

SPACE STRUCTURES Company Ltd FOR STEEL STRUCTURES

SAFETY MANUAL

Section 1: Safety Policy

A. Company Policy

(Company Name) is dedicated to providing a safe and healthy work environment for all of our employees and customers. The Company shall follow operating practices that will safeguard employees, the public and Company operations. We believe all accidents are preventable. Therefore, we will make every effort to prevent accidents and comply with all established safety and health laws and regulations.

B. Management Commitment to Safety

Management is concerned about employee safety. Accidents, unsafe working conditions, and unsafe acts jeopardize both employees and Company resources. Injuries and illnesses result in discomfort, inconvenience and possibly reduced income for the employee. Costs to the Company include direct expenses (workers' compensation premiums, damaged equipment or materials, and medical care) and indirect expenses (loss of production, reduced efficiency, employee morale problems, etc.). These indirect costs are reported to cost 4-10 times more than the insured costs of an accident. Accordingly, Management will provide sufficient staffing, funds, time, and equipment so those employees can work safely and efficiently.

C. Assignment of Responsibilities

Safety is everyone's responsibility. Everyone should have a safe attitude and practice safe behavior at all times. To best administer and monitor our safety policies, the following responsibilities are delegated. This list should not be construed as all-inclusive and is subject to change as needed.

1. Management

- a. Provide sufficient staffing, funds, time, and equipment so that employees can work safely and efficiently
- b. Demand safe performance from each employee and express this demand periodically and whenever the opportunity presents itself.
- c. Delegate the responsibility for a safe performance to the Safety Director, Supervisors, and Employees, as appropriate.
- d. Hold every employee accountable for safety and evaluate performance accordingly.
- e. Periodically review the Safety Program effectiveness and results.

2. Safety /Quality Department

- a. Provide the resources, direction, and audits to integrate safety into the management system.
- b. Establish and maintain a safety education and training program.
- c. Periodically conduct safety surveys, meetings, and inspections.

- d. Advise supervisors, employees, and the safety committee on safety policies and procedures.
- e. Assure that all newly hired employees have been given a thorough orientation concerning the Company's Safety Program.
- f. Coordinate with Human Resources pre-employment physicals and maintain the company's drug-testing program.
- g. Prepare and maintain safety records, analysis, evaluations, and reports to improve the Company's safety performance and comply with all government agencies, insurance carriers, and internal procedures.
- h. Work with management, supervisors, safety committees and employees to maintain & implement new and ongoing safety programs and comply with recommendations provided by outside consultants,
- i. Make available all necessary personal protective equipment, job safety material, and first-aid equipment.
- j. Review all accidents with management, supervisors, the safety committee and/or employees and ensure that corrective action is taken immediately.
- k. File all workers' compensation claims immediately and work with the workers' compensation carrier to ensure proper medical treatment is provided to injured workers and they are returned to work as quickly as medically possible.

3. Supervisors

Each employee, who is in charge of a specific work area, supervises the work of others, or to whom an employee is assigned for a specific task or project, is responsible and accountable for their safety. Supervisors will:

- a. Establish and maintain safe-working conditions, practices, and processes through:
 - Job Safety Analysis (see Return to Work section for sample)
 - Job Inspections
 - Safety Training
- b. Observe work activities to detect and correct unsafe actions.
- c. Ensure that all injuries are reported promptly and cared for properly. Make available first aid treatment.
- d. Investigate all accidents promptly. Complete an accident report and provide it to the Safety Director the same day the accident occurs. Review all accidents with the Safety Director and employees and correct the causes immediately.
- e. Assist Human Resources in the review of employment applications, preemployment physicals reports, and personnel files to determine physicals qualifications for specified job classifications.
- f. Seek out alternative work so that injured employees can return to work in a modified duty job.
- g. Consistently enforce safety rules/regulations, programs, and protective measures (i.e. use of personal protective equipment, machine guarding, proper clothing, etc.)

- h. Post signs, notices, and instructions as needed or required.
- i. Brief your employees of any new hazards before they start work and weekly host brief safety meetings to discuss safety practices related to job hazards and general safe work behavior.
- j. Work with management, safety/Quality department and employees to maintain & implement new and ongoing safety programs and comply with recommendations provided by outside consultants, insurance companies.

