LCM BUILDERS, INC.

Roofing & General Contractor

North Carolina HUB NC & SC DOT DBE SBE ~WBE Certified

general@lcmbuilders.com http://www.lcmbuilders.com

Safety Guidelines

Please read this booklet thoroughly and keep it so you can refer to it when you are not certain of the correct procedures.

If you have any questions, please ask your foreman, the job site superintendent, or Lynn.

Safety must be our FIRST priority!

PO Box 299 Peachland, NC 28133 **800-329-8338** fax: 877-382-9238

LCM BUILDERS, INC.

Roofing & General Contractor

North Carolina HUB NC & SC DOT DBE SBE ~WBE Certified

general@lcmbuilders.com http://www.lcmbuilders.com

Safety Policy

LCM Builders, Inc. is dedicated to maintaining a safe workplace for all our employees and subcontractors.

Anyone seen violating our safety policies will be removed from work for the remainder of the day.

A second violation will result in a one week suspension.

The third safety violation will result in termination.

If you have any questions concerning safety or if you are concerned about a safety issue on a project, please talk to your foreman, your site supervisor or call Lynn at 1.800.329.8338.

All discussions about safety issues are confidential and any complaints will remain anonymous.

PO Box 299 Peachland, NC 28133 **800-329-8338** fax: 877-382-9238

LCM BUILDERS, INC.

Roofing & General Contractor

North Carolina HUB NC & SC DOT DBE SBE ~WBE Certified

general@lcmbuilders.com http://www.lcmbuilders.com

Safety Policy

By signing below, I acknowledge that I have received the Safety Guidelines Booklet and that I have read and understand LCM's Safety Policies.

_____

Employee signature

_____

Supervisor signature

_____

Date

PO Box 299 Peachland, NC 28133 **800-329-8338** fax: 877-382-9238

TABLE OF CONTENTS

Section 1 - Introduction

1.1 - Safety Philosophy

The safety philosophy of LCM Builders is based on the belief that safe behavior and a good attitude can prevent accidents and that behavior and attitude are the responsibility of every employee within the organization. The number one goal of our program is to create and maintain a safe environment for our employees as well as members of the general public. Job-site safety will not be second or third to quality or production.

The health and safety of our employees is paramount to our success as an organization. Management will create and maintain a work environment that is designed to protect our employees from injury.

Employees will be oriented and trained to perform their jobs in a safe, efficient and effective manner. The methods utilized to maintain job-site safety will either meet or exceed government standards.

LCM Builders is committed to the goal of an injury free workplace. The individual effort of each employee is required for the goal to be attained.

1.2 - Communication

Management

An orientation meeting will be held with all management and supervisory personnel to introduce the updated LCM Builders Corporate Safety Policy (hereinafter referred to as the “Policy”). The meeting objectives will be as follows:
(a) To review the updated Policy and eliminate any confusion as to its contents.

(b) To set expectations and create accountability for all management and supervisory personnel.

(c) To promote personal involvement with the Policy.

Employee

At the beginning of each new project and at least once per week thereafter, Superintendents and Foremen will hold a “tool box” meeting advising current employees of the implementation of the new policy.

Pocket Guides to the Policy will be presented to all employees at that time.

The Superintendent/Foreman on each job will also introduce the Policy to any new-hires. The new-hire will also be required to read the General Safety Rules and sign the acknowledgement form prior to beginning work.

Section 2 - Responsibilities

To ensure that the Policy is carried out, the following assignments of responsibility are made. Please note that these individuals have the full support of management to perform their duties.

2.1 - Management Responsibilities

1. Establish rules and programs designed to promote safety and make them known to all employees.

2. Make available the necessary training for employees to perform their jobs safely.

3. Provide protective equipment as applicable.

4. Record all instances of violations and abate violations if discovered.

5. Discipline any employee who willfully disregards these safety rules.

6. Empower Safety Directors, Superintendents/Foremen to enforce the Policy.

2.2 - Safety Director Responsibilities

1. Perform job-site inspections.

2. Conduct safety training and other activities to maintain program awareness among employees.

3. Report inspection and training results to management.

4. Direct Superintendent/Foreman in implementing any necessary corrective action while on jobsite.

5. Perform accident investigations.

6. Discipline, in accordance with the Policy, any employee who disregards these safety rules.
.

2.3 - Superintendent/Foreman Responsibilities

1. Carry out the Policy at the work level; require compliance of employees and subcontractors.

2. Be aware of all safety requirements and safe working practices.

3. Pre-plan work activities to ensure a safe and efficient project.

4. Make sure that protective equipment is available and that employees are trained to use it.

5. Promptly investigate and report all accidents or injuries and complete Company Incident Report.

6. Discipline, in accordance with the Policy, any employee who disregards these safety rules.

7. Complete the Policy orientation with each new employee.

2.4 - All Employee Responsibilities

1. Work safely to ensure your own safety as well as that of your co-workers.

2. Request help when unsure how to safely perform any task or properly use PPE.

3. Correct unsafe acts and conditions within the scope of immediate work. Report to your Superintendent/Foreman any problems you are unable to correct.

4. Use and maintain all safety equipment provided.

5. Report to work physically and mentally prepared to safely carry out assigned duties.

6. Report all accidents or injuries immediately, regardless of severity, to Superintendent/Foreman.

Section 3 - Employee Safety

3.1 - New Employee Safety Orientation

The Superintendent/Foreman shall verify a new employee has received the General Safety Rules orientation as soon as the employee is hired. This program will insure the following:

1. The employee is given the opportunity to read and ask questions of the General Safety Rules and understands the consequences for non-compliance.

2. The employee has received a Pocket Guide to the Policy.

3. The employee has signed the acknowledgment form, an example of which can be found in the appendix.

4. The employee has the opportunity to ask any questions regarding the safety policy.

3.2 - LCM Builders General Safety Rules

1. Hard hats, safety glasses and vests must be worn on the jobsites at all times.

2. Safety goggles, and/or face shields must be worn when appropriate; such as sawing, drilling, grinding, mixing mortar, pouring concrete, etc.

3. Wear appropriate clothing including safety shoes and gloves when needed. No loose clothing, dangling jewelry, shorts or athletic shoes. Shirts with sleeves must be worn at all times.

4. All accidents, regardless of severity, shall be reported to your supervisor for immediate attention. Failure to do so may result in discharge.

5. Within 4 hours of notice, Superintendent/Foreman will report all incidents to the Safety Director or designated personnel.

6. Possession or use of alcohol or non-prescription drugs on the job-site is strictly prohibited. Any employee reporting to work under the influence of drugs or alcohol will be terminated. Post accident drug/alcohol tests will be administered to all injuries requiring a physician visit.

7. Requirement for Scaffolds:

a) Work platform shall be fully planked.
b) Guardrails at 42” and 21” required at 10’ and greater heights.
c) Base plates required at all times.
d) Ladder access to working platform must be provided.
e) Supported scaffolds with height to base ratio greater than 4:1 will be tied off.

8. Excavation and trench requirements:

a) Excavated material shall be kept at least 2’ from edge of excavation.
b) Excavation 5’ deep or greater must be inspected by competent person.
c) Excavation 4’ deep or greater must have ladder for every 25’ of lateral travel.

9. Ladders must extend 3’ past the landing area and be tied off when in use.

10. Fall protection requirements:

a) Mandatory when working at heights greater than 6'.
b) Body harness and lanyard must be used when working from an aerial lift.

11. Power tools – powder activated tools shall only be used by trained personnel. Guarding and ground faults must be in place.

12. Cylinders shall be upright when in use. During storage and transport, they must be capped and secured in an upright position.

13. Riding of equipment is prohibited. No person shall ride any hook, hoist or other material handling equipment.

14. Safety vests shall be worn on all job-sites at all times.

15. Good "housekeeping" shall be practiced on all construction sites. Avoid excess debris.

16. MSDS's are available for inspection. Ask your Superintendent/Foreman if you have questions.

17. Driving a company vehicle without having your driver's licensed scanned and in the file is strictly prohibited.

Section 4 - Program Enforcement

4.1 - Disciplinary System

Each Superintendent/Foreman must enforce the requirements of the Policy. They are empowered to do so and will be appropriately disciplined for failure to do so. In order to enforce the Policy, the following progressive citation system will be observed:

1st offense: Written Warning with copy to employee's personnel file
2nd offense: Written Warning with one day unpaid time off, copy to personnel file
3rd offense: Further disciplinary action up to and including termination

In addition to the progressive discipline policy above, the company reserves the right to immediately terminate an employee depending on the severity of the offense. An example would be having alcohol or illegal drugs on the jobsite.

Each Superintendent/Foreman will have citation forms available for issuing written warnings. An example can be found in the appendix. The Safety Director or consultant, and other members of management, will also have the ability to issue safety citations.

4.2 - Incentive Programs

We believe that a safety policy must have consequences that apply to individuals who refuse to comply with the policy. We also believe that those individuals who comply in exemplary fashion

and present a positive attitude towards the policy should be rewarded. Each location will have incentive programs in place to help recognize employees who comply with the Policy. These programs may be changed from time to time to keep interest in them strong. The programs will be announced to all personnel prior to their implementation.

Section 5 - Accident Handling/Reporting Procedures

5.1 - Attending to the Injury

The following are procedures that you must follow:

1. Seriously Injured Workers – Call 911 and have the individual taken to the nearest emergency room.

2. Minor Injury **–** Give first-aid at the trailer or job-site. If additional medical treatment is indicated, send the injured worker to the nearest company approved “urgent care” center or hospital. Each Superintendent/Foreman should have a list for your project. A copy of the list is in the appendix.

5.2 - Accident Reporting

1. All accidents must be reported the day of the incident. Failure to do so may result in discharge.

2. Accidents should be reported to the project Superintendent/Foreman. If the Superintendent/-Foreman is not on-site, contact the local office and report it to the Safety Director or other appropriate personnel. Telling a co-worker does not constitute proper reporting procedure.

3. Potential General Liability, Builders Risk or Property claims should be reported within one day to the Risk Manager.

Section 6 - Fleet Safety Policy

6.1 - Qualifications/Restrictions

The employee at all times must have a valid driver’s license, issued by the state in which the employee resides, and provide a copy of the driver’s license to the Risk Manager.

6.2 - Vehicle Safety

The vehicle shall be operated in a safe and courteous manner at all times.

Use seat belts while operating a company vehicle.

Consumption of alcoholic beverages or being under the influence of alcohol or having any level of controlled substances in ones blood is strictly prohibited while operating a company vehicle.

The use of illegal drugs or being under the influence of illegal drugs or having any level of controlled substances in your blood is strictly prohibited while operating a company vehicle

Inspect truck and trailer lights often to ensure proper function.

Each driver has the responsibility to ensure that the vehicle they are operating or trailer they are pulling receives the proper state inspections.

Each driver has the responsibility to ensure that the vehicle or trailer they are operating is of legal size and weight. The office can be called to process needed permits for oversized or overweight loads.

Use caution when loading trucks. Know the weight limits of your vehicle and do not overload.

Ensure proper securing of every load.

Operators must ensure his/her license classification is legal for the vehicle they are operating.

6.3 - Accident Reporting

If you are involved in an accident, you are required to follow the steps below in reporting the accident:

Follow all federal, state, and local requirements for reporting accidents.

While still at the scene of the accident, (when injury has not incapacitated one to do so), drivers shall complete the accident report kit provided in the glove compartment of each vehicle. If there is no accident report kit in the glove compartment, use available material and collect the other driver's (if there is one) personal information and any witness names and other pertinent information including names of passengers and those injured.

Report the accident, regardless of how minor, to the Risk Manager, Safety Director or designated contact person (your supervisor) as soon as possible, but no later than four hours after the accident provided you are physically capable. Provide as much detail as possible.

All accidents involving bodily injury and/or property damage in excess of $5,000 will require a drug & alcohol screen immediately after the accident has occurred. The Risk Manager or local Safety Director will indicate where that can be administered.

