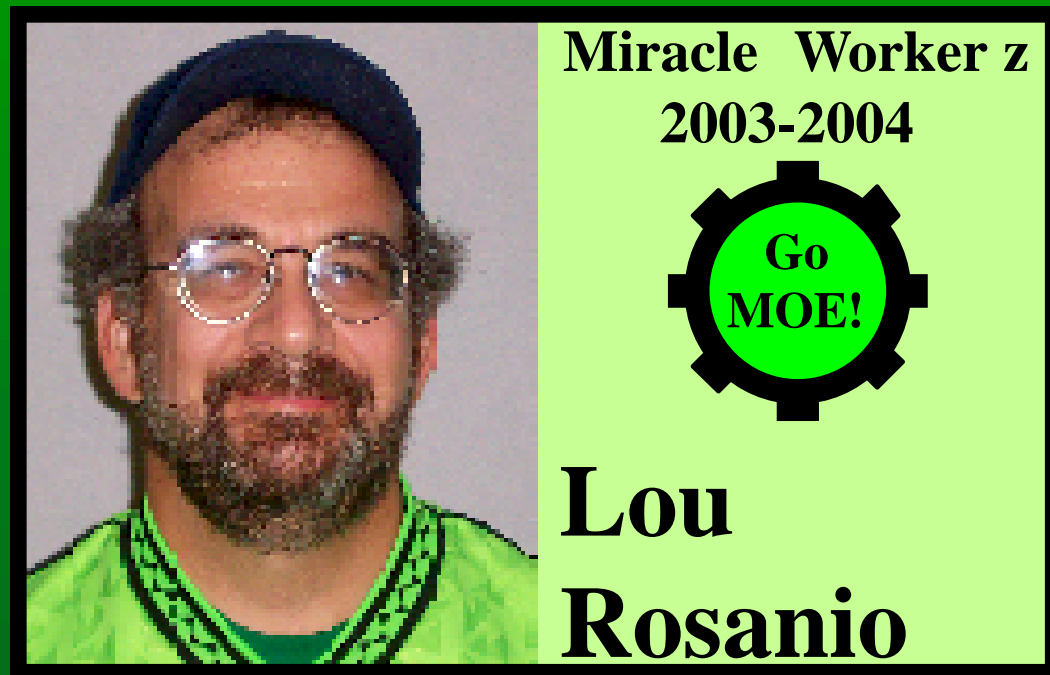
Lower Gate House
Entrance/Exit &
Sign In

Entrances/Exits

X-Do Not Use

Badges

- ◆ MOE badges are to be displayed at all times.