4. Employees

Each employee is responsible for his/her own safety. No task should be completed unless it can be completed safely. Employees will:

- a. Comply with all company safety programs, rules, regulations, procedures, and instructions that are applicable to his/her own actions and conduct.
- b. Refrain from any unsafe act that might endanger him/herself or fellow workers.
- c. Use all safety devices and personal protective equipment provided for his/her protection.
- d. Report all hazards, incidents, and near-miss occurrences to their immediate supervisor or Safety Director, regardless of whether or not injury or property damaged was involved.
- e. Promptly report all injuries and suspected work related illnesses, however slight, to his/her immediate supervisor.
- f. Participate in safety committee meetings, training sessions, and surveys as requested and provide input into how to improve safety.
- g. Notify the Human Resources Manager within five days of any serious driving, drug/alcohol, or criminal convictions.
- i. Be a safe worker on (and off) the job. Help coworkers do their job safely. Come to work everyday with a safe attitude.

D. Accountability for Safety

Everyone is accountable for safety. Management, the Safety /Quality Department shall establish safety objectives and develop and direct accident prevention activities. All employees should strive to reach those objectives and will be evaluated accordingly. All managers' and supervisors' annual appraisals will include safety (results to objectives in their area and company wide) as well as an audit of their performance of their safety responsibilities. All employees' salary reviews will be affected by the company's safety performance record. Appraisals, which include safety records, will also be performed on all employees seeking a promotion.

E. Employee Suggestions

Safety suggestions from employees are welcomed and encouraged. To make a safety suggestion, complete the following form and provide it to the Safety Director. The Safety Committee at their next meeting will review the suggestion. Responses to suggestions will be discussed with the individual or posted along with the Safety Committee Minutes.

Evacuation and emergency Plan:

Evacuation may be required if there is a fire in the building or other hazard. The evacuation team will direct the evacuation of the building and account for all employees outside at a safe location designated.

| Employees will be warned to evacuate | 1. Exit Door on either side of buildings |
|---------------------------------------|------------------------------------------|
| the Building using the following | 2. Stair case |
| system | |
| | |
| Employees should inform the following | 1. Emergency response team. |
| persons | 2. Works manager |
| | 3. Production head |
| | |

Fire Emergency Plan

- If a fire is reported, pull the fire alarm, (if available and not already activated) to warn occupants to evacuate.
- Then Dial 998 to alert Fire Department.
- Provide the following information to fire department:
 - 1. Business name and Street Address
 - 2. Nature of fire
 - 3. Fire location (Building and floor or any..)
 - 4. Type of fire alarm (Detector, Pull station, sprinkler, water flow)
 - 5. Location of fire alarm (Building and floor)
 - 6. Name of person Reporting fire
 - 7. Telephone number for Return call

Also inform the Works Manager to direct evacuation of Employees and Visitors.

Procedures

- Evacuate building occupants along Evacuation routes to Primary assembly areas outside.
- Redirect building occupants to stairs and exits away from the fire.
- Prohibit Use of elevators if any.
- Works Manager to account for all employees and visitors at the Assembly Area or direct them to go to safe place.
- Meet Fire Department Incident Commander (IC). Inform the IC if everyone has been accounted for and if there are any injuries. Provide an update on the nature of the Emergency and Actions taken.
- Provide building floor plans, keys and other assistance as requested.

- Assign Personnel to verify that fire protection systems are operating normally and to operate building utility and Protection systems as directed by the fire department.
- Equipment may be changed/altered as per the Project requirement.

Emergency numbers in KSA

| Emergency Service | Emergency Telephone |
|-----------------------------------|---------------------|
| Ambulance /medical emergency | 997 |
| Fire /Rescue | 998 |
| Police Department | 999 |
| Traffic police / traffic accident | 993 |

Medical Emergency

If any Medical Emergency Dial 997

If a medical emergency is reported, dial 997 and request an ambulance. Provide the following information:

- Number and location of victim(s)
- Nature of injury or illness
- Hazards involved
- Nearest entrance (Emergency access point)

Alert Trained Employees (Medical response team) to respond to the victim's location and bring a First Aid Kit.

