



*"Committed To Safety"*



**DEE CRAMER**  
**HEATING COOLING SHEET METAL**  
*Dedicated People. Delivering Quality.*

4221 EAST BALDWIN ROAD · HOLLY, MI 48442  
**810-579-5000**



## TABLE OF CONTENTS

	PAGE
Welcome	1
About the Booklet	2
OSHA	2
General Safety	3
Head Protection	3
Eyes, Ears, Face & Neck	4
Fingers, Hands & Wrists	4
Respirators	5
Clothing & Work Shoes	6
Lifting	6
Hand tools	8
Housekeeping	9
Fire Protection	9
Cranes	10
Ladders	13
Scaffolds	14
Fall Protection	15
Aerial Lifts & Guarding	16
Lock Tagout	17
Confined Spaces	17
Welding	18
Vehicle Safety	19
Hazard Communication	20
Electrical Work Practices	20
Accidents Are Caused	21
If You Have An Accident	22
Daily Jobsite Work Area Inspection	23
Emergency Evacuation	24
Our Goal	24
Notes	25
Safety Quiz	26
Acknowledgement	27

“SAFETY BEGINS WITH ME”

## **WELCOME**

To All Employees...

No job is so important it can't be done in a safe and healthy manner. People are our most important resource. Their safety and health is our greatest responsibility. Every employee is entitled to a safe and healthy work place. These statements also reflect the stated purpose of the Occupational Safety and Health Act (OSHA) which is, "...that employees shall be provided safe and healthful work environments free of recognized hazards". We will commit resources to the prevention and control of unsafe and unhealthy working conditions, to provide personal protective equipment (PPE) where needed, and training of all employees. Our goal is to involve each and every employee in a comprehensive program to plan safe work, assess known and potential hazards, and to prevent or control these hazards. Comments by employees for improvement of our program are encouraged and may be expressed to your supervisor, the safety director, or the president any time to help improve and promote a safe work environment.

Consider this booklet as a tool to be used every day with the same skill as you use the other tools of your trade.

Any suggestions you may wish to make to further improve our safety will be welcomed.

## **ABOUT THE BOOKLET**

This booklet has been prepared in an effort to make you aware of the hazards inherent in construction. As you know, the rules of safety as outlined in the following pages cannot possibly cover all situations that may be encountered. It is your responsibility to abide by these rules, not only because they are in this booklet, but because you want to avoid accidents as much as we do.

## **OCCUPATIONAL SAFETY AND HEALTH ACT (MIOSHA & OSHA)**

It is our policy to be in voluntary compliance with the Occupational Safety and Health Act of 1970. We subscribe to the intent and purpose of the Act and endeavor to comply with the rules and regulations adopted by OSHA.

The Occupational Safety and Health Act outlines the duties and responsibilities of the employer and employee. We expect each employee to comply with the section of the Act, which states:

**“Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued under the Act that apply to his own actions and conduct on the job.”**

## GENERAL SAFETY

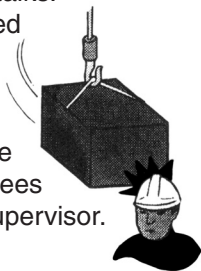
**Standards are a necessary part of our life.** They help us to do our job and to understand each other.

Accidents happen without warning and many are caused by lack of knowledge, distractions and thoughtlessness.

1. Safety equipment such as hard hats, safety glasses, hearing protection, etc., must be worn at all construction sites according to our company safety policy.
2. Only those authorized may operate or repair machines or equipment.
3. The use of intoxicants would be a menace to all and will not be tolerated.
4. All accidents, injuries, fires, spills and near miss incidents no matter how slight shall be reported to your Foreman or supervisor immediately.
5. Construction is serious business in which horseplay has no place.
6. Rings and all other jewelry can cause potential safety hazards and should be removed for your safety.
7. **Accident Prevention is part of your job.** Report any unsafe condition or act to your supervisor at once. It is up to each and every one of us to eliminate the conditions that lead to an accident or injury.
8. Attendance is required at all tool box talks.
9. Personal cell phone usage is prohibited except during breaks and lunch.