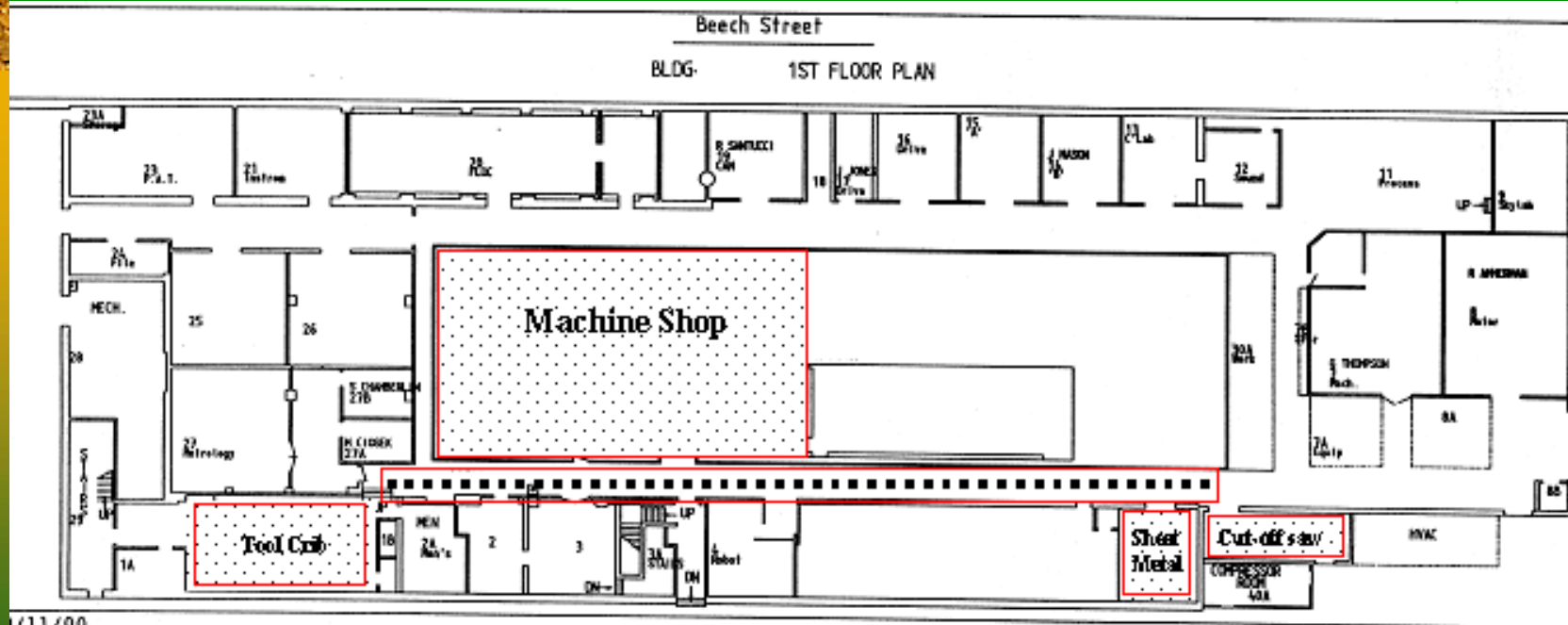
Badges

- ◆ If you forget your badge the Security Officer will issue you a temporary one.



Authorized Areas

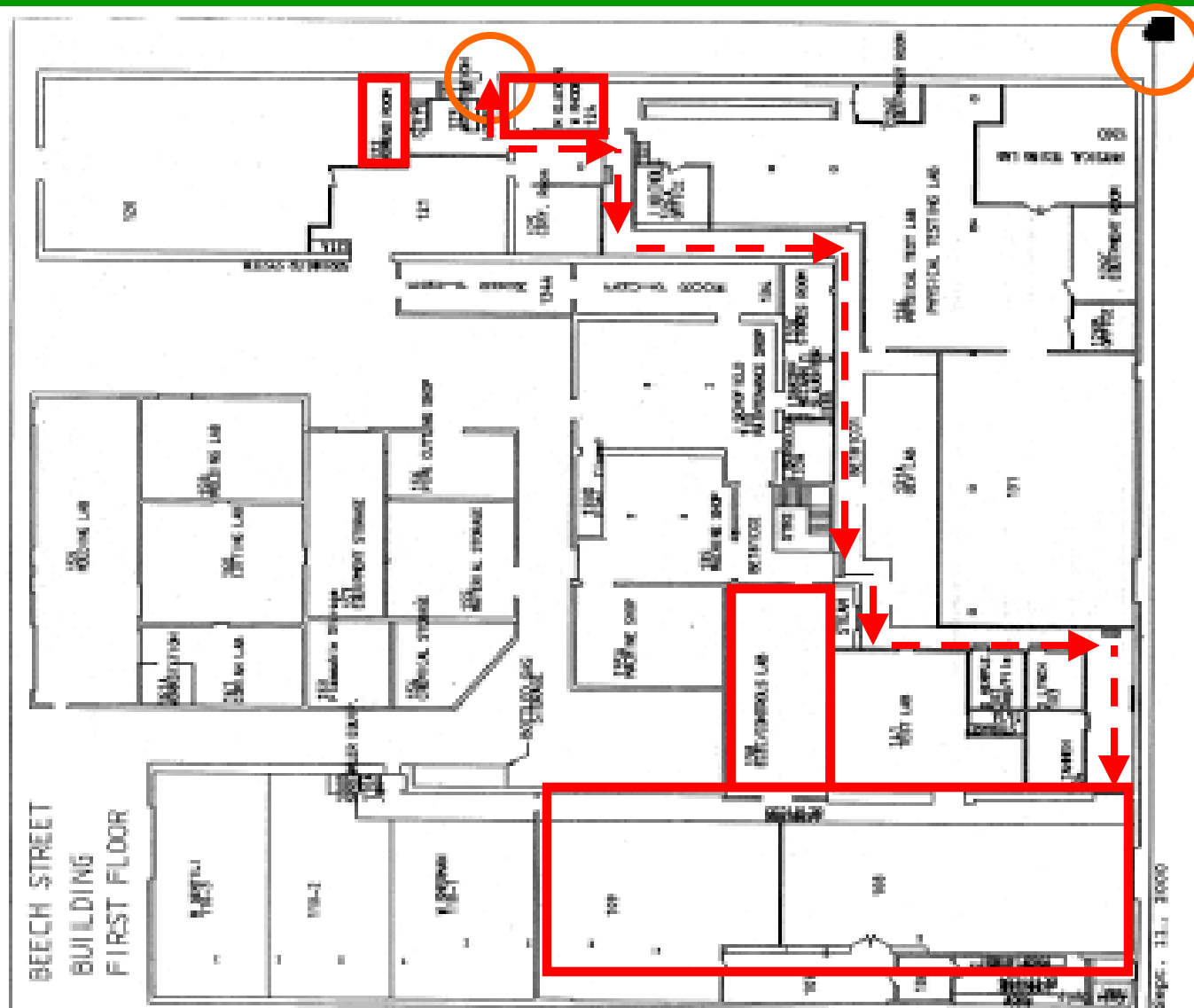
- ◆ You are only authorized to be in the following areas.