Medical Response Team should inform the following person if in emergency:

| Name | Designation | Telephone |
|----------------------|-----------------------|------------|
| 1. Eng. Rajan | Works Manager | 0543527208 |
| 2. Bobby | Production Supervisor | 0547987837 |
| 3. Eng Sami | Project Manager | 0547987910 |
| 4. Eng. Manjunath KV | Quality manager | 0542071893 |

Procedures

- Only Trained responders should provide First Aid Assistance.
- Do not move the victim unless the victim's location is unsafe.
- Control access to the scene.
- Take "universal precautions" to prevent contact with body fluids and exposure to Blood borne pathogens.
- Meet the Ambulance at the nearest entrance or emergency access point; direct them victim(s).

Safe Operating Procedures

All employees are responsible for safety. The following applies to all employees:

1. Rules

- a. Comply with all established safety rules, regulations, procedures, and instructions which are applicable to your own actions and conduct.
- b. Promptly report all accidents, hazards, incidents, and near-miss occurrences to your immediate supervisor, regardless of whether or not injury or property damage was involved.
- c. Do not visit, talk to, or distract another employee who is operating a machine, or who is engaged in a work activity where the possibility of injury exists.
- d. Do not participate in horseplay, scuffling, pushing, fighting, throwing things, or practical jokes.
- e. Observe all no-smoking signs and regulations.
- f. Do not run on Company premises.
- g. Use handrails on steps, elevated platforms, scaffolds, or other elevations.
- h. Assist others and ask for assistance in lifting and carrying heavy or awkward objects.
- i. Firearms, ammunition, and explosives are prohibited on Company premises.
- j. Personal stereos with headphones, i.e. Walkman, are not permitted to be worn in the workplace
- k. Alcohol and drug use and possession on Company property is prohibited.

2. Housekeeping

- a. Practice good housekeeping by keeping the work area, aisles, walkways, stairways, roads, or other points of egress clean and clear of all hazards.
- b. Store and/or return parts, materials, tools, and equipment so as not to create a tripping hazard.
- c. Clean-up scrap, nails, and other excess materials. Place trash and scrap in proper waste containers.
- d. Keep work area floors clean, dry, and free of oils, grease and liquids. Remove all spills immediately.
- e. Remove or bend down nails or sharp protrusions. Store parts, materials, or equipment with protruding sharp ends or edges where personnel can not accidentally bump into them.
- f. Materials and equipment are not to be stored in the aisles or near exits. Permission from the Safety Director must be obtained for temporary or permanent storage of any materials or equipment in aisles or near exits.

3. Tools, Machinery, & Equipment

a. Inspect tools daily to ensure that they are in proper working order. Damaged or defective tools must be taken out of service and replaced immediately.

- b. Power saws, grinders, and other power tools must have proper guards in place at all times.
- c. Cords and hoses must be kept out of the walkways and off stairs and ladders. They must be placed so as not to create a tripping hazard or damaged from equipment or materials.
- d. Electrically powered tools and equipment should be double-insulated or grounded at all times when in use.
- e. Hand tools should be used for their intended purposes only. The design capacity of hand tools should not be exceeded by the use of unauthorized attachments.
- f. All fuel-powered tools must be shut down while being refueled or serviced. Smoking, welding, and other burning is prohibited during refueling.
- g. No one shall ride in or on any equipment not specifically designed or adapted for the transportation of employees.
- h. Do not operate or attempt to operate machines, tools, or equipment for which you are not authorized or trained.
- i. Do not stand, walk, or work under suspended loads or loads being moved by overhead equipment.

4. **Machine Guarding**

- a. It is the responsibility of the Supervisor to see that guards are installed on machines where needed.
- b. Employees should report any malfunctions of the guards to the Safety Director.
- c. The Safety Director should determine if the machine should be locked and tagged-out until the guard can be fixed or replaced.
- d. The guards increase safety on the machine. Machinery with the guards removed shall not be used by any employee without permission from the Safety Director.

5. Material Handling & Back Safety

- a. Know the approximate weight of your load and make certain your equipment is rated to handle it. (All powered equipment and rigging is rated as to safe working load. This rating is posted on the equipment. Never exceed the manufacturer's recommended safe working load).
- b. Lift heavy objects as instructed, with the leg muscles and not with the back. On average, do not manually lift over 50 pounds.
- c. Call for assistance as needed for handling heavy or bulky objects or materials.
- d. Use an appropriate, approved lifting device (i.e. special trucks, racks, hoists, and other devices) for lifting very heavy, bulky, large or unyielding objects.
- e. All ropes, chains, cables, slings, etc., and other hoisting equipment must be inspected each time before use.
- f. A load should never be lifted and left unattended.
- g. Wear safety gloves when handling materials.