## HEAD PROTECTION

During work hours, all field employees are required to wear hard hats. Other employees will wear hard hats as directed by your supervisor.



## **EYES, EARS, FACE AND NECK**

### **Eye Protection**

All employees must wear approved safety glasses during work hours in all work areas except offices. Additional eye and/or face protection such as goggles, face shields, and welding shields are required at all times when engaged in operations such as welding, burning, grinding, chipping, drilling, and driving nails.

### **Ears**

Approved hearing protection must be worn as specified in all posted areas and while working with or around high-noise-level producing machines, tools, or equipment.

### **Face and Neck**

Face shields must be worn when performing grinding operations or when using power saws and other tools/equipment that discharge solid material.



Welding can cause arc burns. Keep your neck and face suitably protected.

Loose neckties, jewelry, or frayed shirts are not to be worn around machinery.

## **FINGERS, HANDS AND WRISTS**

### **Gloves**

Suitable gloves should be worn when handling materials and equipment.

## Tag Lines

Tag lines are used to control loads and to keep individuals away on all lifts made by mechanical equipment - **HANDS OFF LOAD!**

Do not wrap tag lines around your hands or body.

## Restrictions

Materials should be secured when using power tools. Do not depend on your ability to hold against the power of a machine.

Rings and other jewelry are discouraged and should be removed while using power tools.

## RESPIRATORS

Respiratory equipment may be required in areas where health hazards exist due to accumulation of dust or fumes.



Appropriate respirators will be provided and are to be used for protection against excessive concentrations of dusts, mists, fumes, or vapor and gases, or from oxygen deficiency.

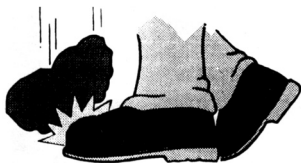
If you are required to use respiratory protective devices, make sure you have been fitted, tested, and instructed in their use.

Make sure that all respiratory protective equipment is inspected regularly and is maintained in good condition. Respiratory equipment must be stored in a dust-proof container between uses.



## **CLOTHING AND WORK SHOES**

Wear sturdy work shoes, safety shoes are desirable. Sneakers are not permitted.

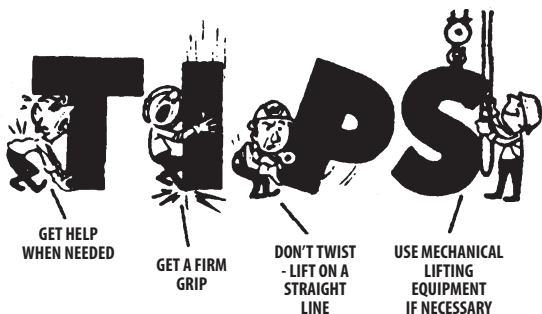
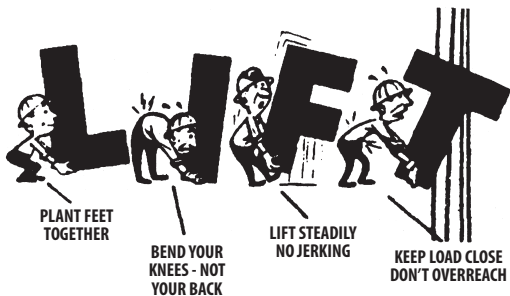


You must wear clothing suitable for the work you are doing. Minimum attire is long pants and a T-shirt.

## **LIFTING**

Regardless of our job or craft, we must lift and move objects from “here to there”. By observing some simple precautions, you can avoid injury or make your work easier.

1. First, make a preliminary “lift” to be sure that the load lifts easily with your lifting capacity. If it does not, get help.
2. When lifting, get solid footing. Stand close to the load and bend your knees. Keep your back as straight as possible.
3. Walk, never run with loads.
4. Keep hands free on ladders.
5. Never twist your body when turning with a load. Simply shift your feet.
6. Never carry a load so that your vision is obstructed.
7. Back supports are available. Check with your supervisor.