If you are involved in an avoidable accident, (as determined by the Safety Committee), in a company vehicle, you will be responsible to pay for the cost of the damage or the insurance deductible (presently $500.00 but subject to change) of any cost of that accident (whichever is less).

6.4 - Vehicle Usage

Only employees authorized by management, and employees signatory to this policy, may operate company vehicles.

LCM BUILDERS has issued vehicles to specific employees for the specific interest of LCM BUILDERS business.

LCM BUILDERS vehicles and equipment are strictly prohibited from being used for extracurricular work activity (i.e. rat work, side businesses, etc.).

You may not allow any person not authorized by LCM BUILDERS management to operate any company vehicle.

6.5 - Vehicle Maintenance

Please read and be familiar with your vehicle manual for proper maintenance of your vehicle.

Care of company vehicles is important. Therefore, we ask that you follow the factory recommendations for oil changes (3,000 miles), tune-ups, and other factory recommended maintenance.

Tires should be rotated according to the factory recommendations.

Brakes should be inspected during tire rotation or if problems are suspected.

Check for tire wear and balding or any other defects that could cause serious tire damage, which could lead to an accident.

Section 7 - Company Substance Abuse Policy

It is LCM Builders policy to create and maintain a drug-free workplace in keeping with the spirit and purpose of the Drug-Free Workplace Act of 1988. The unlawful use of controlled substances is inconsistent with the behavior expected of employees, subjects all employees and clients/customers to unacceptable safety risks, and undermines the company's ability to operate effectively and efficiently.
It shall be a condition of their employment by LCM Builders that all employees of LCM Builders abide by this Drug-Free Workplace Policy.
The unlawful manufacture, distribution, dispensation, possession, sale, or use of a controlled substance, or being under the influence of the same, is strictly prohibited in LCM Builders workplace, or while conducting LCM Builders business outside of the workplace. Such conduct is also prohibited during nonworking time to the extent that, in LCM Builders sole discretion, it impairs an employee's ability to perform on the job or threatens the reputation or integrity of LCM Builders.
If any employee is convicted (including a plea of nolo contendere or no contest) of a violation of a criminal drug statute for conduct occurring in the workplace, he/she must notify LCM Builders of such conviction no later than five days after such conviction or plea.
Employees who violate any aspect of this policy shall be subject to disciplinary action up to and including termination.
LCM Builders has also established a drug-free awareness program through the distribution and dissemination of this policy and through the distribution and dissemination of such additional information as deemed appropriate by LCM Builders.
Employees must be aware that the unlawful use of controlled substances threatens their

health, safety, and well-being, affects their work performance, and jeopardizes the health, safety, and well-being of LCM Builders clients.

7 - 1 Drug-testing - reserve right.

LCM Builders reserves the right to require employees to undergo appropriate tests designed to detect the presence of alcohol, illegal drugs, or other controlled substances, either randomly or where it has reason to believe that an employee may be under the influence of any of these substances. Refusal to consent to such a test may result in disciplinary action up to and including dismissal.

7 - 2 Drug-testing policy.

1. ***Statement of LCM Builders Policy and General Prohibitions Respecting Drug and Alcohol Use by Employees.***

It is LCM Builders policy to maintain a drug-free, healthful, and safe work place. Employees are therefore required to report to work in appropriate mental and physical condition to perform their jobs in a satisfactory manner. The use of controlled substances is inconsistent with the behavior expected of employees, subjects all employees and visitors to our facilities to unacceptable safety risks, and undermines LCM Builders ability to operate effectively and efficiently.

While on LCM Builders premises and while conducting business-related activities off LCM Builders premises, no employee may use, possess, distribute, sell, or be under the influence of alcohol or illegal drugs. Such conduct is also prohibited during non-working time to the extent that, in the sole opinion of LCM Builders, it impairs an employee's ability to perform on the job or threatens the reputation or integrity of LCM Builders.

LCM Builders reserves the right to require employees to undergo appropriate tests designed to detect the presence of alcohol, illegal drugs, or other controlled substances, either randomly or where it has reason to believe that an employee may be under the influence of any of these substances. Refusal to consent to such a test may result in disciplinary action up to and including dismissal.

7 - 2 Drug-testing policy.

1. ***Statement of LCM Builders Policy and General Prohibitions Respecting Drug and Alcohol Use by Employees.***

It is LCM Builders policy to maintain a drug-free, healthful, and safe work place. Employees are therefore required to report to work in appropriate mental and physical condition to perform their jobs in a satisfactory manner. The use of controlled substances is inconsistent with the behavior expected of employees, subjects all employees and visitors to our facilities to unacceptable safety risks, and undermines LCM Builders ability to operate effectively and efficiently.

While on LCM Builders premises and while conducting business-related activities off LCM Builders premises, no employee may use, possess, distribute, sell, or be under the influence of alcohol or illegal drugs. Such conduct is also prohibited during non-working

time to the extent that, in the sole opinion of LCM Builders, it impairs an employee's ability to perform on the job or threatens the reputation or integrity of LCM Builders.

The legal use of prescribed drugs is permitted only if, in LCM Builders sole discretion, it does not impair an employee's ability to perform the essential functions of the job effectively and in a safe manner and does not endanger the employee or other individuals in the work place. Otherwise it is included in the above prohibitions.

To further the goals and prohibitions of this general statement of policy, LCM Builders will impose drug and alcohol testing on employees and prospective employees of LCM Builders under the terms and conditions that follow.

2. *Substances for Which Testing Is Required.*

LCM Builders will test for drugs and alcohol, defined as follows.

"Alcohol" for which testing will occur means ethanol, isopropanol or methanol.
"Drugs" for which testing will occur means any substance which is controlled under the Controlled Substances Act (21 U.S.C. § 812) or the metabolite of the substance. Testing will occur for the specific substances listed in section 5 below.

3. *Description of Those Employees or Prospective Employees Who Are Subject to Testing.*

All prospective employees and all employees of LCM Builders shall be required to submit to testing for the presence of drugs, at the times and in the manner hereinafter set forth. Only employees of LCM Builders (but not prospective employees) shall be required to submit to testing for the presence of alcohol at the times and in the manner hereinafter set forth.

4.Circumstances Under Which Testing May be Required.

LCM Builders reserves the right to test for any job-related purpose consistent with business necessity, including without limitation the following purposes:
• in order to maintain and assure safety for employees, customers, clients or the public at large; and
• in order to maintain productivity, quality of products or services, and security of property or information.
In furtherance of these purposes, testing will be required at the following times.
• Drug testing of any prospective employee will occur before any offer of employment will be made (pre-hire testing).
• Drug and alcohol testing will occur after any accident in the work place, in connection with an investigation of such accident, in which case the test will take place as soon as practicable after the accident and only those persons reasonably believed to have contributed to the accident will be tested (post-accident testing).
• Drug and alcohol testing will occur after any injury in the work place, in which case the test will occur as soon as reasonably practicable after the incident causing injury and only those persons reasonably believed to have contributed to the incident causing injury will be tested (post-injury testing).
• Drug and alcohol testing will occur on a random basis of two randomly selected employees per month (random testing).

• Drug and alcohol testing will occur for investigation of possible individual employee impairment, or based on any reasonable suspicion that an employee may be affected by the use of drugs or alcohol and that such use may adversely affect job performance or the work environment (reasonable cause testing). Such reasonable suspicion may be based, without limitation, on one or a combination of the following: high frequency of on the job accidents; slurred speech; smell of alcohol on breath; sharp mood swings or changes in behavior, especially after absence from work station; decrease in manual dexterity or coordination; increased absenteeism or tardiness; unusual irritability; severe weight loss; needle track marks or other physical indicia of drug use; carelessness in appearance and hygiene; unaccountable employee time while at work; and bloodshot eyes.

5. Description of the Collection Procedures and Testing Methods to be Used.

LCM Builders will require samples from its employees and prospective employees (in the manner more fully set forth below) and may require the presentation of reliable individual identification from the person being tested to the person collecting the samples. Collection of samples will be conducted during or immediately before or after the employee's regular work period. Testing is considered work time for compensation and benefits for current (but not prospective) employees.

LCM Builders shall pay for costs associated with the initial screen and the first confirmation testing for both employees and prospective employees. If either an employee or a prospective employee requests evaluation of their sample beyond the confirmation level, they will be required to pre-pay for that testing. If the test results at that level are negative, LCM Builders will reimburse the individual for those expenses.

Sample collection and drug and alcohol tests shall meet the following conditions:

• Sample collection shall be performed under reasonable and sanitary conditions.
• Samples shall be labeled to reasonably preclude the possibility of misidentification of the person tested in relation to the test results.
• Persons to be tested shall be given an opportunity to provide notice of any information that may be considered relevant to the test, such as use of prescription or non-prescription drugs or other medical information.
• Sample collection, storage and transportation to the place of testing shall be done in such a way as reasonably to preclude the possibility of contamination, adulteration or misidentification.
• Sample testing shall comply with scientifically accepted analytical methods and procedures.
• Confirmation testing shall be conducted at a laboratory approved or certified by the U.S. Department of Health and Human Services, the College of American Pathologists or the North Carolina Department of Health Services.
• All positive drug tests for employees (but not prospective employees) shall be subjected to a confirmation test, which shall: (1) be conducted using a different chemical process than the original testing method; and (2) be chromatographic (such as gas chromatography-mass spectrometry), or another comparably reliable analytical method. Testing for drugs shall use the following minimum detection thresholds to determine "positive" readings:

Drug Screening Limit Confirmation Limit

Cannabinoids 100 ng/mL 15 ng/mL
Cocaine 300 ng/mL 150 ng/mL
Opiates 300 ng/mL 300 ng/mL
Amphetamines 1000 ng/mL 500 ng/mL
Barbiturates 200 ng/mL 200 ng/mL

***6. Adverse Personnel Action Based on Procedure or Results*.**

Any employee who refuses to participate in testing when required under this policy will be dismissed immediately. Any prospective employee who refuses to participate in testing when required under this policy will not be hired.
In the event of an unconfirmed positive test result for a prospective employee, that employee will not be hired.

In the event of a first positive, confirmed, test result for an employee, the following will occur.
The employee will be placed on unpaid suspension for enrollment in and pursuit of an appropriate rehabilitation, treatment, and/or counseling program, including periodic retesting, as approved by LCM Builders in its sole discretion. If the employee is eligible for Family and Medical Leave, and has any leave time remaining, the employee will use Family and Medical Leave for the period of the suspension, and the terms of the Family and Medical Leave Act shall control such leave to the extent inconsistent with this policy. If the employee is not eligible for Family and Medical Leave, or has no leave time remaining, then the length of the leave shall be subject to the sole discretion of LCM Builders.

LCM Builders group health insurance plan in force at any particular time *may* cover the cost of the rehabilitation, treatment, and/or counseling program. If not, the employee must bear the entire expense for the program.

The employee shall not be permitted to return to work until he or she has successfully completed the entire rehabilitation, treatment, and/or counseling program and only for so long as the employee successfully remains in any aftercare program recommended by the rehabilitation, treatment, and/or counseling program. The employee shall also be required to pass a retest, at the employee's expense, before returning to work upon completion of such rehabilitation, treatment, and/or counseling. The employee may also be subject to periodic retesting after return from leave.

The employee is not guaranteed a return to his or her job at the conclusion of the suspension, except to the extent provided by the federal Family and Medical Leave Act. Except as provided therein, the decision whether or not to hold the employee's job open shall depend on all factors that LCM Builders in its sole discretion deems relevant, including without limitation the needs of the business.

In the event of a second positive, confirmed test result any time during employment, the employee will be dismissed.
Any employee has the right to obtain the written test results upon request.
Any employee shall have the right, upon request, to explain a positive test result in a confidential setting.

