



CERAMIC TILE INSTITUTE OF AMERICA, INC.

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CTIOA Field Report 90-10-1

SUBJECT: JOB SITE SAFETY REQUIREMENTS

I. INTRODUCTION

A. It does not matter what state of the United States a tile marble or terrazzo contractor is doing business in that contractor is subject to the OSHA, Occupational Safety and Health Administration requirements.

It was recent action of the State of California however, that prompted this article. .

II. CALIFORNIA ESTABLISHES MANDATORY SAFETY PROGRAM

A. Now there is even more reason to enforce your safety program. If you are operating in California, the administrative law judges and the Appeals Board have established five elements necessary for an employer to defend against unsafe independent employee actions.

B. Recognizing that some employees may act against their employer's best safety efforts, the Appeals Board has developed this test. As an employer you must show all of the following:

1. that the employee was experienced in the job being performed.

2. that you as the employer have a well-devised safety program which includes training employees in safety matters relating to their individual job assignments.

3. that you effectively enforce your safety program

4. that you have and enforce a policy of sanctions against employees who violate your safety program, and

5. that the employee caused a safety infraction which he or she knew was in violation of your safety requirements.

C. A good safety program, properly enforced, with up-to-date records, can do a great deal to protect you from unexpected legal actions. An accident prevention program not only makes good sense, but is also a requirement of all California employers, who must "Inaugurate and Maintain" an accident prevention program for their employees.

D. Back in 1973, at the urging of a safety engineer, and with his help, what was then "Southern Tile, Terrazzo and Marble Contractors Association", now "National Tile Contractors Association, Inc." sponsored a safety standard for subcontractors. This standard establishes the safety requirements for ceramic tile, terrazzo, and marble work during handling and installation on all types of construction, including heavy construction such as bridges and tunnels.

III. ANSI A10.20

A. The official name of the standard is "American National Standard Safety Requirements for Ceramic Tile, Terrazzo, and Marble Work".

B. This American National Standard provides detailed information for subcontractors and their employees on the safety requirements for construction site installations of ceramic tile, terrazzo, and marble. It applies to all types of structures - residential, commercial, industrial; to heavy construction such as bridges and tunnels; and to both interior and exterior work. The standard represents the consensus of a cross section of the ceramic tile, terrazzo, and marble industries and should form the basis for construction safety regulations for ceramic tile, terrazzo, and marble work when established by federal, state and municipal agencies, as well as for

safety standards adopted by insurance companies and trade associations. Work on this standard was begun by the Southern Tile, Terrazzo and Marble Contractors Association. Now National Tile Contractors Association, Inc. By its invitation, all of the national organizations in the ceramic tile, terrazzo, and marble trades participated in the preparation and development of the standard. The first draft was dated January 10, 1973, and the final draft was approved by American National Standards Committee A10.20 on February 22, 1974.

IV. FEDERAL REGISTER

A. The full safety requirements are listed in the Federal Register. The ANSI A10.20 standard removes the items of concern of the ceramic tile, terrazzo, and marble contractor from the pages and pages of fine print in the Federal Register.

V. RECOMMENDED SAFE WORKING PRACTICES

A. When ANSI A10.20 was written the committee tried to include information so that the ceramic tile, terrazzo, and marble contractor would know what he had to do to comply with the law. This was objected to by some safety oriented committee members as not acceptable as it was advice and not information belonging in the standard. The committee was however able to include this information in an appendix to the standard. This can be used as a check list and is as follows

VI. ACCIDENT-PREVENTION-PROGRAM

A. Every employer should inaugurate and maintain an accident prevention program. The program should provide that capable, responsible supervisors make regular inspections and take immediate corrective measures to eliminate the hazards directly under the control of the employer; or should report violations of safety orders and safe practices not directly under his control to the responsible employer. Employers should keep records and acquaint themselves with the necessary forms.

VII. MANAGEMENT-FOREMEN SAFETY MEETINGS

A. Monthly or more frequent meetings of all foremen should be held under direction of management for a discussion of safety problems, training and review of accidents that have occurred. Employers should keep records and acquaint themselves with the necessary forms.

VIII. TAILGATE MEETINGS

A. Supervisory personnel should conduct short "**toolbox**" or "**tailgate**" safety meetings (or equivalent) with their crews at least every ten working days on the job or as needed to emphasize safety. Employers are advised to keep records of when the meetings were held.

IX. SAFETY INSTRUCTIONS FOR NEW EMPLOYEES

A. When a worker is first employed he should be given instructions regarding the hazards and safety precautions applicable to the type of work in question.

X. INSURED SAFETY

A Every reasonable effort should be taken to ensure the safety of workmen in all situations.