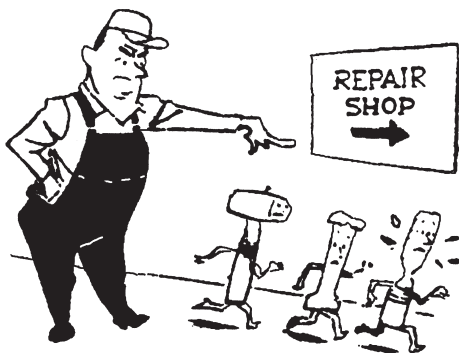


## HAND TOOLS

The old saying, “a mechanic is known by his tools” could be reworded, as “**A safe mechanic**” and be just as true.

1. The proper tool in the proper condition, used at the proper time, can do much to prevent injury.
2. Every tool has a purpose. Use it for that and only that.
3. Keep edges sharp, striking faces smoothly, struck ends dressed and handles tight.
4. Tools have a proper place. Keep them there when not in use.
5. Use the proper strength tool for each job.

## WHAT SHAPE ARE YOUR TOOLS IN?



## HOUSEKEEPING

**Good Housekeeping** is a basis for a safe work environment; it prevents accidents and fires, and creates a businesslike work place. Housekeeping must be a concern of each of us as a continuous day-to-day effort, never a “sometime when I get a chance” thing.



1. Deposit all trash and scrap in the proper containers.
2. Special attention is required in immediate work areas, especially when working at heights on scaffolds or platforms and confined spaces.
3. Orderly material storage with clear walkways is vital. Use care when removing or placing material in these Areas.
4. Remove or bend over nails.
5. Space used for passage such as walkways, stairs and around ladders must be kept clear. Clutter is not only dangerous but makes your job more difficult.

## FIRE PROTECTION

Remember all fires start small; they only become serious if they go unnoticed or are not attended to properly and promptly.

Fire extinguishers; learn their location and their use. Turn in fire extinguishers for recharge after each use.

In case of fire, first consideration must be the safety of all personnel. Afterwards, attention can be given to the saving of property. Welding and burning around combustibles requires extra care. Check with your supervisor regarding a “fire watch”.

Housekeeping is vital. A fire is out before it begins if it has no place to start. Keep rubbish, rags, etc., cleaned up.

## **CRANES**

Mankind's strength and reach have been magnified over the years by cranes, hoists, come-a-longs, etc. With this increase in capacity has come an increase in hazards. The need for careful use is increased.

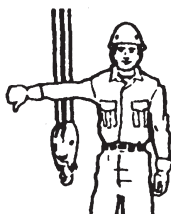
1. **Operators are permitted to take signals from only one person.**
2. Keep clear of the swing and out from under suspended loads.
3. Never ride the load. Stand away from cable or chains under strain.
4. Use a guide or “tag line” on loads.
5. Keep hands clear of pinch points on slings and hooks when hooking or unhooking.
6. Descend from trucks before crane, etc., lifts loads.

## **DO YOU KNOW THE PROPER SIGNALS TO GIVE?**

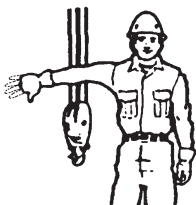
# STANDARD HOIST SIGNALS



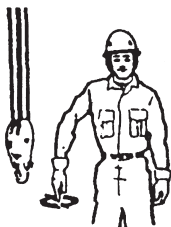
**RAISE BOOM.** Arm extended, fingers closed, thumb pointing upward.



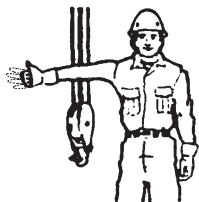
**LOWER BOOM.** Arm extended, fingers closed, thumb pointing downward.



**LOWER THE BOOM AND RAISE THE LOAD.** With arm extended, thumb pointing down, flex fingers in and out as long as load movement is desired.