7. *Statement of LCM Builders Policy Regarding the Confidentiality of Test Results.*

LCM Builders will treat as strictly confidential *all communications* received through this testing program that are relevant to drug test or alcohol impairment test results. Such information shall be maintained in a separate, confidential, medical file, and shall not be disclosed in any public or private proceeding, including court mandated discovery, except in a proceeding related to an action taken by an employer or employee relating to this policy, or except disclosure to:

(1) the tested employee or prospective employee or designee(s) specified in writing by the affected party;
(2) persons or entities designated by LCM Builders to receive and evaluate the test results or to hear the employee's or prospective employee's explanation; and
(3) an arbitrator or mediator, or a court or agency as authorized by law.

8. Conclusion.

Any questions on this policy should be directed to your supervisor or any other member of management.

Section 8 - OSHA

The Occupational Safety and Health Administration (OSHA), part of the Department of Labor, makes safety and health rules to protect American workers in all industries, including construction. Under the OSH Act of 1970, employers have a general duty to:
a) Furnish each employee with a workplace free from recognized hazards that can cause death or serious physical harm. This is called the “General Duty Clause.”

b) Comply with occupational safety and health rules and regulations promulgated under the Act.

There are four elements necessary to prove a violation of the “General Duty Clause”:
1. The employer failed to keep the workplace free of a hazard to which employees were exposed.

2. The hazard was recognized.

3. The hazard caused or was likely to cause death or serious physical harm.

4. There was a feasible and useful method of correcting the hazard.

In addition to employer responsibilities, employees shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this act which are applicable to their own conduct. This means that employee cooperation is essential in achieving compliance with OSHA standards. Citations and penalties may be issued by OSHA when violations of standards are found, and for violations of the general duty clause if no OSHA standard applies to the particular hazard.
Focused Inspection for Construction:
An analysis of construction fatalities investigated by Federal OSHA has indicated that over 90 percent of construction fatalities fall into the following four categories:
Falls from . . . . . .
Being struck by . . . . .

Caught in . . . (Excavations)
Electrical Hazards
Scheduled construction safety inspections are normally comprehensive, covering all areas and conditions on a construction site and all safety hazards regardless of potential severity. By concentrating on the four areas representing the leading causes of construction fatalities, the Compliance Officer may spend less time on safe sites and focus more on contractors who are having accidents. Contractors on sites with effective safety and health programs in place may avoid comprehensive OSHA inspections.

8.1 - OSHA Visits

An OSHA inspection may result from any of the following:
1. Imminent Danger
2. Inspection following a fatality or serious injury
3. Inspection stemming from an employee complaint.
4. Referral/follow-up/monitoring
5. Special emphasis
6. Generally scheduled inspection

The Compliance Officer identifies conditions and/or acts considered unsafe and/or in violation of construction safety regulations. The Compliance Officer may not violate any known safety regulation and is responsible for providing and wearing the appropriate personal protective equipment. Failure to comply with the project safety program is cause to deny the officer admittance to the site or to prematurely halt the inspection.

The Compliance Officer will present identification and state the purpose of the visit. An opening conference will be held with representatives from all on-site contractors and any construction managers.

The Compliance Officer will:

1. State nature of the inspection: (General Complaint, etc.)

2. Request copies of the safety program, accident reports and inspection surveys.

3. Approve members of the inspection party. Employers are required to have representation during inspection of their part of the job site.

4. Generally discuss the purpose of the OSH Act, its sanctions, and the authority vested.

5. Advise that at the end of the inspection, a closing conference will be held to discuss any alleged violations to determine abatement deadlines, the employer’s rights and responsibilities after the inspection, and answer any questions.

The Compliance Officer may privately interview employees regarding matters of safety and health.
At the completion of the inspection, the Compliance Officer will usually hold a general meeting of all contractors, but may meet with each contractor individually.

8.2 - Citations

As a result of an inspection, citations and notice of monetary penalty may be issued. Should a citation or penalty be received, the following must be done:
1. Post copies of citations near the area cited for three working days or until corrections have been made, whichever is later.

2. The company has 15 working days from receipt of a citation to contest or to accept it. Failure to take action with those 15 days means the company has accepted the citation and is judged in violation.

Upon request, an employer, affected employee, or employee representative has the right to an informal conference with the OSHA Area Director of his/her designated representative to resolve any problems. If this does not yield a satisfactory result, it is the employer's right to have a hearing before the Occupation Health and Safety Review Commission. If the Commission rules against you, it is your right to appeal through the federal judicial system.

8.3 - Job-Site OSHA Inspection Checklist

I. Preparation Prior to Inspection
A. Job-Site Representative or Superintendent
1) Appoint a company representative and an alternate to handle OSHA problems and inspections for each project. They must read and understand this checklist and have a copy for their own use.

2) Instruct other management personnel not to talk to the inspector, other than to remain courteous.
OSHA continued
3) Have a camera/ video camera, and note book available on the job-site for inspections.

B. Records
1) Is there a hazard communication plan (HazCom) available for all employees and the inspector immediately upon request at the job-site at all times?

2) Are Material Safety Data Sheets (MSDS) available for all employees and the inspector immediately upon request at the job-site?

3) Is an OSHA poster displayed on the job site?

4) Keep notes of all records furnished to the inspector and any comments by the inspector.

C. Job-Site Entry Options
1) Allow the inspection to proceed and permit the designated company representative to take part in the inspection.

2) Ask the compliance officer to wait until someone from upper management arrives on the job site. This request should not be made as a denial to entry.

II. Inspection:
A. Opening Conference

1) Immediately notify the company safety officer or main office, as required, upon learning of an OSHA inspection or the presence of an OSHA inspector.

2) Greet the OSHA inspector, being courteous at all times, and record the information regarding his/her credentials in a notebook.

3) Ask the inspector to identify the type or scope of the inspection to be conducted. Recording, in detail, all questions and responses.

4) Do not volunteer any information.

5) Advise the inspector that he will be required to wear safety equipment in the appropriate areas.

B. Walking the Job-Site
1) Briefly answer the questions in a courteous manner. Provide only the information requested.

2) Allow the inspector to visit only those areas of the site which were allowed for inspection by agreement or by warrant.

3) Carefully choose the path of travel. The inspector can issue citations for anything he sees or hears.

4) Photograph or videotape everything the inspector photographs or videotapes in the same manner and from the same angle. The company should have its own photo documentation of what the inspector is photographing.

If the inspector makes a mistake, do not correct him, but do note information favorable to the company.
OSHA continued
5) Do not argue with the inspector; simply inform him of the facts.

C. Interview
1) OSHA inspectors are allowed to privately interview employees in a reasonable manner. Advise the employee that they have the right to request that the company representative be present during an interview.

2) Write down the name of any employee interviewed. Make sure the employees, prior to an OSHA inspection, are familiar with who the competent person is on each job site and each procedure that requires a competent person.

D. Closing Conference
1) The company representative should obtain as much information as possible from the inspector without making comments that could hurt the company.

2) Record the inspector’s statements about alleged violations. Make notes of the inspector’s comments.

3) Do not agree with the inspector or volunteer any information regarding any safety problems, either past or present. Ask the inspector what corrections are appropriate. Write down everything he says.

4) The inspector may try to get the company representative to propose corrective measures. The inspector may also try to get the company representatives to agree on appropriate abatement dates. Never admit the existence of any deficiencies. Do not state time required for abatement or correction of any safety measure. Simply state that you will do what he requests or suggests.

5) Show the inspector all documents he has requested and which he has authority to review.

III. After the Inspection
1) Immediately go back and take photographs of items for a more flattering or truthful view than those angles that may have been taken by the inspector.

2) Investigate matters that may result in citations.

3) Immediately correct or change any matters that need correcting.

4) After the inspection, all notes, tapes, photographs, personal observations, etc. taken during the inspection should be identified, typed, taped or otherwise made legible and sent to the company safety director or home office.

8.4 - OSHA Posting Requirements

The OSHA log for the prior year will be posted at the home office from February to April. All jobs lasting more than 12 months must also have an OSHA log on-site and a total sheet posted during the same period.

The following signage must be posted in a conspicuous location on every project:
1) Federal Minimum Wage and Labor Rate
2) Safety and Health Protection on the Job
3) Workers' Compensation Notice
4) EEO (Equal Employment Opportunity)
5) Unemployment Insurance
6) Wage and Hour Act
7) Employee Polygraph Protection Act
8) FMLA (Family Medical Leave Act)
9) ADA (Americans with Disabilities Act)
10) USERRA Poster
11) Individuals with disabilities clause

Section 9 - Safety Programs

The following Safety Program list does not include all Subparts of the OSHA Standards for the Construction Industry. However, it covers the hazards that our companies come in contact with on a regular basis. Consult the OSHA Standards for the Construction Industry Handbook for clarification of issues not covered in this list.

1. First-aid and Medical Facilities within Subparts C & D
First-aid kits shall be provided on all construction projects. The kit must be appropriate for the crew size.

First-aid kits shall be inspected by the Superintendent/Foreman and items replaced as required.

Every project shall have a method of emergency communication, such as a cell phone.

See Appendix for list of approved medical facilities.

Employee Tips
Know where to locate:
First-aid kit
Eyewash or other fresh water
Phone or radio
Immediately report all accidents, no matter how small, to your Superintendent/Foreman.

Be prepared to take a post-accident drug/alcohol test.

Do not administer first-aid unless you have received prior training.

Do not attempt to be a “hero” in a rescue. You could become another victim.

2. General Housekeeping within Subpart C
Housekeeping is one of the most overlooked hazards on a construction site. Yet it is one of the largest exposures we face on a daily basis. The results of poor housekeeping run the gamete from trips and falls that cause twisted ankles and broken wrists to fires that have catastrophic potential. The following rules should be followed:
Nails in all lumber shall either be pulled from the material or bent over to prevent injuries.

Adequate driving and walking routes shall be provided throughout the job-site.

Lumber, steel, and other materials shall be stacked neat in an orderly manner, they cannot topple over or obstruct passageways.

All work areas shall be kept clean.

Trash and garbage shall be disposed of properly. Each contractor is responsible for cleaning up trash.

Trailer floors should be kept clean and free of debris. Tools should not be stored in the walkways of trailer floors.

3. Hazard Communication within Subpart D

Concept Builders has developed a Hazard Communication program to ensure a safe working environment for all our employees and subcontractor's employees. We will make every effort to accomplish our goal and provide a reasonably safe work place by employee training, compiling hazardous chemical information, and labeling all containers.

The Safety Director is the overall coordinator of this program. The superintendent, project manager, and/or project engineer are responsible for container labeling, warning signs, MSDS's, and employee training.

Under this program, employees will be informed of the content of the Hazard Communication Standard, the hazardous chemicals on our hazardous chemical list, safe handling procedures, and measures to take to protect themselves when using these chemicals.

LIST OF HAZARDOUS CHEMICALS

All subcontractors will maintain a list of all hazardous chemicals. This list will be kept in the General Contractor's job-site trailer.

MATERIAL SAFETY DATA SHEETS (MSDS's)

Material Safety Data Sheets will be kept in the job-site trailer of the general contractor or the foreman's vehicle. These programs and MSDS's will be readily available to all employees. Information on the MSDS's must contain the following:

- Name of product
- Hazardous ingredients and primary entry into body
- Physical data
- Fire and explosion data
- Health hazards
- Reactivity
- Spill or leak procedure
- Special protection information (PPE)
- Special precautions

Hazard Communication continued

Each Superintendent/Foreman will monitor employees under his direct supervision for proper training and proper precautions prior to the hazardous chemical's introduction to the jobsite.

LABELS AND OTHER FORMS OF WARNING

All hazardous chemicals on the site must be properly labeled, tagged, or marked with the following information:

- Identity of the hazardous chemical(s)
- Appropriate hazard warning
- Name and address of the manufacturer, importer, or other responsible party Labels must not be removed from any container or defaced in any manner. If a label is missing or illegible, notify your Superintendent/Foreman immediately.

All subcontractors must ensure all products they purchase or bring on site are labeled when they come on site. The Safety Director will conduct periodic inspections of all containers onsite to ensure they are labeled and that the labels are up to date.

TRAINING

Each employee who works with or might be exposed to hazardous chemicals will receive initial training on the Hazard Communication Program and the safe use of those hazardous

chemicals. Additional training will be provided for employees whenever a new hazard is introduced into their work areas.