NO UNSAFE WORK PLACES

No worker should be required or knowingly permitted to work in an unsafe place unless for the purpose of making it safe and then only after proper precautions have been taken to protect him while doing such work.

EMPLOYER SURVEY

Prior to the start of work, the employer should make thorough survey of the conditions of the site to determine so far as practicable the predictable hazards to employees and the kind and extent of safeguards necessary to prosecute the work in safe manner.

FIRST-AID MEDICAL ATTENTION

A. There should be adequate first-aid materials readily available for workmen on every job. Such materials should be kept in a sanitary and usable condition. A frequent inspection should be made of all first-aid materials, which should be replenished as necessary. Inspections to replenish first-aid supplies are suggested.

XIV. FIRST-AID TRAINING

It is recommended that the employer have employees available who have a valid certificate in first-aid training, unless a construction site has facilities that do not make this necessary.

FIRE EXTINGUISHERS

A. It is recommended that the employer have portable fire extinguishers available.

XVI. WINTER PROTECTION

A. When construction areas are enclosed with canvas, plastic, or other flammable materials, open flame or open salamanders should not be used as a source of heat. Fire-resistivetreated canvas tarpaulins should be considered flammable. Adequate fire protection consisting of water hoses or fire extinguishers, or both, should be provided in or adjacent to the enclosed areas.

B. Temporary winter-protection enclosures should be provided with adequate light and ventilation for the safety of personnel entering these areas.

C. When salamanders or similar heating units are used to protect concrete or for the comfort of employees, the following precautions should be taken:

1. All salamanders should be covered and equipped with exhaust stacks.
2. Heating units should not be set on or placed near wood or combustible materials.
3. Salamanders, as well as other oil or gas-fired temporarily installed heating equipment, should be attended at all times, and suitable fire extinguishers should be maintained readily available in the area.
4. Fuel oil should be stored and handled in covered approved-type flammable liquid containers. Salamanders should not be refueled until extinguished and permitted to cool.

XVII. POWDER-ACTUATED TOOLS OPERATOR REQUIREMENTS

A. The powder-actuated equipment, fasteners and load, should be engineered by the equipment manufacturer for the application intended. The operator should be licensed in accordance with ANSI A103.

B. Only qualified personnel at least 21 years of age, or an apprentice in the final six-month period of apprenticeship, should operate powder-actuated tools. The operator should be trained to disassemble, clean and reassemble the tool correctly as recommended by the manufacturer and to recognize any worn or defective parts or defective operation. He should

also be able to use the tool safely under varying conditions, know the limitations of its use, and demonstrate his competence by actually firing the tool in the presence of the person who issues the operator's card. He should be familiar with the provisions of American National Standard Safety Requirements for Powder-Actuated Fastening Systems, A103 and with instructions provided by the manufacturer for operation care, and be able to read the English language.

XVIII. FUMES AND VAPORS

A. Fumes and vapors produced by materials used in the installation and grouting of ceramic tile, terrazzo, or marble, under certain conditions such as space limitations, quantity used, or specific formulation, can cause harmful exposure to employees or create potential fire hazard; each hazard should be controlled by reducing the degree of hazard in any or all of the following ways:

1. Supply sufficient ventilation by general or local means to remove the fumes or vapors or both.
2. Use approved respiratory equipment and safety clothing.
3. Follow explicitly the directions, cautions, and recommendations of the manufacturer of products used.
4. Follow the applicable federal, state, and local standards for use and storage of such products.

RUNWAYS FOR FOOT TRAFFIC

A. Except as provided elsewhere, ramps or runways erected for the use of workmen should be not less than 20 inches in width, and should be

supported so as to avoid deflection or springing greater than one inch under any load.

Securely fastened cleats may be used on inclined runways to improve the footing. They should be 8 inches or more in length and not more than 16 inches apart.

POWERED BUGGY RUNWAYS

A. Ramps or runways erected for the use of power-driven concrete buggies should be capable of supporting at least four times the maximum load to be imposed.

Curbs of 4-inch by 4-inch lumber, or a member of similar size made from laminated 2-inch members, should be securely fastened on the runway edges. Such runways should be at least 5 feet wide and, where necessary, should provide turn-outs sufficiently wider to permit safe meeting or passing of buggies.

XXI. ELECTRICAL EQUIPMENT CONNECTIONS

A. Attachment plugs for use in work areas should be so constructed that they will endure rough use and be equipped with a suitable cord grip to prevent strain on the terminal screws.

B. Trailing cables should be protected from damage

C. Splices in trailing cable should be mechanically strong components and should be insulated to retain the mechanical and dielectric strength of the original cable.

D. Cable passing through work areas should be covered or elevated to provide protection from damage that would create a hazard to employees.

E. Worn or frayed electric cables should not be used.

F. Extension cords should not be fastened with staples, hung from nails, or suspended by wire.