**LOWER.** With arm extended downward, forefinger pointing down, move hand in small horizontal circle.

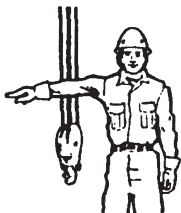


**RAISE THE BOOM AND LOWER THE LOAD.** With arm extended, thumb pointing up, flex fingers in and out as long as load movement is desired.

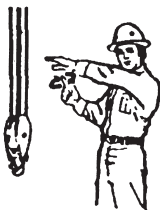


**HOIST.** With forearm vertical, forefinger pointing up, move hand in small horizontal circle.

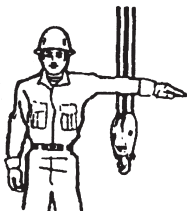
## STANDARD HOIST SIGNALS



**SWING.** Arm extended, point with finger in direction of swing of boom.



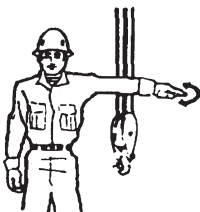
**MOVE SLOWLY.** Use one hand to give any motion signal and place the other hand motionless in front of hand giving the motion signal. (Hoist slowly shown as example).



**STOP.** Arm extended, palm down, hold position rigidly.



**EXTEND BOOM.** (Telescoping Booms). Both fists in front of body with thumbs pointing outward.



**EMERGENCY STOP.** Arm extended, palm down, move hand rapidly right and left.



**RETRACT BOOM.** (Telescoping Booms). Both fists in front of body with thumbs pointing toward each other.

## **LADDERS AND SCAFFOLDS**

### **Ladders**

Straight and extension ladders must be tied off.

Stepladders must be fully opened and set level. Work facing the ladder with both feet on the rungs. Always face the ladder when climbing or descending. Stay off the top of stepladders and top platform of ladders. Ladders must extend a minimum of 36 inches above the landing, or where not practical, be provided with grab rails and be secured against movement.

Inspect ladders before use. Ladders are not to be painted except for numbering purposes. Do not use ladders for skids, braces, workbenches, or for any purpose other than climbing.

If it is necessary to place a ladder in or over a doorway, barricade the door and post warning signs.

Keep both feet on the ladder rungs. Do not reach out too far or place one foot on a line or piece of equipment. Safety equipment is required if it is necessary to work backwards from a ladder and when six feet or more above the working surface. Check with your supervisor.

Metal ladders must not be used for electric welding or near any electric lines or services.

Most ladders have a 300 pound capacity. Report damaged ladders to your supervisor for repair or disposal.



## **Scaffolds**

Before starting work on a scaffold, inspect it to determine that handrails, toeboards, and decking are in place, that all wheels are locked on moveable scaffolds, and that locking pins are in place.

Guardrails and toeboards shall be installed on all open sides and ends of platforms more than 10 feet above ground or floor level.

When working on any scaffold platform not equipped with standard guardrails or complete deck, personnel must wear safety harnesses with the lanyard properly tied off.

When working on any scaffold in the vicinity of energized electrical lines or equipment, employees must ensure that no part of the scaffold or his/her body shall come in contact with the electrical lines or equipment.

Do not change or remove scaffold members unless authorized. Scaffold planks shall extend over their ends at least 6 inches and not more than 12 inches.

No one is allowed to ride on a rolling scaffold when it is being moved. Remove or secure all tools and material on deck before moving. Do not climb on or work from any scaffold handrail, midrail, or brace member. Use the ladder to get on the scaffold.

When the height of a scaffold platform is going to exceed three (3) times the minimum base dimension, the base must be enlarged by using outboard supports, wideners or outriggers, or the scaffold must be tied-in to the building.