The training will emphasize these elements:

 A summary of the standard and this written program.

 Hazardous chemical properties including visual appearance and odor methods that can be used to detect the presence or release of hazardous chemicals.

 Physical and health standards associated with potential exposure to work place chemicals.

 Procedures to protect against hazards, e.g., personal protective equipment, work practices, and emergency procedures.

 Where MSDS's are located, how to understand their content, and how associates may obtain and use appropriate hazard information.

 Employees shall be routinely tested to ensure they understand the hazard communication program.

Hazard communication training should also be provided regularly during weekly toolbox safety meetings when chemical hazards change and when a new hazardous chemical is introduced to the jobsite.

NON-ROUTUNE TASKS

Employees shall be trained in the use of hazardous materials when those materials are used in performing non-routine tasks. Non-routine tasks may include work that is not consistent with typical duties or tasks that involve work with chemicals that may not be labeled.

COMMUNITY RIGHT TO KNOW

Each project location will cooperate with city and county officials to comply with requirements of the OSHA standards regarding hazardous materials onsite.
Other contractors and subcontractors will be notified of company hazard communication policy and the location of MSDS's.

4. Personal Protective Equipment within Subpart E

 PPE capable of providing protection from hazards of processes or environment which may cause injury or impairment to the function of any body part through absorption, inhalation or physical contact shall be worn.

 Hard hats are to be worn at all times and in the proper manner with the bill facing forward.

 All employees shall wear appropriate work boots.

 Safety eyewear shall be worn at all times while on the project. Special eye protection, i.e. goggles are required and shall be worn when: using chainsaws, grinders, chipping hammers, and pouring hazardous chemicals. Ordinary glasses such as prescription and sun-glasses that do not meet the ANSI specifications will not be worn as safety glasses.

 Burning goggles are required for all burning and gas welding operations. Lenses shall be #4 density at a minimum and increase with the plate thickness.

 Hearing protection shall be used in work areas where noise levels exceed 90dB in any one 8-hour day or on excessive noise producing equipment such as: jack hammers, ram set guns, and various machinery. The hearing protection rule of thumb is that if you have to speak loudly for the person next to you to hear, the noise level merits wearing hearing protection.

 Respirators of the approved type shall be worn when dust or toxic fumes are present. Only NIOSH approved respirators shall be worn. Remember to use the correct cartridge for the associated hazard. All persons using a respirator must be fit and function tested per the OSHA standard. See Section 19 for more information on the Respirator Program.

 Full body harnesses and lanyards that meet OSHA specifications shall be worn when fall protection is required.

 Safety vests providing high visibility shall be worn by Superintendents, Project Managers and all employees at all times.

5. Fire & Burn Prevention within Subparts F & J

 Maintain good housekeeping in work areas. Control trash build-up to limit fire fuel.

 Recognize the common causes of fire.

 No open-burning fire or other sources of ignitions shall be permitted within 25 feet of fuel storage tanks, or within 50 feet where flammable liquids are used.

 Applicable danger signage is required by all flammable or combustible areas (i.e. “No Smoking”).

 No open-burning fires will be unattended, or allowed to burn overnight.

 Flammable liquids – these require extra care in storage, handling and transfer. The following standards apply:

a) Flammable liquids shall be stored in approved containers or tanks and bonded and grounded for static electricity.

b) Flammable liquids in excess of one gallon shall be stored in approved containers with “Flash Arrestors”. No more than 25 gallons of flammable liquid shall be stored in any one location unless in an approved Flammable Storage Cabinet.

 Oil and gas-soaked rags are to be stored in an approved container to prevent the possibility of combustion or ignition. Containers shall be emptied daily.

 Know where extinguishers are, which types are effective, and how to use them correctly.

 All office and tool trailers shall be equipped with at least one ABC fire extinguisher.

 Fire extinguishers shall be located on every job-site in accordance with OSHA standards.

 At least one portable fire extinguisher having a rating of not less than 20-B shall be located not less than 25 feet, nor more than 75 feet, from any flammable liquid storage area where 25 or more gallons exist.

 All equipment should have ABC fire extinguishers attached.

 LP gas or liquid fuel heaters require adequate clearance from combustible materials.

Before doing ANY HOT WORK:
 Anyone engaged in welding and cutting shall wear protective clothing and PPE such as goggles, helmets, aprons, and gloves.

 Use a Fire Watch when necessary.

 Always check adjacent areas, including the backside of work to be welded/cut.

 Sparks and slag created by welding or burning operations must be contained and combustible materials removed.

 Secure connections, couplings and fittings.

 Have fire protection available at work area:
a. Proper extinguisher.
b. Know location and accessibility of fire sprinkler controls.
c. Identify gas or fuel pipelines, tanks, shut off valves, other utilities.

Arc Welding:
 All work must be adequately grounded.

 Welding rods must not be left in electrode holders.

 Where overhead hazards exist, welders must wear hard hats that will accommodate welding shields.

 Appropriate filter lenses shall be used.

 Welding machines must be turned off at the end of each shift.

 Welding operations shall not be performed from metal ladders.

 The electrode holder and connecting cable shall be fully insulated.

 Light holder shall not be used for heavy work, and the welder shall avoid standing on damp or wet surfaces while welding.

Torch and Cylinder Safety:
 Secure cylinders upright and cap when not in use.

 Valve protection caps should not be used for lifting cylinders.

 Compressed gas cylinders must never be stored in “gang” boxes.

Fire and Burn Prevention continued
 When Oxygen and Acetylene cylinders are hoisted, they must be secured on a cradle, swing board or pallet.

 Oxygen and Acetylene cylinders not being used must be separated by 20 feet or by a noncombustible barrier at least 5 feet high having a fire resistance rating of at least one half-hour.

 Pressure check hose, torch and regulator.

 Use flashback prevention valves.

 Always use an igniter to light torches. Matches or cigarette lighters are prohibited.

6. Public Protection within Subpart G

 All equipment left unattended at night, adjacent to a highway in normal use, or adjacent to construction areas where work is in progress must have appropriate lights or reflectors to identify the location of the equipment, excavation or any other potential hazardous condition.

 Fences, barriers, guardrails, warning signs, etc. shall be used when deemed appropriate to keep members of the public away from job sites and attractive nuisance areas.

 All visitors attempting to enter the job-site must report to the site trailer or Superintendent/Foreman. They must follow all safety rules while on the jobsite, hard hats, safety vests and safety glasses are required for all tours through the jobsite.

 Keys must be removed from equipment at the end of each shift.

 Flagging Procedures

 Signs, barricades, etc. shall be placed where there is a possibility of the public driving on or through the construction site whereby they would cause damage to their vehicle or possible bodily harm. Sign placement shall be in accordance with state, company and DOT requirements.

 Flagmen must wear appropriate high visibility garments. They must use signs or flags meeting state specifications.

7. Moving Materials: Rigging and Hoisting w/in Subparts H & Q

 Inspect the project for overhead lines prior to operating any equipment.

 Never get beneath a suspended load or permit others to do so.

 Never leave a load suspended. Use cribbing or blocking to support it.

 Only trained persons are allowed to rig loads.

 No riding on the hook, ball, slinged load, etc.

 Use safety latches on everything. Use positive locking connections.

 Always check the path of the load. Be sure of clearances.

 Select the right rigging materials to use for the lift.

 Know the weight of all loads, equipment, capacities, centers of gravity, etc.

 Inspect, inspect, inspect before all lifts!!!

 Use boom trucks' outriggers. Outrigger pads must be used on every pick.

 For high-capacity lifts using 75 percent of the cranes rates capacity or any time cranes are making a tandem lift, review these steps and submit a written plan.

 Use tag lines when applicable.

8. Tool Safety within Subpart I

 Inspect all employer and employees' tools, power cords and equipment prior to their use. Worn or damaged equipment must be taken out of service and tagged for repair or discarded.

 Personal tools are subject to inspection at any time.

 Use tools only for their designed purpose.

 Only qualified and authorized personnel should operate certain tools and all equipment (i.e., powder actuated tools).

 All power tools and extension cords must be grounded to reduce the risk of electric shock by means of a three-wire type ground system or double-insulated tools.

 All frayed drop cords shall either be discarded or be repaired using heat shrink tube equal to or greater gauge casing than actual cord, or the cord shall be cut and new male and female plugs installed.

 Electric cords shall not be used for hoisting or lowering tools or other materials.

 Ground Fault Circuit Interrupters (GFCIs) shall be used on all extension cords and portable tools.

 Be sure the switch is off before plugging in any tool. Keep moving parts of power tools pointed away from your body.

 Do not operate electrical tools while standing on damp or wet surfaces. Keep hands dry.

 Be sure power tool is off and motion stopped before setting tool down.

 Disconnect tool from power source before changing drill bits or blades, or when attempting to repair or adjust.

 Do not operate any tool if the safety guard has been removed or disabled.

 Unplug all tools and properly store them after use.

 Keep impact tools such as drift pins, wedges, hammers, and chisels free from mushroom heads.

 Do not leave tools lying around where they can cause someone to trip or stumble.

 Shut off and bleed down air hose before disconnecting air tools.

 All pneumatic hose connections must be fastened securely by some positive means to prevent the tool from becoming disconnected.

 Safety clips or retainers must be installed on all pneumatic tools to prevent the accidental expulsion of the tool from the barrel.

 Screw or radiator hose clamps are not to be used on pneumatic hose connections.
 Powder-actuated tools are to be operated by trained employees. When using them, check out the areas behind the target material to avoid damage or injury caused by a fastener penetrating all the way through the material.

9. Confined Space Entry within Subpart J

Definitions
Confined Space -a space that meets each of the following criteria:
 Is large enough to enter
 Has a limited or restricted means of entry/exit
 Is not designated for human occupancy

Permit-required confined space - a space that has one or more of the following characteristics:
 Contains, or may contain, a hazardous atmosphere
 Contains a material that may engulf the entrant
 Has an internal configuration that may cause an employee to become trapped
 Contains any other recognized safety or health hazard

Non-Permit Confined Space – confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazards capable of causing death or serious physical harm.
Entry Permit – written or printed document that is provided by the employer to allow and control entry into a permit space and that contains the information specified in 29 CFR 1910.146
Attendant – an employee who is authorized by the employer to enter a permit space.
Entry Supervisor – the person responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations and for terminating entry as required by the standard. This person is typically either the Superintendent/Foreman or the Safety Director.
Entry – action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.
Hazardous Atmosphere – an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue, injury, or acute illness.

Hot Work Permit – an employer's written authorization to perform operations such as welding, cutting, burning, and heating) capable of providing a source of ignition.
Immediately Dangerous to Life or Health (IDLH) – any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.
Oxygen-Deficient Atmosphere – atmosphere containing less than 19.5% oxygen by volume.
Oxygen-Enriched Atmosphere – atmosphere containing greater than 23.5% oxygen by volume.
Rescue Service – personnel designated to rescue employees from permit spaces.
Retrieval System – equipment used for non-entry rescue of persons from permit spaces. Examples would be full-body harness and a tripod-lifting device.
Testing – process by which the hazards that may confront the entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the space.

10. Electrical Safety within Subpart K

A Ground Fault Circuit Interrupter (GFCI) is a fast acting circuit breaker that senses small imbalances in a circuit caused by current leakage to ground, and in a fraction of a second, shuts of electricity. The GFCI continually matches the amount of current returning from the device along the normal electrical path. Whenever the amount "going" differs from the amount "returning" by approximately five milliamps, the GFCI interrupts the electric power within as little as 1/40 of a second.
The Combined companies will predominantly rely on GFCI's as the base of its Electrical Safety Program. If use of GFCI's is not possible or practical in a given operation, an assured equipment grounding conductor program should be designed for that specific application.
 Ground Fault Circuit Interrupters shall be used on all extension cords and portable tools.