7/11/00



Authorized Areas



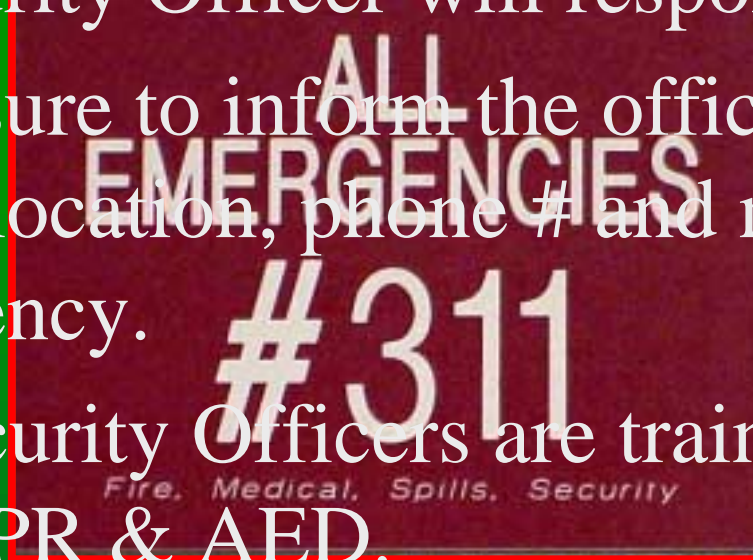


Authorized Areas

- ◆ You are also allowed access to the cafeteria in Building 16
- ◆ If you are found in an unauthorized area, you will be **BANNED FROM BEC**. No Exceptions.

Emergencies

- ◆ A Security Officer will respond.
- ◆ Make sure to inform the officer of, your name, location, phone # and nature of the emergency.
- ◆ All Security Officers are trained in First Aid, CPR & AED.



Emergencies

- ◆ In the event of an evacuation alarm immediately evacuate the building and report to your muster location.



FIRE ALARM SIGNAL

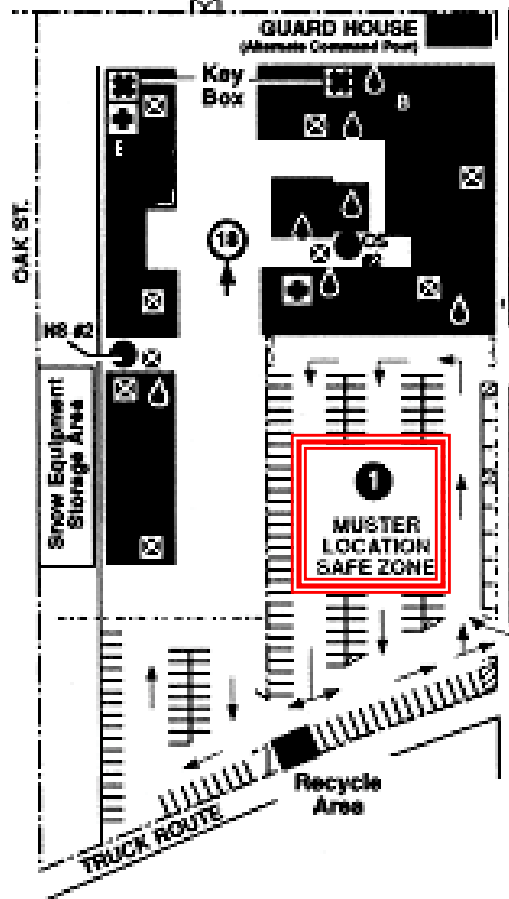
If you discover a fire, pull this
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Then stay put until help arrives.