- h. Properly stack and secure all materials prior to lifting or moving to prevent sliding, falling, or collapse.
- i. Protruding nails or staples must be bent or pulled away whenever stripping forms or opening materials.
- j. Avoid moving or lifting loads by hand whenever possible.

Tips for manual lifting:

- a. Get a good footing.
- b. Place feet about shoulder width apart.
- c. Bend at the knees to grasp the weight.
- d. Keep back as straight as possible.
- e. Get a firm hold.
- f. Lift gradually by straightening the legs.
- g. Don't twist your back to turn. Move your feet.
- h. When the weight is too heavy or bulky for you to comfortably lift GET HELP.
- i. When putting the load down, reverse the above steps.

Note: If lifting stacked materials, materials should be carefully piled and stable. Piles should not be stacked as to impair your vision or unbalance the load. Materials should not be stacked on any object (i.e. floor, scaffold) until the strength of the supporting members have been checked.

6. Forklift & Heavy Equipment Safety

The following are the minimum safety practices for the operation of fork lifts and heavy equipment (cranes, bulldozers, backhoes, etc.):

- a. Only trained and authorized operators are permitted to operate a fork lift or heavy equipment. All operators will be trained by their Supervisors or the Safety Director. Every operator must participate in, at a minimum, annual forklift training.
- b. Prior to operating the forklift or equipment, the operator must test: the brakes, steering controls, warning light, clutch, horn, fluid levels, and other devices for safe and proper operation.
- c. Never check the engine while it is running.
- d. Document your inspection results and equipment defects using the attached Inspection Report Form. Report defects to your supervisor immediately. No defective equipment shall be used. Adjustments and repairs should be made by authorized personnel only.
- e. Wash the equipment whenever necessary. The equipment must be kept clean and free of oil and grease.
- f. Employees should operate the equipment/forklift with safe speed and within rated load capacity. Drive to the right. Do not exceed 10 miles per hour, or posted authorized speeds, on plant roads.
- g. Passengers are not permitted on forklifts or heavy equipment except for training purposes.

- h. Mobile equipment should never be left unattended without first shutting off power, neutralizing controls, setting brakes, and lowering forks or bucket. Do not park on an incline.
- i. All mobile equipment must have a <u>functional</u> fire extinguisher on board.
- j. Sound horn at exits, corners, cross aisles, intersections, and when approaching pedestrians. Do not use horn needlessly or at undue length.
- k. Always look in the direction equipment is traveling, looking backward when backing up, even for a short distance. Keep a clear view of the path. When forward vision is obstructed, drive in reverse.
- 1. When traveling, with or without a load, keep forks or bucket as low as possible.
- m. Avoid following pedestrians or other vehicles too closely, especially when operating on inclines or in noisy areas.
- n. Ascend/descend all ramps and inclines slowly. Wait for passengers to exit the ramp before attempting to ascend/descend. When descending, always use low gear and the slowest speed control. Do not descend ramps with the load at the front of the fork lift. Never ascend in reverse. When ascending, loaded forklifts should be driven with the load upgrade.
- o. A man cage must be used when elevating personnel with a forklift. Attach the cage prior to use. Do not travel with passengers in the man cage.
- p. Personal protective equipment should be used as instructed. Hard hats should be worn where danger of falling objects exists.
- q. If the forklift is equipped with a seatbelt, the belt must be worn at all times.

7. Ladders

- a. Inspect all ladders before use. Do not use any ladders with missing safety feet, missing or broken rungs, etc. Tag defective ladders with a "DO NOT USE" sign and report the defects immediately.
- b. Portable ladders should be placed so that the base is away from the horizontal plane by one-fourth the ladder length (i.e. 12' ladder would be 3' from the wall).
- c. Never climb a ladder that is unstable.
- d. Never place a ladder in front of a door, unless the door is locked, guarded or otherwise blocked.
- e. All ladders placed up against a stationary object must be tied off at the top to a secure point.
- f. Ladders must extend at least three feet beyond the step off point.
- g. Do not place a ladder close to live electrical wiring or against piping. Beware of overhead wires when moving an extended ladder. Do not use metal ladders near electrical power lines.
- h. Portable ladders must be equipped with non-slip bases.
- i. Face the ladder when ascending or descending.
- j. Never stand at the top rung of a step ladder.