 All 120-volt receptacle outlets and all extension cords shall have third wire grounding conductor installed and intact. Two wire, double insulated portable tools are acceptable for use if the tool and power cord are approved by a recognized testing laboratory, such as UL.

 All electrical work shall be done by a Licensed Electrical Contractor.

 Cover all boxes and receptacles with a cover or faceplate. Cardboard is not acceptable.

 Cover or replace all missing knockouts of boxes that have live wiring.

 All overhead electrical power cables shall be at least 10 feet above ground over walking surfaces, and 12 feet above ground over roads for trucks; 18 feet over public streets, alleys, roads, and driveways; and 15 feet over other areas subject to truck traffic.
 All areas of electrical service that may cause possible danger shall be labeled with a warning sign as to the extent of the hazard.

 Use only grounded round (not flat or Romex) drop cords of sufficient capacity inspected prior to use for damage such as missing ground pin, cuts or frays, polarity, etc.

 If the drop cord ground pin is bent or missing, the cord shall be removed from service and replaced or repaired.

 Never string drop cords where they may become a tripping hazard or across a sharp edge or object or where they could be a subject to vehicular traffic.

 Drop cords used from a generator that does not have a built-in GFCI shall use a portable GFCI in connection with the drop cord and generator.

 Power tools shall be inspected for defects before each day's use.

 NO DIRECT WIRING into panels.

 Every temporary lamp shall have a lamp installed and a lamp guard in place. Non-conductive materials shall be used for securing lighting strings to supports.

 Energized wiring in junction boxes, circuit breaker panels and similar places must be stabilized and located in proper outlet boxes.

 Temporary electrical outlets are not allowed on temporary lighting systems.

11. Scaffolds within Subpart L

Scaffolds are one of our most serious exposures to injury. The OSHA Manual and Scaffolding Manufacturer's Brochures contain very specific guidelines on Scaffold Safety.
These guidelines are to be followed specifically and completely and it is not the intent of this section to replace or add to these.
GUARDRAILS: These must be in place at all times, including Midrails, Toprails, and Endrails.
FOOTINGS/BASES: Follow the standards – in the past some have used various jury-rigged approaches, including concrete blocks – these are absolutely unsatisfactory, and not to be used.
PLANKING: Be sure to use approved planking lumber, overlap properly and use cleats where appropriate.
BRACING: Be sure bracing is properly installed according to the standards.
ACCESS/EGRESS: An access ladder or equivalent safe access shall be provided.
Definitions
Frame or Panel - The principal prefabricated, welded structural unit in a tower.
Adjustment Screw - Device composed of a threaded screw and an adjusting handle used for the vertical adjustment of the scaffolding.
Base Plate - A device used to distribute the leg load.
Coupling Pin - Device used to connect lifts or tiers together vertically.
Cross-Bracing - System of members connecting frames or panels of scaffolding to make a tower structure.
Lifts or Tiers - The number of frames stacked one above each other in a vertical direction.
Locking Device - A device used to secure the cross brace to the panel.
Towers - A composite structure of frames, braces and accessories.
Sill or Mud Sill - A footing, usually wood, which distributes the vertical loads to the ground or slab below.
Scaffold Layout - An engineered drawing prepared prior to erection showing arrangement of equipment.
Factor of Safety - The ratio of ultimate load to the allowable load.
Safe Leg Load – That load which can safely be directly imposed on the frame leg.
Ultimate Load - The maximum load, which may be placed on a structure causing failure by buckling of column members or yielding of some component.

SCAFFOLD REGULATIONS

Scaffold safety depends primarily on the proper erection and use of the equipment. The CONTRACTOR OR USER IS RESPONSIBLE for providing a safe assembly for, and the proper use by, its employees. Scaffold equipment is designed and manufactured with the utmost consideration for safety. However, the safety built into the equipment cannot offset carelessness in the erection or use of the equipment. The safety rules and regulations listed below must be strictly adhered to:

PRIOR TO USE

All the equipment shall be inspected before use. Only equipment in good repair and safe condition shall be used.

All plank shall be inspected to ensure it is in good condition; of sound quality; straight grained; free from saw cut, splits, holes, through knots; and is graded for scaffold use.

Calculate total loads to be imposed on scaffolding. With consideration of job site ground conditions, determine frame spacing, and size mud sills to safely carry these loads. Stationary scaffolds over 125’ in height and rolling towers over 60’ in height must be designed by a professional engineer.

If in doubt as to the ability of the scaffold equipment to do a particular job, consult your supplier or manufacturer. Don’t take chances.

Familiarize yourself with local, state, and federal requirements and be governed accordingly.

General Requirements

 Scaffold must be erected, moved, or dismantled only under the supervision of competent persons. If in doubt, contact your supplier or manufacturer.

 Provide adequate sills for scaffold legs and use of base plates.

 Compensate for any unevenness of ground by using adjusting screws. Unstable objects such, as barrels, boxes, concrete blocks, loose bricks, etc. shall not be used to support scaffolding or planks.

 All scaffolds shall be level and plumb at all times. Plumb and level as the erection proceeds.

 Each scaffold leg must be braced. Do not force braces to fit. Plumb and level scaffold until fit can be made with ease. Braces must be fastened properly.

 Guard-railing and intermediate railing shall be used on all open sides and ends of scaffolding 10’ or more in height (4’ in height if the minimum dimension in either direction is less than 45”). Toe-boards shall be used over 10’ in height. Wire mesh screening will be used between the toe-board and guard railing whenever persons are required to work or pass under the scaffold. (Consult local codes for variances in guardrail height).

 Provide proper access to scaffold platforms. Be sure to consult your local or state codes. DO NOT CLIMB SCAFFOLD BRACING. Use internal stairs, access ladders, guardrail gates or hatch planks if access is from ground. Use landing platforms with all access ladders higher than 30 ft. Offset ladder location at each landing. Top-rail height must be at 42” (+/- 3”). Mid-rail height must be 21” (+/- 3”).

 Overhead protection shall be provided for men on scaffolds exposed to overhead hazards.

 Anchor running scaffold to the wall or structure at each end and every 30 ft. in length. Begin vertical ties and repeat at four times the minimum scaffold base dimensions. (Consult local codes for variances in base to height requirements). Anchors must prevent the scaffold from tipping into or away from the wall or structure.

Scaffolds continued
 Additional anchors may be required under the following conditions: 1) When the pulleys, hoist arms or other devices are used; 2) Under windy conditions, and 3) If the Scaffold is partially or fully enclosed.

 Guy or brace all freestanding scaffold towers when the height of the tower exceeds four times its minimum base dimension. (Consult local codes for variances in freestanding height requirements).

 Where uplift may occur, use unit lock arms, rivet and hairpins, or other similar means to lock frames together.

 Horizontal diagonal bracing shall be used when necessary to prevent racking of the scaffold.

 Do not use ladders or makeshift devices on top of the scaffold to increase its height or to provide access from above.

 Scaffold shall not be used as material hoist towers for mounting derricks.

 Scaffold is not to be placed in the proximity of power lines unless special precautions are taken. (Consult the local utility company for advice).

BRACKETS AND ACCESSORIES
 All scaffold accessories shall be used and installed in accordance with Manufacturer's recommended procedures. Accessories shall not be altered in the field.

 All brackets shall be seated correctly with side brackets parallel to the frames and end brackets 90 degrees to the frame. Brackets shall not be bent or twisted from normal positions. Uplift and overturning effect of brackets must be considered and compensated for. Guard railing shall be installed at ends of runs 4 ft. and higher or where planking is interrupted.

 Do not use putlogs as side brackets without putlog supports and thorough consideration for loads to be applied and the uplift and overturning effect of such use.

 Never tie two putlogs together to accommodate greater spans. No putlogs shall have less that 6' overhang at point of support. Use putlog hangers to fasten putlogs to scaffold frames.

 When using 16-foot and 22-foot putlogs in parallel, proper bracing between putlogs shall be used.

 Use putlog knee brace supports where spans exceed 12-feet with bottom of support attached within 6 inches of horizontal member of frame.
 Do not omit or fail to tighten all bolts or wing nuts that are a part of the scaffold assembly.

PLANKING

 Wood planking used on scaffolding shall be specifically graded for scaffold use as scaffold plank by approving grading rules. CAUTION: Not all species and grades of lumber can be used as scaffold plank. All wood planking must have at least 12 inches of overlap and be extended 6 inches beyond centers of support or be cleated at both ends. Do not allow unsupported ends of plank to extend more than 12 inches beyond the end supports on scaffold runs.

 Plank spans should never exceed 10 ft. Loads on planked surfaces should be distributed as uniformly as possible, and no more than one person should stand on an individual plank when spacing between supports exceeds 7 ft. Do not jump on or onto planks or platforms.

Scaffolds continued
 Consult the manufacturer for acceptable scaffold leg loading when planking and loading more than one level at a time.

 Scaffold platforms shall be fully planked between guardrails.

 Secure plank to scaffold when necessary to prevent uplift of displacement.

ROLLING TOWERS – SPECIAL PRECAUTIONS
 Rolling towers must be level and plumb at all times.

 Rolling towers shall be no higher than 4 times the minimum base dimension. (Consult local codes for variance in ratio).

 Caster brakes must be applied at all times when scaffold is not being moved.
 Five-inch casters may be used on towers under 20 ft. For towers 20 ft. and over, always use 8-inch casters.

 Casters with plain stems shall be attached to the frame leg or adjusting screws by pins or other suitable means.

 Do not exceed adjusting screws more than 12-inches.

 Rolling towers shall be fully braced on both sides.

 Horizontal diagonal bracing is to be used on the bottom and at intermediate levels of 20 ft. Prefabricated hooks may be used in place of top diagonal brace.

 Unit lock arms, rivet and hairpins, or other means of locking frames together shall be used on all towers.

 Guardrails and intermediate rails, when required, shall be used on all scaffolds above 4 ft. in height.

 Use stair units or access ladders and guardrail gates for proper access.

 All scaffold planking must be secured to prevent displacement or uplift. Toe-boards shall be used on scaffolds 10 ft. or more in height.

 Do not use brackets or extend the platforms of rolling towers beyond base dimension of the towers.

 Remove or secure all material and equipment on platform before moving scaffold.

 DO NOT RIDE rolling scaffolds or towers.

 Do not attempt to move a rolling tower without sufficient help. Apply force to move tower as close to the base as possible.

 Watch out and avoid holes in floor or other obstructions on the floor or overhead when moving a rolling tower.

Inspection
 Completed scaffold assemblies shall be inspected by competent persons and found to be in safe condition and in compliance with these regulations prior to use.

 Scaffold assemblies shall be inspected at least daily to see that changes or alterations have not been made to the assembly that will affect the safety of its use. An inspection check list is shown in the appendix.

PERSONNEL INSTRUCTIONS

 All personnel shall be instructed in the proper and safe use of scaffolding

12. Fall Protection within Subpart M

INTRODUCTION
THE OSHA Fall Protection Rules apply to construction operations that are 6 ft. above the level below.
The formal definition of a Fall Hazard is: When an activity exposes an employee to an unprotected fall, which may result in injury or death.
Fall Hazards include:
 falling from elevation (from one floor to a lower elevation),

 falling on the same level (tripping over tools, or falling on slippery working or walking surfaces),

 being struck by falling objects (a dropped tool, or improperly stored objects or construction materials).

A partial list of some of the obvious fall hazard locations on typical construction sites are: Ladders, Openings in floors, Scaffolding, Reinforcing steel extending vertically out of hardened concrete, Work platforms, Steel stay-in-place floor forms, Bridges, Excavations, Precast Concrete erection, Tilt-Up panels, Lift Slab construction, and Edges of elevated floors or roofs.
The company is committed to Fall Hazard Control wherever the potential exists and will take all practical measures to eliminate, prevent, and control fall hazards as discussed throughout.
All personnel and supervisors working where fall hazards cannot be eliminated or where fall prevention cannot be assured shall be uniformly equipped, trained, and given refresher training at specific intervals. Fall protection equipment and training standards shall be established and compliance shall be mandatory for both employees and outside contractors.
Control of falls should be considered only after it is determined that the hazard cannot be eliminated and the possibility of the falling presented.