## **FALL PROTECTION**

- 1) Fall protection is required when exposed to a fall hazard of 6' or more; except for scaffold use, ladder use and steel erection operations.
- 2) Methods of fall protection include safety harnesses; safety nets, floor covers, pedmeter cables and guard rails. Built up roofing operations on a low pitch roof (less than 4-12 pitch) are allowed to use a warning line system and/or a safety monitoring system if roof dimensions are less than 50'.
- 3) All open-sided floors and platforms 6' or more above adjacent floors or ground level should be protected by a standard guardrail. Toeboards are required wherever people may pass below and be injured from falling debris.
- 4) Standard guardrails should be constructed to a height between 39" and 45" and withstand a force of 200 lbs. Cable guardrail systems should not deflect lower than 39" in height. The top cable rail must be ribboned every 6'.
- 5) Sound lumber should be used in constructing guardrails and should not contain large or loose knots. All nails should be driven in completely. Double-headed nails are not permitted.
- 6) Guardrails should be installed, as necessary, where wall openings are less than 39" above the working surface and the fall exposure is greater than 6'.
- 7) Ladderway openings should be protected by standard guardrails and toeboards. A swinging gate or an offset that will not allow people to walk directly into the opening should be provided for access.
- 8) Floor openings or holes should be protected by a standard guardrail and toeboard, or a cover capable of supporting 2 times the maximum intended load and secured against accidental displacement. The floor cover must be labeled.

- 9) Employees engaged in built-up roofing work on low pitch roofs with a ground-to-eave height greater than 6' should be protected by one of the following:
- a) Motion Stopping System(s) (MSS) - Fall protection using the following equipment singly or in combination: standard railings, scaffolds or platforms with guardrails, safety nets or safety belt/harness systems.
  - b) Warning Line Systems installed in accordance with MIOSHA standards.
  - c) Safety Monitoring System on roofs less than 50 wide where no mechanical equipment is being used.

## **AERIAL LIFTS**

- 1. You must be trained and authorized in order to operate an aerial lift.
- 2. If you have any questions regarding aerial lifts please speak with your foreman or supervisor.

## **GUARDING**

Proper guards or shields must be installed on all power tools before issue. Do not use improper tools or tools without guards in place. No "homemade" handles or extensions ("cheaters") are permitted.

## **Power Tools**

Certain power machines such as a powerset and laser level are to be run only by authorized operators after receiving proper training. Licenses are required for power actuated tools. Please see your Foreman or Supervisor if you are required to use this tool.

## LOCKOUT TAGOUT

1. Locks and tags should be used to prevent operation of a switch, valve, or piece of equipment, in cases where someone may get hurt or equipment may be damaged.
2. Follow all required switching and locking procedures to remove a piece of equipment from service.
3. Place your lock personally; never have somebody else do it.
4. All locks and tags should be labeled to identify their owner.
5. Never remove someone else's lock and/or tag.
6. Never operate any locked-out or tagged-out piece of equipment.



## CONFINED SPACES

A confined space is defined as any space that:

- Is large enough and so configured that an employee can bodily enter and perform assigned work; and
- Has limited or restricted means of entry or exit; and
- Is not designed for a continuous employee occupancy

All three conditions **MUST** exist for a space to be classified as a Confined Space". There are two types of confined spaces: Non-Permit required and Permit required.

- a. All confined spaces shall be assessed by a competent person to decide if they are permit or non-permit required.
- b. Only trained employees will enter into confined spaces.
- c. If the confined space is deemed a permit required confined space, all employees will be prohibited from entering until a confined space permit is issued and filled out completely.
- d. Permit and non-permit required confined spaces will only have work performed in them when all necessary safety equipment is provided and used.
- e. Only competent persons will determine what safety equipment will be used.

## **Operating Practices**

Loose clothing, rings, jewelry must not be worn around operating machines. Keep sleeves buttoned or rolled up. Keep fingers away from moving parts. Shut off machines to remove waste.

Inspect at least daily before start-up. Look for loose or damaged parts, adequate lighting, lubrication, and abandoned tools or material that could “vibrate into trouble.” Many machines have safety interlocking devices. Be sure they work, and NEVER BYPASS AN INTERLOCK DEVICE.