FIRE PULL BOX

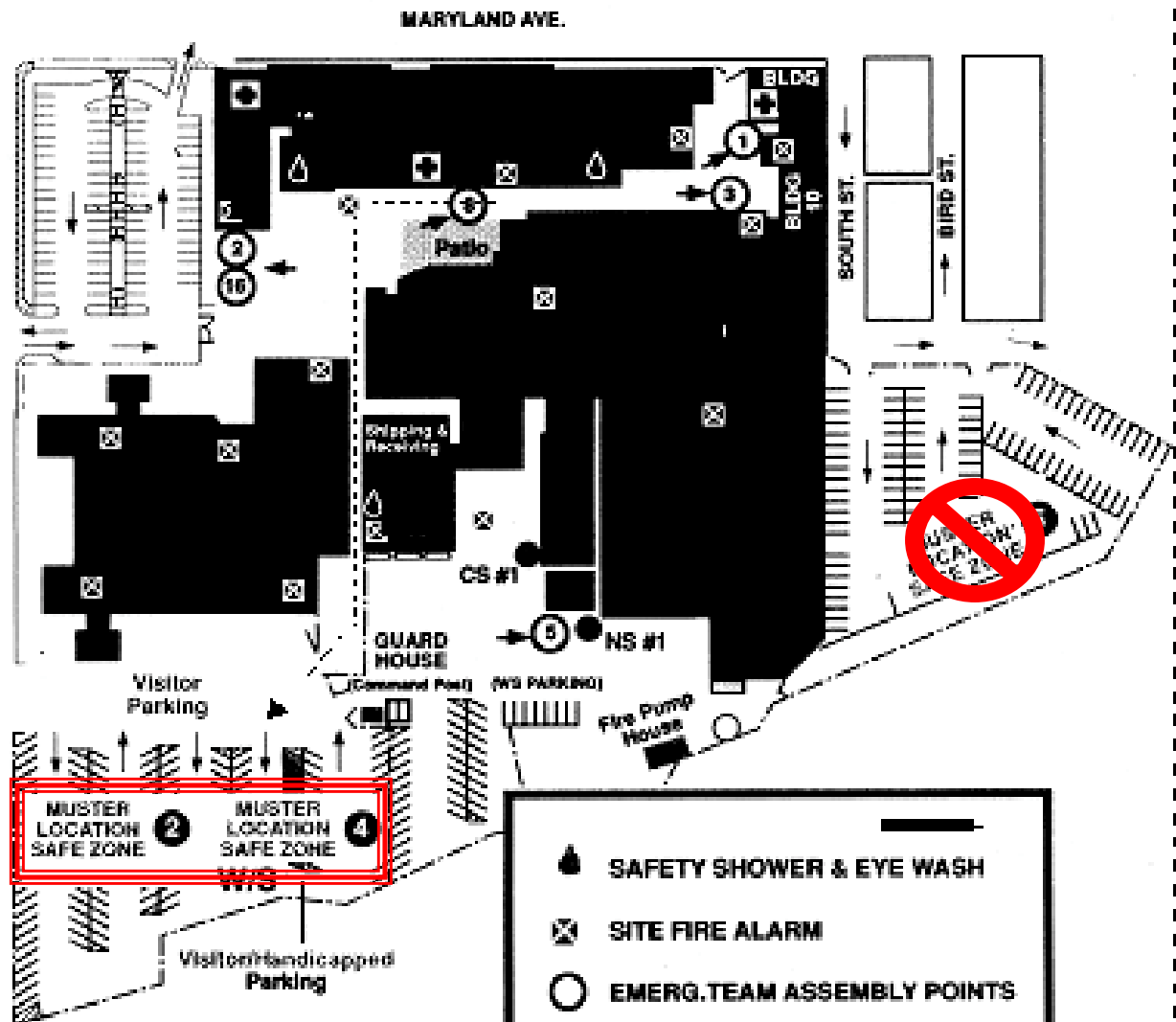
LOCATED HERE

HVF - Industrial Industries/Fiber Co.

ANCHORAGE ST.



BEECH ST.



Beech St. Center

EMERGENCY MAP

10/20/92

- SAFETY SHOWER & EYE WASH
- SITE FIRE ALARM
- EMERG. TEAM ASSEMBLY POINTS
- MEDICAL
- GATE KEY (EVAC. ONLY)
- FIRST AID CABINET



SAFETY - WHAT YOU NEED TO KNOW

- ◆ Report all Incidents, Injuries & Illnesses
- ◆ Know what to do in an Emergency
- ◆ Personal Protective Equipment (PPE)
- ◆ Identify Hazards, Job Plans, STA
- ◆ Material Storage & Housekeeping
- ◆ HazCom (Hazard Communication)
- ◆ Portable Tools



SAFETY - WHAT YOU NEED TO KNOW

- ◆ Designated Eating & Drinking Areas
- ◆ Remember- Put Your Mind in Gear Before Putting Your Body in Motion!
- ◆ Take Two
- ◆ Misc.