Control of falls requires the appropriate use of safety nets, harness, lanyards, shock absorbers, fall arresters, lifelines, and anchorage connections. The proper use of these devices requires training, and periodic retraining of all company personnel, subcontractors, and others on-site that are exposed to fall hazards.

Proper training is not restricted to, but must include the procedures on how to check all equipment prior to use, how to properly store this equipment, and guidelines for evaluating when equipment needs to be replaced. When there is any question about the adequacy of the equipment, it should be replaced.

How to Identify Fall Hazards

Preliminary identification of fall hazards begins with a review of the plans shortly after the contract is awarded. Mentally visualizing the sequence of construction operations will identify the more obvious fall hazards and the trades involved.

Following the preliminary review of plans, meet with the construction superintendent and key individuals from affected trades. The best personnel to interview are those familiar with working at elevation, or on scaffolds, and work platforms.

A list should be made of the potential fall hazards, the anticipated time schedule for when these hazards might appear on the job, and the trades at risk. The list should be prioritized by the:

- Frequency of exposure.
- Number of personnel exposed.
- Likelihood of an accident occurring.
- Potential severity of injury.

When the job starts, make periodic inspections of the job-site to identify new hazards not foreseen in the preliminary or interview stages of the fall protection plan's development. Foreman, supervisors, and all management personnel should be alert to fall hazards and call the Safety Director, or Superintendent whenever one is identified.

Fall Prevention

The purpose of fall prevention is to prevent personnel exposure to fall hazards by eliminating the hazard, by preventing the fall, or by various controls.

Eliminating the hazard

Many fall hazards can be eliminated by proper planning. Some examples are:

- Backfill the excavations around abutments, walls, and foundations before employees begin work on the rest of the structure.
- Use field radios to eliminate employees hanging over the edge of an elevated floor to provide hand signals to crane operators.
- Simplify work at elevation by assembling components at ground level when practical.
- Work with designers to minimize the number of reinforcing bars protruding from hardened concrete.
- Trips/falls on protruding bars from the same level can cause injuries.
- Falls from elevation can impale an employee on protruding bars resulting in severe injuries or even death.
- Protruding bars should be bent over if permitted by codes and specifications.

When elimination of the hazard is not possible or has not occurred, then fall prevention measures must be developed. Fall prevention includes:Providing safe access to work by correct installation of ladders, scaffold, stair towers, stairways, and construction elevators.

- Proper use of guardrails on scaffolds; elevated work platforms on forms; around openings or holes in bridge decks, floors, and other unprotected surfaces.
- Unprotected sides of stairs, ramps, and platforms require guardrails.

 Isolate work area below elevated work areas to avoid injuries to employees from falling objects.

Definitions:
Anchorage: A secure point of attachment for lifelines, lanyards, or deceleration devices capable of withstanding the anticipated forces during a fall.
Body Belt: A work-positioning (safety) belt designed to fit around a worker's waist to be used in conjunction with a lanyard, lifeline, or reinforcing cage assembly. Body belts with single or double D-rings are intended only to restrain a person in a hazardous work position and to reduce the possibility of falls. They should not be used when a fall potential exists, but for positioning only.
Body Support: A belt or harness consisting of single or multiple straps that are arranged and assembled for the purpose of providing body support during and after an arrested fall. The body support is designed to distribute arresting forces over the body (e.g. full body harness).
Competent Person: An individual knowledgeable about fall protection equipment and systems, including the manufacturer's recommendations and instructions for proper erection, use, inspection, and maintenance. That person is capable of identifying existing and potential fall hazards and has the authority to take prompt corrective action to eliminate those hazards.
Connecting Means: A device, lanyard, or lifeline used to connect the body support to the anchorage to provide protected movement during an elevated work task.
Fall Arrest System: Includes the proper anchorage body support (Belt/Harness) and connecting means (lanyards/Lifelines) interconnected and rigged to arrest a free fall.
Fall Hazard: Occurs during any construction activity that exposes an employee to an unprotected fall, which may result in injury.
Fall Prevention: Any means used to reasonably prevent exposure to an elevated fall hazard, either by eliminating work elevation or by using aerial lifts, scaffold, floors, guardrails, or isolating an area.
Fall Protection: Involves using fall arrest equipment and systems to minimize the effects of a fall once it has occurred.
Fall Protection Plan: A written plan in which the employer identifies all areas on the job-site where a fall hazard exists. The plan describes the methods of fall protection necessary to protect employees, and includes safe work practices required during the installation, use, inspection, and removal of the fall protection method selected.
Fall Restraint System: An approved device and any necessary components that function together to restrain an employee from falling to a lower level. When standard guardrails are selected, compliance with applicable regulations governing their construction and use should be followed.
Full Body Harness: A body support configured of connected straps to distribute a fall arresting force over at least the thighs, shoulder, and pelvis. The harness provides a D-ring for attaching a lanyard, lifeline, or decelerating devices.
Fall Protection continued
Horizontal Lifeline: Provides an attachment for the workers lanyard or other fall arrest devices to protect him while moving horizontally and to control dangerous swing falls. It may be a cable or wire rope that is installed horizontally, which serves as an anchoring line rigged between two or more fixed anchorages on the same level. Horizontal lifelines must be positioned above waist high on a worker and all horizontal lifelines and their installation should be approved and supervised by a qualified person.
Lanyard: The connecting means (rope, webbing) used to attach a body belt or harness to a lifeline or an anchorage point. Lanyards are usually two, four, or six feet in length and come with, or without a shock absorber.

Shock Absorbing Lanyard: A flexible line of webbing, cable, or rope used to secure a body belt or harness to a lifeline or anchor point that has an integral shock absorber. The shock absorbing effect minimizes the forces distributed to the employee and the anchorage points.
Leading Edge: The advancing edge of a floor, decking, or formwork, which changes location as additional sections are placed. Leading edges not actively under construction are considered “unprotected sides and edges”, and appropriate methods of fall prevention shall be required to protect exposed workers.
Qualified Person: A person, who by reason of education, experience or training, is familiar with the operation to be performed and the hazards involved. The design of fall arrest systems must be engineered by a qualified person.
Rope Grab: A fall arresting device that provides employees protection while moving in the vertical direction (such as climbing). Rope Grabs are designed to move up or down a vertical lifeline, which is suspended from a fixed overhead anchorage point. The vertical lifeline is independent of the work platform and is attached to a harness by a rope grab and lanyard. In the event of a fall, the rope grab locks on the lifeline to arrest the fall. The use of a rope grab device is ideal for fall protection during work from two-point suspension scaffolds.
Safety Monitor System: A system used in conjunction with a warning line system. A Competent Person is assigned, as his sole duty, to monitor the proximity of workers to fall hazards when working between the warning line system and the unprotected sides and edges of a work surface.
Safety Nets: Used to provide passive fall protection under and around elevated work areas.
Self-Retracting (Retractable) Lifeline: A deceleration device, which contains a drum wound line, which may be slowly extracted onto the drum under slight tensions during normal employee movement, and which after the onset of a fall, automatically locks the drum and arrest the fall. This device limits the fall to approximately 18 inches, and is used during climbing operations or with horizontal lifeline systems.
Unprotected Sides and Edges: Any side or edge of a form, deck, floor, or structure where there is no protection from a falling hazard.

Warning Line System: A barrier erected on the working surface to warn employees they are approaching an unprotected fall hazard.

Fall Protection, or the Control of falls:
Control of a fall is the last line of defense. Consider it only when it is known that the fall hazard cannot be eliminated or the fall prevented.
For example, climbing forms or reinforcing bar cages requires complete and continuous fall protection. At times, the only way to provide this level of protection is through a self-retracting device anchored overhead and attached to the employee to prevent, or arrest a fall. Fall protection requires:
 Working with the designer to engineer appropriate anchorage points into the structure.

Fall arrest systems:
The purpose of the fall arrest system is to stop the fall and distribute the impact energy during the arrest of a fall to minimize the consequences, rather than to prevent the fall from happening.
 A fall arrest system has three basic components: an anchorage, a body support device, and connecting lifelines or lanyards.

 A fall arrest system may be as basic as a safety belt connected to a six-foot lanyard, which in turn is fastened to a safe anchorage point.

A more intricate system may include a vertical lifeline attached above the employee to an independent anchorage point and a rope grab connected to the vertical lifeline with a lanyard. The lanyard is attached to a body harness completing the fall arrest system.

A fall arrest system requires identifying the proper anchorage, wearing the appropriate body support, and using a connecting means capable of attaching the employee to the anchorage.

The anchorage point should be positioned on an independent structure and must be designed by a qualified person. It should be above the employee to prevent unnecessary swing and be capable of supporting 5,000 pounds minimum strength for falls up to six feet. Retracting lifelines permitting falls of two feet or less require anchorage points capable of supporting 3,000 pounds.
Body support devices minimize the impact of an arrested fall on the person falling. Body support devices have D-rings for connecting lanyards, lifelines, and retractable devices. Full body harnesses are used to provide fall arrest, while belts provide work positioning and restraint to falls.

Lanyards, lifelines, retractable devices, rope grabs, and their hardware (snap-hooks. D-rings, shackles) are the means of connecting the employee to the anchorage. To avoid roll out, only double locking snap hooks should be used.

Lifelines should be free of chafing, cuts, abrasions, and other defects. Synthetic lifelines of 5/8-inch nylon, polyester, or equivalent are preferred. Wire rope lifelines should be a minimum ½ inch diameter, of extra-improved plow-steel with a minimum breaking strength of 5,000 pounds.

Lanyards should be at least ½ inch diameter synthetic rope.

Rope grabs connect the lanyard to the lifeline and allow employees vertical movement.

13. Heavy Equipment within Subparts N, O and W

Only trained, qualified and in some cases certified operators are allowed to run equipment.

Use 3-point contact getting on and off machinery. Never jump.

All machines, vehicles and equipment with an obstructed view to the rear must have a back-up alarm or an observer signaling that it is safe to back up.

Equipment shall be greased and necessary maintenance shall be performed in accordance with the manufacturer’s specifications and recommendations.

Operators shall not start or operate equipment while personnel are oiling or adjusting the machinery.

When machine is idle or parked, lower the blade, bucket or forks.

Travel with buckets, forks, etc. as low as possible. Secure outriggers and any other attachments before heading out on the road.

Booms, hoisting engines, hooks, shackles, and cable should be inspected daily and replacements or repairs made before usage.

 Crane hand signals shall be posted on all cranes.

 Overloading of any cable or rigging will not be permitted.

 All cranes shall have a safety swing radius barricade around each counterweight.

 Riding on hooks, lines or chain of any derrick, backhoe, crane or other lifting device will not be permitted.
 When working near electrical lines, either overhead or underground, power should be disconnected, erect guards or other suitable warning signs so the equipment operator will be aware of such lines. No crane, backhoe, concrete pump, aerial lift, etc., shall be allowed to work closer than 10 feet to power lines.

 Avoid sharp bends or kinks in cables.

 Anti-two block boom stops shall be provided on all cranes used to lift personnel.

 Personnel shall not be permitted to approach the cab of any piece of equipment until the operator has made eye contact with the individual.

 Motors are to be shut down during refueling operations and smoking is not allowed during fueling time.

 Bulldozer and scraper blades, front end-loader buckets, dump bodies, and similar equipment must be either full lowered or blocked when being repaired.

 Only equipment operators shall be permitted to ride on the equipment. No riding on concrete buckets, cables, or fenders will be permitted.

 Riding in the bed of a pickup is strictly prohibited.

14. Excavations within Subpart P

General Requirements
 Never begin digging in any location without first contacting the local utility companies so that underground utilities can be located. Hand dig around utilities when near them until an exact location is determined. Support underground utilities during excavation activities.