Fire hazards are constantly around us. Oil, rags, and hot chips are fire hazards. Know where fire extinguishers are; keep the machine area clean.

## **WELDING**

Do not look at welding arc even if you have tinted lenses. It will burn your eyes. Keep welding leads and burning hose clear of passageways. Inspect all leads, grounds, clamps, welding machines, hoses, gauges, torches, and cylinders each day before use. Be sure that all fittings, couplings, and connections are tight. Avoid breathing fumes. Use the exhaust system in the shop, a blower, or a respirator.

Each welder is responsible for containing sparks and slag and/or removing combustibles to prevent fire. A five-pound, or larger, dry-chemical fire extinguisher must be within 20 feet of any welding, burning, or open-flame work.

Proper barriers or screens should be erected to prevent Inadvertent exposure of arc to employees in operating Areas (flash burn).

## **VEHICLE SAFETY**

Vehicles and mobile equipment are to be operated by authorized personnel only.

The driver is responsible for the safety of all passengers and the stability of materials being hauled. Use the following guidelines, along with company vehicle policy.

Wear seat belts.

Obey all speed limits and other regulatory signs. Give pedestrians the right-of-way.

Look to the rear and sound your horn before backing. Shut off the motor to refuel.

Shut off the motor and set the brakes before leaving the vehicle.

Inspect the vehicle each day before use.

Mount or dismount only when the vehicle is stopped. Keep arms, feet, and bodies inside. All personnel must be seated.

A flagman should direct the backing of a vehicle in congested areas.

No more than three persons may ride on the front seat of any vehicle.

Truck drivers must dismount from the cab and remain clear while the truck is being loaded by power equipment.

No one is allowed to ride in a container that is being moved with a forklift.

Know a forklift's capacity before operating.

## **HAZARD COMMUNICATION**

If you are working with hazardous chemicals, or may come in contact with them, you will be provided information and training concerning the hazardous chemicals. This training should include, but not be limited to:

An explanation of the Hazard Communication Standard.

Notification of the locations of the hazardous chemicals and description of the labeling system.

A description of the Material Safety Data Sheets (MSDS), their use and location.

If you have any concerns or desire any information concerning chemicals in your workplace, ask your supervisor for the information.

## **ELECTRICAL WORK PRACTICES**

Follow the following safety rules to avoid electrical hazards.

Always inspect tools and equipment for frayed cords and defective plugs before using them.

Never use a power tool that has had the ground plug removed.

## **ELECTRICAL WORK PRACTICES Continued**

Never stand in water and operate a power tool.

Keep extension cords out of water when in use.

Consider power lines “live” and avoid contact.

Disconnect all electrical tools and cords when not in use.

## **ACCIDENTS ARE CAUSED**

Experience has shown that “accidents don’t happen.” They are caused by people just like you and me. We also know that five things cause most accidents on construction jobs:

### **1. STRUCK BY**

Falling or flying objects cause many injuries. Wear your personal protective equipment. Keep out from under or in front of equipment, material or operations that may cause this type of injury.

### **2. FALLS**

Although second on the list, falls cause by far the most serious accidents. Tie off ladders, use hand rails and safety harnesses. Be extra cautious at heights.

### **3. CAUGHT BETWEEN**

Being caught or pinched between two objects generally means someone wasn’t alert, for this hazard is usually quite obvious if one just looks. Always leave yourself a way out.

### **4. STRAINS**

These always involve improper pushing, pulling, or lifting.

### **5. CUT/PUNCTURED BY**

On a daily basis you will Work with sharp materials and tools. Wear protective gloves and be careful & conscious of your work environment.



These injury types are pointed out to you because we feel that “a word to the wise is sufficient.” All five of these types of injuries can be avoided if you use normal care and common sense in doing your job.

## **OBEY SAFETY RULES AND REGULATIONS. THEY ARE FOR YOUR PROTECTION.**

### **IF YOU HAVE AN ACCIDENT**

**If you are hurt**, no matter how slightly, you must immediately report to your supervisor.

Get immediate First Aid. A delay could compound the injury through infection or by aggravating the injury.