8. Office Safety

- a. Practice good housekeeping throughout the office area. Do not leave materials or position telephone or electrical cords in the aisles.
- b. Report or correct any obvious hazards as soon as they are discovered.
- c. Install pencil sharpeners so as not to protrude beyond the ends of desks or tables.
- d. Do not carry articles weighing more than 20 pounds when ascending or descending stairs that rise more than 5 feet.
- e. Close files and desk drawers. Arrange contents in file cabinets prevent tipping when draws are open. Store heavier materials in the lower drawers. Do not open more than one draw at a time when tipping may occur. Secure cabinets to each other as necessary.
- f. Report damaged furniture and broken veneer surfaces immediately.
- g. Do not carry pointed or sharp objects in hand, pockets, or attached to clothing with points or blades exposed.
- h. Do not leave paper cutters with the blade in the open or upright position.
- i. Take precautions to prevent materials from falling from the top of file cabinets or desks.
- j. Do not stand on chairs, desks, boxes, waste baskets, or any other substitutes for an approved step-stand or stepladder.
- k. Report slippery floor surfaces to your supervisor immediately.
- 1. Clean up spills on floors immediately.
- m. Position desks and files so that drawers do not extend into the aisle way when open.

9. **Clothing**

- a. **Clothing**: Wear safe and practical working apparel. Be sure that any clothing you wear is not highly flammable. Neckties and loose, torn or ragged clothing should not be worn while operating lathes, drill presses, reamers and other machines with revolving spindles or cutting tools.
- b. **Shoes**: Low-heeled, closed-toe shoes (or proper work boots) made of substantial leather or equivalent material with sufficient heavy soles must be worn in designated areas.
- c. **Jewelry**: Do not wear rings or any form of jewelry or ornamentation when working around machinery or exposed electrical equipment.

Continual Monitoring & Improvement

A. Safety Committees

Managers, supervisors, union representatives, and employees will all be represented on the committee. The purpose is to bring workers and management together on a regular basis in a non-adversarial, cooperative effort to promote workplace safety.

The Safety Committee will not have more than 10 people on it at any one time. Members should remain on the Committee for a minimum of one year. Membership on the Committee includes:

<u>Management</u>: A Management representative with authority to act on all but major expenditures or procedural matters. The management representative will be familiar with corporate objectives and be aware of insurance costs and the need to control losses.

<u>Safety Director:</u> The Safety Director does not run the Safety Committee. He/she should attend all safety meetings and be an advisor to the Committee. The Safety Director shall select 3-4 supervisors to participate in the Safety Committee.

<u>Supervisors:</u> One supervisor shall chair all meetings. This is an elected position by the safety committee. The chairman should work with the Safety Director and other committee members to plan meeting agendas. One supervisor will be responsible for taking all minutes at the meetings. Minutes of the meetings should be provided to all committee members and field supervisory personnel within a reasonable time following meetings. Supervisors should solicit employees to volunteer to participate in the safety committee. Only employees working at least 1 year at the company may volunteer. 4-5 employees should be selected among the volunteers to participate on the committee.

<u>Employees:</u> Should solicit suggestions and concerns from coworkers and participate at the committee meetings. Employees must attend all committee meetings, unless a medical reason prohibits their attendance.

<u>Union Representative:</u> A union representative with authority to negotiate and agree to safety programs and policies should also be assigned to the safety committee.

The Committee should meet at least once a month for 1-2 hours at a time. A written agenda should be provided to all members by the committee chairman prior to the meetings. Minutes should be taken at all Committee meetings, distributed to members and supervisors, posted for employees, and retained for future audits. The attached form should be used for minutes (attach additional pages as needed).

The Safety Committee has many functions. Here is a list of responsibilities often assigned to the Safety Committee. Some responsibilities are also performed by managers and supervisors. In this case, the Safety Committee may audit the supervisor or simply assist:

- A. Planning, direction, and control of corporate loss control activities
- B Create, review, update, and implement areas of the safety manual and other safety programs
- C Review losses
- D Follow-up on employee suggestions
- E Conduct inspections and monitor safe behavior
- F. Implement Great American Loss Prevention Recommendations & Safety Programs
- G. Conduct Training Sessions
- H. Complete Job Analyses (JSA) on safety-sensitive and non-routine tasks