 Trenches and excavations as described below in which employees are exposed to danger from moving ground or cave-ins shall be guarded by a shoring system, proper sloping, or other equivalent means.

a. Trenches in unstable material five (5) feet or more in depth.
b. Trenches in stable material more than five (5) feet in depth and eight (8) feet in length.
c. Excavations for tower footings in unstable material in excess of five (5) feet in depth.
d. Excavations for manholes, vaults, and other underground facilities in excess of five (5) feet in depth.

 Conditions immediately adjacent to a trench or excavation, such as trees, boulders, slides, banks or building foundations, shall be examined and proper precautions taken.

 Site conditions, such as surface water drainage and vibration from blasting, traffic, or machinery, shall be considered in planning the excavation.

 Trenches and excavations in which employees are working shall be inspected by the competent person at least daily and more frequently as made necessary by rain storms, freezing and thawing conditions, and other hazard-increasing occurrences.

 In locations where oxygen deficiency (less than 19.5% oxygen) or gaseous conditions are possible, the air in an excavation or trench greater than four (4) feet shall be tested. Controls shall be established to ensure acceptable atmospheric conditions.

 Excavated or other material shall be kept at least two (2) feet from the edge of any trench or excavation. Where this requirement cannot be met, effective barriers or retaining devices shall be used.

 When employees are required to enter a trench or excavation four (4) feet deep or greater, approved ladders of proper length and location shall be used and shall be within 25 feet of travel distance at all times.

 Heavy machinery or material should not be placed near the edge of excavations unless necessary precautions are taken to prevent a cave-in. A distance of at least two (2) feet should be maintained.

 Before and during an excavation, effort shall be made to discover the position of underground facilities, such as pipelines, storage tanks, cables, etc. Proper measures shall be taken to protect employees from hazards resulting from exposed facilities.

 All excavations 20 feet and greater must be approved in writing by a Registered Professional Engineer for excavation.

 If you are using a trench box, a ladder MUST be INSIDE the box at ALL TIMES. Also the ladder must extend 36 inches from the top of the box.

 The trench box sides must extend a minimum of 18 inches above the intersection of the adjoining soil.

 Excavation of earth material up to 2 feet below the bottom of a trench box is permitted, but only if it meets requirements in OSHA standard 1926.652 (g2).

 Workers must remain inside the trench box or shield at all times when working. Workers must leave the excavation if the box must be lifted vertically.

 Excavations left open overnight or during lunch breaks shall be re-analyzed by the competent person.

 Excavations left open shall be appropriately guarded.

15. Concrete and Masonry within Subpart Q

General Requirements

 Employees working more than 6 feet above any working surfaces, placing and tying reinforcing steel in walls, piers, columns, etc. shall wear full body safety harnesses with shock absorbing lanyards in accordance with the OSHA Construction Standard, Subpart M, Fall Protection.

 Employees shall not be permitted to work above vertically protruding reinforcing steel unless it has been protected to eliminate the hazard of impalement.

 The riding of concrete buckets for any purpose shall be prohibited.

 Where practical, tag lines should be used to control and position suspended concrete buckets.

 Pumpcrete or similar systems using discharge pipes should be provided with pipe supports designed for 100% overload. Compressed air hose in such systems shall be provided with positive fail-safe joint connections or otherwise secured to prevent separation of sections when pressurized.

 Nozzlemen applying cement, air, sand, and water through pneumatic or high-pressure hose shall wear protective head, face, and hand equipment.

 Concrete workers are required to wear rubber boots and gloves to reduce the danger of cement burns.

 Finishers shall wear safety glasses and/or face shields when chipping, wire brushing or using power impact or rotary tools while patching concrete.

 Eye wash stations and/or bottles of neutralizer should be available in the pour area.

 Temporary winter protection enclosure shall be provided with adequate ventilation, lighting and fire protection.

 The handles on bull floats used where they may contact energized electrical conductors shall be constructed of nonconductive material, or insulated with a nonconductive sheath whose electrical and mechanical characteristics provide the equivalent protection of a handle constructed of nonconductive metal.

 Concrete buckets equipped with hydraulic or pneumatic operated gates shall have positive safety latches or similar safety devices installed to prevent premature or accidental dumping.

 When discharging on a slope, the wheels of ready-mix trucks shall be blocked and the brakes set to prevent movement.

 Exposed gears, chains, and rollers of mixers shall be properly guarded.

 Sections and the ends of tremies, elephant trunks, and similar concrete conveyances shall be secured with wire ropes, chain or similar safe fastener.

 Powered and rotating-type concrete troweling machines that are manually guided shall be equipped with a control or dead-man switch that will automatically shut off the power whenever the operator removes his hands from the equipment handles.

Concrete and Masonry continued
 All ready-mix trucks shall be equipped with operable back-up alarms. A spotter who has a clear view of the area behind the truck as well as be clearly visible to the truck driver should control backing operations.

Forms and Shoring
 Formwork and shoring shall be designed, erected, supported, braced, and maintained to safely support all vertical and lateral loads that may be imposed upon it during the placement of concrete.

 Stripped forms and shoring shall be removed and stockpiled promptly after stripping in all areas where persons work or pass.

 The sills for shoring shall be sound, rigid, and capable of carrying the maximum load.

 All shoring equipment shall be inspected prior to erection to determine that it is as specified in the shoring layout. Any damaged equipment shall not be used in shoring.

 Erected shoring equipment shall be inspected immediately prior to, during, and immediately after the placement of concrete. Any shoring equipment found to be damaged or weakened shall be immediately reinforced or re-shored.

 Re-shoring shall be provided when necessary to safely support slabs and beams after stripping, or where such members are subjected to superimposed loads due to construction work done.

 The building of shoring or form systems shall be in accordance with Subpart P, Excavations of the OSHA Construction Standards, when working in excavations over five (5) feet deep.

Pre-cast Concrete and Tilt Up Operations
 Employees shall not be permitted under pre-cast walls, panels, or sections while they are being lifted or tilted into position.

 Properly attached tag lines should be used, especially if the load is to be lifted and moved into place.

 Pre-cast walls or vertical concrete panels shall be adequately braced during construction.

 Braces or shores shall be securely attached to the concrete member.

 Lifting inserts on or in tilt-up pre-cast concrete members must be capable of supporting at least two (2) times the maximum intended load applied or transmitted to them.

 Lifting hardware must be able to support at least five (5) times the maximum intended load applied or transmitted to the lifting hardware.

Masonry Work

 Handling and storage of masonry building materials shall be in accordance with the Material Handling and Storage Procedure and scaffolds for masonry construction shall be built in accordance with the OSHA Construction Standard, Subpart L, Scaffolds.

 Power saws for cutting brick or stone should be equipped with dust collectors or employees shall be provided with approved respirators, including training, fit-test, and physician's approval to wear a respirator. The exhausted dust should be directed away from vehicle or personnel traffic.

 Employees cutting brick or stone shall wear approved safety glasses or goggles.

 Mortar tubs shall be kept free from ragged edges which may cut the hands, legs and arms of bricklayers.

 All walls or vertical surfaces shall be properly braced during construction to withstand wind and other pressure.

 During cold weather, caution should be used to ensure uniform curing of the mortar to prevent the wall from falling. This may occur when the exposed exterior side of the wall cures at a slower rate due to the temperature difference.

 A limited access zone shall be established whenever a masonry wall is being constructed.

 The limited access zone shall be the height of the wall plus four (4) feet, and be the entire length of the wall.

 The limited access zone shall be restricted to entry by employees actively engaged in constructing the wall. No other employees shall be permitted to enter the zone.

 All masonry walls over eight (8) feet in height shall be adequately braced to prevent overturning and to prevent collapse unless the wall is adequately supported so that it will not overturn or collapse. The bracing shall remain in place until permanent supporting elements or the structure is in place.

16. Stairways & Ladders within Subpart X

Definitions

Cleat – a ladder crosspiece of rectangular cross section placed on edge upon which a person may step while ascending or descending a ladder.

Double-cleat ladder – a ladder similar in construction to a single-cleat ladder, but with a center rail to allow simultaneous two-way traffic for employees ascending or descending.

Extension tressle ladder – a self supporting portable ladder, adjustable in length consisting of a trestle ladder base and a vertically adjustable extension section, with a suitable means for locking the ladders together.

Maximum Intended Load - total load of all employees, equipment, tools, materials, transmitted loads and other loads anticipated to be applied to a ladder component at any one time.

Riser height – the vertical distance from the top of a tread to the top of the next higher tread or platform/landing or the distance from the top of the next higher tread or platform landing.

General Requirements

 A stairway or ladder shall be provided at all personnel points of access where there is a break in elevation of 19 inches or more, and no ramp, runway, sloped embankment or personnel hoist is provided.

 Two or more separate ladders or a double-cleated ladder shall be provided when ladders are the only mean of access or exit from a working area for 25 or more employees, or when a ladders is to serve simultaneous two-way traffic.

General Requirements- Ladders
 Ladders shall be capable of supporting the following loads without failure:

a). Self-supporting and non self-supporting portable ladders – four times the maximum intended load except 1A metal or plastic ladders which should support 3.3 times the maximum intended load.
b). Fixed ladders – at least two loads of 250 pounds each, concentrated between any two consecutive attachments.
 Rungs, cleats and steps of portable ladders and fixed ladders shall be spaced not less than 10 inches apart, nor more than 14 inches apart, as measured between center lines of the rungs, cleats and steps.

 Ladders shall be used only for the purpose for which they were designed.

 Only one employee is permitted on a ladder at a time. Be sure not to climb on the cross bracing on the rear of a stepladder.

 Employees must always use 3-point contact when using any extension ladder. Always face the ladder when ascending or descending.

 Ladders must not be used for working except for limited periods of time. Ladders are primarily for ascending or descending from one level to another. When work requires the use of tools and materials, or the job is of considerable duration, employees shall use a work platform, stepladder, man-lift or some other acceptable working base.

 Employees shall ascend no higher than the third rung from the top on a straight or extension ladder and no higher than the second step form the top on a stepladder. The top of the stepladder is not to be used to stand on.

 Employees should have free use of both hands while ascending or descending ladders. Haul tools or materials up and down ladders using hand lines or tool belts.

 Extension ladders should be placed using the 4:1 rule. The base of the ladder set one foot out from vertical for every 4 feet of working height.

 The top of the ladder must extend 3 feet above the upper elevation access.

 Extension ladders in use must be blocked, tied off or otherwise secured to prevent movement or displacement.

 Ladders must not be placed on slippery surfaces unless secured or provided with slip-resistant feet to prevent displacement.

 Ladders shall not be placed in passageways, doorways, driveways or any location where they may be displaced by other work activities, unless protected by barricades or guards.

 Metal or conductive ladders shall not be used near energized lines or equipment.

 Keep ladder landings clear of tripping hazards.

Ladder Ratings Guide
 IA – Industrial – Extra Heavy – 300lb Working Load
 I – Industrial – Heavy – 250lb Working Load
 II – Commercial – Medium – 225lb Working Load
 III – Household – Light - 200lb Working Load

General Requirements - Stairways
Stairways that will not be permanent a part of the structure on which construction work is being performed shall have the following:
 A landing at least 30 inches deep and 22 inches wide shall be provided for every 12 feet or less of vertical travel.

 Stairs shall be between 30 degrees and 50 degrees from horizontal.

 Risers shall be uniform. Variations shall not be over 1/4 inch.

 Except during stairway construction, foot traffic is prohibited on stairways with pan stairs where the treads and/or landings are to be filled with concrete or other material at a later date, unless the stairs are temporarily fitted with wood or other solid material at least to the top edge of each pan. Such temporary treads and landings shall be replaced when worn below the level of the top edge of the pan.

 If doors or gates swing onto a stairway, a platform shall be provided. The effective width shall be at least 20 inches.

 Fill the pan landings and pan treads.

 Free of hazardous projections, such as protruding nails.

 Eliminate all slippery conditions before use.

 Stairways having four or more risers or rising more than 30 inches shall be equipped with at least one handrail or one stair rail on unprotected side.

 Stair rails must be at least 36 inches high with a mid rail at 29 inches high.

 Handrails must be capable of withstanding a 200-pound downward or outward force.