If one of your co-workers is hurt, give whatever aid and assistance you are qualified to give. If you're not involved, stay away and keep others away.

### **IF YOU HAVE A SEVERE ACCIDENT**

Call 911.

Don't panic, stay calm.

Get the injured medical treatment immediately.

Notify Superior or Safety Director immediately.

Stay out of the way and keep area free from onlookers

Report who, what, when and how to Job Superintendent and fill out report.



## Daily Jobsite Work Area Inspection

Formally check area daily. Report all problems to your foreman or supervisor.

1. Work area is clean and organized.
2. There is a means of safe access and egress.
3. All personnel are advised of hazards, precautions and procedures.
4. We have the tools and equipment to safely perform the work.
5. We have copies of MSDS and have been trained to safely work with the material.
6. The work area is protected (barricades, guardrails, and signage).
7. Fire protection is available (fire extinguishers, fire blanket, tire watch).
8. Electrical cords are in safe condition (insulation not damaged, grounded, GFCI).
9. Emergency procedures are in place.
10. Work operations are controlled so other workers will not be affected by dust, fumes, sparks, slag, welding flash, floor holes, falling objects, overhead loads, etc.
11. Work area is adequately lighted.
12. We have the necessary training to work safely.

## **EMERGENCY EVACUATION**

- Your foreman or supervisor will advise you of the meeting point for your job location.
- Locate two escape routes and familiarize yourself with them before you begin work.
- In the event of an emergency, proceed calmly and quickly to the safest evacuation route.
- Once you are safely outside, report immediately to your meeting point so others will know you are not trapped inside.

## **OUR GOAL**

To develop and maintain a safe, accident free environment. This goal cannot be attained without your help. If you have any suggestions regarding our safety programs, please speak with your foreman.

## NOTES

## SAFETY QUIZ

Please indicate if the statement is true or false

- |          |          |     |  |
|----------|----------|-----|--|
| <b>T</b> | <b>F</b> | 1.  | When required to use a respirator you must be fitted, tested, and instructed in their use.   |
| <b>T</b> | <b>F</b> | 2.  | It is not necessary to report a near miss incident.  |
| <b>T</b> | <b>F</b> | 3.  | "MSDS" means; Maintain a Safety Director at the Site.  |
| <b>T</b> | <b>F</b> | 4.  | During work hour, all field construction employees are required to wear hard hats.   |
| <b>T</b> | <b>F</b> | 5.  | A fire extinguisher must be within 20 feet of any welding, burning, or open-flame work.  |
| <b>T</b> | <b>F</b> | 6.  | It is not necessary to attend all tool box talks.  |
| <b>T</b> | <b>F</b> | 7.  | Straight and extension ladders must be tied off.   |
| <b>T</b> | <b>F</b> | 8.  | Safety harnesses with the lanyard properly tied off are required when working on any scaffold platform not equipped with standard guardrails or complete deck. |
| <b>T</b> | <b>F</b> | 9.  | You may look at welding arc if you have tinted lenses.   |
| <b>T</b> | <b>F</b> | 10. | You do not need to be authorized to operate a forklift.  |
| <b>T</b> | <b>F</b> | 11. | Crane operators are permitted to take signals from more than one person.   |
| <b>T</b> | <b>F</b> | 12. | Guardrails and toe boards are required on all open sides and end of platforms more than 10 feet above ground or floor level.                                   |
| <b>T</b> | <b>F</b> | 13. | In case of an emergency, you should locate one or two escape routes prior to beginning work.   |

**My foreman/supervisor has reviewed any incorrect answers with me and I fully understand the material.**

\_\_\_\_\_  
Date

\_\_\_\_\_  
Employee's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Foreman's or Safety Director Signature

## **ACKNOWLEDGMENT**

I have received DCI's Safety Handbook. I agree that a safe working environment makes good sense for everyone and will act accordingly.

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

Foreman Name: \_\_\_\_\_

Rev. 10/2009