GENERAL SAFETY RULES

- ◆ Safety glasses must be worn in the robot lab, playing field, and when performing any work.
- ◆ Food is not allowed in the robot build area.
- ◆ No horseplay
- ◆ No running on site
- ◆ Wear proper PPE for the task.



The ABC's of Safety

"A" STANDS FOR ATTITUDE

A positive, safe attitude means staying alert, focused on the task at hand, following all applicable safety rules/procedures, not horsing around on the job



The ABC's of Safety

"B" STANDS FOR BEHAVIOR

**Following established procedures,
refusing to take short-cuts, asking
questions when you need more
information or do not fully understand,
using the correct PPE for the job-
-all of these are SAFE BEHAVIORS.**



The ABC's of Safety

"C" STANDS FOR CONTROL

CONTROL means accepting responsibility for making your work area a safe place to be.

You can keep your surroundings safe from potential hazards if they are clean and orderly.

Keep machines, tools and other equipment in good repair, report or clean-up spills, leaks, etc. promptly, and make sure that walkways are free from obstacles.



Eye Protection

WHAT CAUSES EYE INJURIES?

Flying particles or sparks striking the eye (60%).

Contact with chemicals (20%).

Objects swinging from fixed positions (20%).

HOW CAN EYE INJURIES BE PREVENTED?

Safety glasses with side shields must be worn in the robot build area and playing field. There are NO EXCEPTIONS!!!!!!

Safety glasses must have Z87 rating. Regular prescription glasses are not acceptable.



POWER TOOL SAFETY

THE FOLLOWING GENERAL PRECAUTIONS SHOULD BE OBSERVED BY POWER TOOL USERS:

- All power tools must be plugged into a GFI
- Never carry a tool by the cord or attached hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- Disconnect tools when not in use, before servicing, and when changing accessories such as blades, bits and cutters.
- Secure work with clamps or a vise, freeing both hands to operate the tool.
- The proper apparel should be worn. Loose clothing, ties or jewelry can become caught in moving parts.
- Utilize the designated PPE (Personal Protective Equipment) to reduce hazard exposures.



HAND TOOL SAFETY

Hand tools are non-powered. They include anything from axes to wrenches. The greatest hazards posed by hand tools result from misuse and improper maintenance.

Saw blades, knives, or other tools must be directed away from employees working in close proximity. Knives and scissors must be sharp. Dull tools can be more hazardous than sharp ones.

Appropriate personal protective equipment, e.g., safety goggles, gloves, etc., should be worn to reduce hazards that may be encountered while using hand tools.

Floors must be kept clean and dry as possible to prevent accidental slips with or around dangerous hand tools.



HAND SAFETY

It has been estimated that in a given year there will be half a million accidents in which hands are severed, crushed, mangled or burned. The *National Safety Council* points out that hand injuries account for nearly 25% of all industrial injuries.

The following guidelines will help to insure that your hands stay injury free.

- Beware of pinch points; train yourself to recognize pinch points and avoid placing your hands and fingers in such hazardous spots.
- Expect the unexpected when using wrenches, persuaders, bars, and other hand tools with which you expect resistance. Anticipate that the tool might slip or the object to which pressure is being applied may suddenly give way. Failure to anticipate such a move could result in painful and serious injuries to hands and fingers.



HAND SAFETY

- Inspect tools--check to see if they are in good condition and safe to use. A wrench with worn or spread jaws, a mushroom headed chisel, a worn screwdriver, or a hammer with a cracked handle are examples of defective tools which are frequently the cause of injuries to hands and fingers.
- Be mindful when closing doors and other "hinged" devices; keep hands and fingers clear. It's a safe bet that each of us has caught a finger in a door at one time or another. Attention to hand placement can prevent this type of injury. Also, watch your children's fingers when near the family car.
- Use gloves to protect your hands during all work activities which involve handling of materials or tools. They are your last line of defense from sharp edges, splinters burns, chemical contacts and a host of other injury sources.
- Use a tool for the job instead of your hand. Whenever possible, a tool should be used to complete the task rather than your hand.



**Your Safety and
Security is our #1
priority.**