 Handrails shall be between 30 and 37 inches high. If handrail serves as stair rail, it must be between 36-37 inches.

 Unprotected sides and edges of stairway landings shall be provided with a guardrail system.

17. Steel Erection within Subpart R

General Requirements
 Before authorizing the start of steel erection, the controlling contractor must provide the steel erector the following written criteria:
A. Concrete in footings, piers or walls must reach 75% of the intended minimum compressive strength or sufficient strength to support loads.

B. Repairs to anchor bolts must be in accordance with 1926.755(b)
C. A steel erection contractor shall not erect steel unless it has received the above written notifications.

 Site layout – The controlling contractor shall provide and maintain:
A. Adequate access roads for cranes and delivery trucks.
B. Firm, properly graded, drained areas readily accessible with adequate space for safe storage of materials and equipment.
C. All hoisting operation preplanned to avoid employee exposure to overhead hazards.
D. Where elected due to site-specific conditions an erection plan shall be developed by a qualified person and be available at the site.

 Falling object protection
A. All materials that are not in use aloft must be secured from accidental displacement.
B. The controlling contractor shall ensure that no other construction processes take place below steel erection unless adequate overhead protection for the employees below is provided.

 Protection of other workers and the public shall be safeguarded at all times. Safety signs and barricades to warn people of overhead work shall be posted when necessary.

 Employees shall not be permitted to ride loads or crane headache ball.

 Employees working more than 6 feet above any adjacent working surfaces, placing and tying reinforcing steel walls, piers, columns, etc., shall wear an approved full-body harness in accordance with the OSHA Construction Standard, Subpart M.

 All projecting or protruding reinforcing rods which create tripping or falling hazards shall be bent or covered with acceptable protective covers.

 Excess material should not be hoisted to a structure and stored in the working area until it is ready to be put into position and fastened.

 Before cutting any large or heavy structural steel member, the member shall be secured or supported by ropes, cables, or other means to prevent dropping or uncontrolled swinging.

 Work areas shall be maintained in an orderly condition with necessary equipment and materials safely arranged.

 In setting steel, each piece shall be securely bolted before the load line is unhooked. The use of one-bolt connections is not sufficient.

 When setting steel trusses, they shall be securely tied or cross-braced until permanent braces are in place.

 All loads should be checked to ensure there are no sharp edges, which will cut into the lifting slings.

 A tag line or lines shall be attached to loads where their use will not create a greater hazard.
Steel Erection continued
 All openings in floors shall be securely planked over or guarded.

 A safety railing of ½ -inch wire ropes or equal shall be installed, at approximately 42 inches and 21 inches, around the perimeter of all temporary planked or temporary metal-decked floors of multi-floored buildings/structures during structural steel assembly. In addition, orange safety fence shall be secured between the 21-inch wire rope and floor surface.

 Permanent stairways shall be installed as soon as working conditions permit.

 All perimeter railings shall be inspected daily.

 When using wire rope a minimum of 3 clips of required size shall be used at each connection.

 Supports shall be adequate and properly placed.

 Proper fall protection system shall be in place if railings are removed to receive materials.

 Temporary guardrail systems shall be covered routinely during weekly tool box safety meetings.

For more information, please refer to OSHA Standards for the Construction Industry section 1926.750-761.

18. Lockout/Tagout

This section is designed to meet the minimum requirements of CFR 1910.147 for lockout/tagout of hazardous energy sources.
Definitions:
Affected Employee – an employee whose job requires the operation or use of a machine or piece of equipment on which servicing or maintenance is being performed under lockout and tagout.
Authorized Employee – an employee who locks or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment.
Energy Isolating Device – a mechanical device that physically prevents the transmission or release of hazardous energy.
Lockout – the application of an energy-isolating device to separate and secure energy sources from the equipment to prevent release of hazardous energy during servicing or maintenance.
Lockout Device – a device that utilizes a positive means such as a lock to hold an energy isolating device in the position and prevent the energizing of the machine or equipment.
Servicing and /or Maintenance – Workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment.
Tagout – the placement of a tag on an energy-isolating device, in accordance with an established procedure to indicate that the energy isolating device and equipment being controlled may not operate until the tagout device is removed.

Sequence of Lockout

1. Notify all affected employees that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

2. The authorized employee shall identify the type and magnitude of the energy that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.

3. If the machine or equipment is operating, shut it down by the normal stopping procedure.

4. De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).

5. Lock out the energy isolating device(s) with assigned individual lock(s).

6. Stored or residual energy must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.

7. Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.

8. The machine or equipment is now locked out.

1. Local Medical Facilities
2. General Safety Rules
3. Daily Scaffold Check List
4. Safety Violation Warning Notice

APPENDIX # 1
APPROVED FACILITIES FOR MINOR EMERGENCIES

Anson County Hospital
500 Morven Road
Wadesboro, NC 28170
704-694-5131

Monroe Family Medical Center
1420 East Franklin Street,
Monroe, NC
(704) 289-8427

Carolinas Healthcare Urgent Care
332 Sam Newell Rd
Matthews, NC 28105
(704) 512-6850

Firsthealth of the Carolinas
809 S Long Dr
Rockingham, NC (910) 471-4090

Appendix # 2
LCM BUILDERS GENERAL SAFETY RULES

1. Hard hats, safety vests and or high visibility shirts and safety glasses must be worn on all job sites by all personnel at all times.

2. Goggles, and/or face shields must be worn when appropriate; such as sawing, drilling, grinding, mixing mortar, pouring concrete, etc.

3. Wear appropriate clothing including safety shoes and gloves when needed. No loose clothing, dangling jewelry, shorts or athletic shoes. Shirts with sleeves must be worn at all times.

4. All accidents, regardless of severity, shall be reported to your supervisor for immediate attention. Failure to do so may result in discharge.

5. Within 4 hours of notice, Superintendent/Foreman will report all incidents to Risk Manager, Safety Director or designated personnel.

6. Possession or use of alcohol or non-prescription drugs on the job-site is strictly prohibited. Any employee reporting to work under the influence of drugs or alcohol will be terminated. Post accident drug/alchol tests will be administered to all injuries requiring a physician visit.

7. Requirement for Scaffolds:
a) Work platform shall be fully planked.
b) Guardrails at 42” and 21” required at 10’ and greater heights.
c) Base plates required at all times.
d) Ladder access to working platform must be provided.
e) Supported scaffolds with height to base ratio greater than 4:1 will be tied off.

8. Excavation and trench requirements:
a) Excavated material shall be kept at least 2’ from edge of excavation.
b) Excavation 5’ deep or greater must be inspected by competent person.
c) Excavation 4’ deep or greater must have ladder for every 25’ of lateral travel.
d) Ladders must extend 3’ past the landing area and be tied of when in use.
e) Fall protection requirements:
f) Mandatory when working at heights greater than 6’.
g) Body harness and lanyard must be used when working from an aerial lift.

9. Power tools – powder activated tools shall only be used by trained personnel. Guarding and ground faults must be in place.

10. Cylinders shall be upright when in use. During storage and transport, they must be capped and secured in an upright position.

11. Riding of equipment is prohibited. No person shall ride any hook, hoist or other material handling equipment.

12. Safety vests shall be worn on all jobs at all times.

13. Good “housekeeping” shall be practiced on all construction sites. Avoid excess debris.

14. MSDS’s are available for inspection. Ask your Superintendent/Foreman if you have questions.

15. Driving a company vehicle without having read and signed the Fleet Safety Policy is strictly prohibited.

~~~~~~
~~~~~~

Appendix # 3

DAILY SCAFFOLD CHECK LIST

Project _____
Foreman: _____

Week of:	Monday Y/N	Tuesday Y/N	Wednesday Y/N	Thursday Y/N	Friday Y/N
1. Are scaffold components and planking in safe condition for use and is plank graded for scaffold use?					
2. Have competent persons been in charge of erection?					
3. Are sills properly placed and adequate size?					
4. Have screw jacks been used to level and plumb scaffold?					
5. Are scaffold legs braced with braces properly attached?					
6. Is guard railing in place on all open sides and ends?					
7. Has proper access been provided?					
8. Are ladders secured top and bottom?					
9. Are working level platforms fully planked ?					
10. Are toeboards installed properly?					

Comments: _____
_____
_____

APPENDIX # 4

SAFETY VIOLATION WARNING NOTICE

Employee Name: _____

Date: _____

Superintendent/Foreman:_____

Job-Site Location:_____

First Warning ☐ Second Warning ☐ Third Warning ☐ ☐

Violation(s):_____

_____

Superintendent Statement: _____

_____

_____

Employee Statement: _____

_____

_____

Disciplinary Action: _____

_____

_____

Appendix # 5

FIELD SAFETY INSPECTION REPORT

FIELD SAFETY INSPECTION REPORT				
Safety Inspector(s):				
Project Superintendent:				
Superintendent's Signature:				
Company:				
Date Inspected:				
Project Name:				
	C	N.C.	N/A	
1. JOBSITE INFORMATION	❒	❒	❒	
2. HOUSEKEEPING & SANITATION	❒	❒	❒	
3. CONCRETE FORMING AND POURING	❒	❒	❒	
4. CONFINED SPACE ENTRY PROGRAM	❒	❒	❒	
5. CRANES & RIGGING	❒	❒	❒	
6. MAN BASKETS	❒	❒	❒	
7. ELECTRICAL/GROUNDING/LIGHTING	❒	❒	❒	
8. EXCAVATION/TRENCHING/SHORING	❒	❒	❒	
9. FALL PROTECTION	❒	❒	❒	
10. FIRE PROTECTION AND PREVENTION	❒	❒	❒	
11. HEAVY EQUIPMENT	❒	❒	❒	
12. LADDERS	❒	❒	❒	
13. PERSONAL PROTECTIVE EQUIPMENT	❒	❒	❒	
14. SCAFFOLDING	❒	❒	❒	
C = Compliance N.C. = Non-Compliance N/A = Not Applicable				

Inspection Report Continued

	C	N.C.	N/A
15. SIGNS - SIGNALS - BARRICADES	❒	❒	❒
16. STEEL ERECTION	❒	❒	❒
17. TOOLS	❒	❒	❒
18. TRAINING & ORIENTATION REQUIREMENTS	❒	❒	❒
19. WELDING / CUTTING	❒	❒	❒
20. MATERIAL HANDLING & STORAGE	❒	❒	❒

C = Compliance N.C. = Non-Compliance N/A = Not Applicable

Comments:

Recommended Corrective Action(s):

LCM BUILDERS, INC.

Roofing & General Contractor

North Carolina HUB NC & SC DOT DBE SBE ~WBE Certified

general@lcmbuilders.com http://www.lcmbuilders.com

This is to acknowledge that I have received and read the

LCM Builders General Safety Rules

and had the opportunity to ask questions about them.

I understand that in accepting employment with the LCM Builders, I am expected to abide by these safety rules and regulations as well as any additional safety rules that may be communicated to me.

I understand that failure to abide by the General Safety Rules may result in disciplinary action up to and including termination.

I understand this policy does not create a contract of employment.

Printed Name_____

Signature_____

SSN#: _____

Date _____ Trade _____

PO Box 299 Peachland, NC 28133 **800-329-8338** fax: 877-382-9238

LCM BUILDERS, INC.

Roofing & General Contractor

North Carolina HUB NC & SC DOT DBE SBE ~ WBE Certified

general@lcmbuilders.com http://www.lcmbuilders.com

This is to acknowledge that I have received and read the

LCM Builders General Safety Rules

and had the opportunity to ask questions about them.

I understand that in accepting employment with LCM Builders, I am expected to abide by these safety rules and regulations as well as any additional safety rules that may be communicated to me.

I understand that failure to abide by the General Safety Rules may result in disciplinary action up to and including termination.

I understand this policy does not create a contract of employment.

Printed Name_____

Signature_____

SSN#: _____

Date _____ Trade _____

P.O. Box 299 Peachland, NC 28133 **800-329-8338** fax: 877-382-9238