

SAFE PRACTICES FOR ERECTING & DISMANTLING OF FRAME SHORING

It shall be the responsibility of all employers and users to read and comply with the following common sense guidelines which are designed to promote safety in the erection, dismantling and use of frame shoring. These guidelines are not all inclusive nor do they supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If these guidelines conflict in any way with any state, provincial, local or federal statute or governmental regulation, said statute or regulation shall supersede these guidelines and it shall be the responsibility of each employee and user to comply therewith and also to be knowledgeable and understand all state, local or federal statutes or governmental regulations pertaining to frame shoring.

I. GENERAL GUIDELINES

- A. POST THESE SHORING SAFETY GUIDELINES in a conspicuous place and be sure that all persons who erect, dismantle or use shoring are aware of them.
- B. FOLLOW ALL STATE, PROVINCIAL, LOCAL AND FEDERAL CODES, ORDINANCES AND REGULATIONS pertaining to shoring.
- C. SURVEY THE JOB SITE. Pertaining to frame shoring a survey by a qualified person shall be made of the job site for hazards, such as untamped earth fills, ditches, debris, electrical wires, unguarded openings and other hazardous conditions. These conditions should be corrected or avoided as noted in the following sections.
- D. PLAN FRAME SHORING ERECTION in advance and obtain necessary access equipment to accomplish the work safely.
- E. INSPECT ALL FRAME SHORING EQUIPMENT. Never use any equipment that is structurally defective in any way. Mark it or tag it as defective, and do not use it.
- F. A SHORING DRAWING prepared by a person qualified to analyze the loading intended and consistent with the manufacturer's recommended safe working loads, shall be used on the job at all times.
- G. ERECT, DISMANTLE OR ALTER FRAME SHORING only under the supervision of a Competent Person, qualified in the erection, dismantle, or alteration of frame shoring equipment.
- H. DO NOT ABUSE OR MISUSE THE FRAME SHORING EQUIPMENT.
- I. INSPECT ERECTED FRAME SHORING: (a) immediately prior to concrete placement; (b) during concrete placement and while vibrating concrete, and (c) after concrete placement until concrete is set.
- J. NEVER TAKE CHANCES! IF IN DOUBT REGARDING THE SAFETY OR USE OF THE SHORING, CONSULT A QUALIFIED, KNOWLEDGEABLE FRAME SHORING SUPPLIER OR QUALIFIED PERSON.
- K. USE FRAME SHORING EQUIPMENT only for the purposes or in ways for which it was intended. Use proper tools when installing equipment.
- L. ERECTING AND DISMANTLING OF SHORING requires good physical condition. Do not work on shoring if you feel dizzy, unsteady in any way or are impaired in any way by drugs or other substances.
- M. DO NOT USE SHORING SYSTEMS for fall protection unless specifically designed for such use by a Qualified Person and or Registered Professional Engineer'.

II. GUIDELINES FOR ERECTION AND USE OF SHORING

- A. PROVIDE AND MAINTAIN A SOLID FOOTING. The sills or cribbing for shoring shall be sound, rigid and capable of carrying the maximum load without settling or moving.
- B. ALWAYS USE BASE PLATES. When sills or cribbing are used, base plates must be centered on them.
- C. ADJUSTING SCREWS SHALL BE USED to adjust to uneven grade conditions. Maintain all screw adjustments within the recommended height for the design load.
- D. PLUMB AND LEVEL ALL SHORING FRAMES as the erection proceeds. DO NOT force braces on frames - level the shoring towers until proper fit can be made. Maintain all shoring towers plumb and level.
- E. MAINTAIN THE SHORE FRAME SPACINGS AND TOWER HEIGHTS as shown on the shoring drawing. Where job site conditions require deviations from the shoring drawing, consult a qualified person.
- F. IF MOTORIZED CONCRETE EQUIPMENT is to be used, be sure that the shoring has been designed for use with this equipment and such fact is noted on the drawing.
- G. USE CAUTION WHEN ERECTING FREE-STANDING TOWERS. Prevent tipping by guying or bracing when height exceeds 4 times the minimum base dimension.
- H. GIVE SPECIAL CONSIDERATION TO TEMPORARY LOADING. Areas where re-bar, material or equipment is to be stored temporarily may need to be strengthened to meet those loads.
- I. DO NOT CLIMB CROSS BRACES. Use proper access.
- J. USE SPECIAL PRECAUTIONS when shoring from or to sloped surfaces.
- K. USE ADJUSTMENT DEVICE ON TOP OF LEG to position the falsework.
- L. SHORING LOADS ARE INTENDED TO BE CARRIED BY VERTICAL LEGS. Horizontal loading may require special consideration. Consult your shoring supplier for allowable loads on horizontal members.
- M. AVOID ECCENTRIC LOADS on U-Heads, top plates and similar members by centering stringer loads on those members.
- V. WINDLOAD – Have a Qualified Person analyze the forming/shoring system for additional loads imposed from wind loading and provide adequate anchorage to resist these forces, including uplifting wind forces.

III. GUIDELINES FOR DISMANTLING SHORING

- A. DO NOT REMOVE BRACES OR RELEASE LOADS FROM THE SHORING until proper approval has been given by a Qualified Person.
- B. DISMANTLED EQUIPMENT should be stockpiled in a planned manner and distributed to avoid concentrated loads on the partially cured concrete.
- C. USE PROPER ACCESS in the dismantling process.
- D. LOWER SHORING COMPONENTS in a safe manner. Do not drop or throw components as this could result in injury to personnel and damage to equipment.
- IV. RESHORING –Reshoring is one of the most critical operations in formwork; consequently, reshoring procedures must be designed by a qualified person.

These safety guidelines set forth some common sense procedures for safely erecting, dismantling and using frame shoring equipment. Since equipment and shoring systems differ, reference must always be made to the instructions and procedures of the supplier and/or manufacturer of the equipment. Since field conditions vary, and are beyond the control of the Scaffold & Access Industry Association, safe and proper use of equipment is the sole responsibility of the employer and user.

This document was prepared by members of the Scaffold & Access Industry Association Shoring Council.

This document does not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If this document conflicts in any way with a state, local, federal, or other government statute or regulation, said statute or regulation shall supersede this document and it shall be the responsibility of each user to comply therewith. This document has been developed as an aid to users of various types of scaffolding equipment. The Scaffold & Access Industry Association and their Council members are not responsible for the use of this document