



2600SEG141 SAFETY STANDARD FOR SCAFFOLDS

1.0 PURPOSE

To learn safety standards that apply to the acquisition, inspection, use, and maintenance of the various types of scaffolds for work performed in the Panama Canal Authority (ACP).

2.0 BACKGROUND

None

3.0 SCOPE

This standard applies to all Panama Canal Authority (ACP) employees, contractors, and third parties that carry out work or activities in ACP installations or areas under its responsibility. This standard only applies to supported scaffolds.

4.0 LEGAL FOUNDATION

This Standard is established pursuant to Agreement No. 12 of the Board of Directors of the Panama Canal Authority (ACP), Safety and Health Regulations,, Chapter 1, Article 3.

5.0 DEFINITIONS

5.1 Supported Scaffolds: Platforms supported by an approved structure erected from the floor to the height of the platform.

5.2 Suspended Scaffolds: One or more platforms suspended by ropes, cables, or other non-rigid means. The platform is suspended from an overhead structure.

5.3 Lifting Equipment: Aerial lifting devices such as vehicle-mounted extensible boom platforms, articulating boom platforms, and vertical towers.

5.4 Capacity: Each scaffold and scaffold component must support without failure its own weight and at least (4) four times the maximum intended load applied or transmitted to it.

5.5 Footing: The base or place where a structure is supported.

5.6 Crossbracing: Diagonal auxiliary support that increases the rigidity of scaffolds decreasing any torsion or twisting possibility.

5.7 Frame Coupler: A device to lock frames together.

5.8 Planking: Material used to build a platform.

5.9 Frame: The structure of the scaffolding.

5.10 Diagonal Brace: Part that joins opposing frames.

5.11 Guardrail: A railing built to prevent employees from falling.

5.12 Platform: A work surface elevated above lower levels. Platforms can be constructed using individual wood planks, metal planks, or prefabricated planks.



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These are basic definitions. The scaffolding industry is complex and there is ample terminology. In case of any questions please contact the area's health and safety specialist.

6.0 GENERAL

6.1 General Requirements

6.1.1 Scaffolds must be used whenever the work required increases the risk involved using a ladder or solid base and whenever it is feasible to erect one. The type of scaffold resistance or capacity must be in accordance with the load. All scaffolds must support at least (4) four times the load they intend to carry.

6.1.2 If a wooden structure or planking is used in the construction of scaffolds, they must comply with the following: All load-carrying timber members must be a minimum of 1,500-ft/in² (stress grade) construction grade lumber. The wood used for scaffolds shall be selected for such use according to the regulations established by a recognized lumber grading association or by an independent lumber grading inspection agency. Such planks shall be identified by the grade stamp of such association or agency and the grading rules under which the wood is graded shall be certified by "The Board of Review, American Lumber Standard Committee, as set forth in the American Softwood Lumber Standard of the U.S. Department of Commerce."

6.1.3 Metal or prefabricated planks must comply with ANSI a10.8 standard.

6.1.4 Scaffolds must be built and maintained following applicable safety requirements and must be assembled by qualified personnel.

6.1.5 Damaged, weak, or loose scaffolds shall not be used. Scaffold members of different types or manufacturers shall not be combined.

6.1.6 Employees shall not work on scaffolds during high winds or electric storms.

6.1.7 Scaffolds shall be anchored to a fixed structure and must have a fixed handrail and a protective plank for the feet along all open sides.

6.1.8 Employees working on scaffolds more than 1.83 meters (6 feet) above a lower level shall be tied to safety ropes which are in turn connected to their harnesses in accordance with ACP Fall Protection Standards. (See ACP Fall Protection Policy.)

6.1.9 Scaffolds shall not be moved while there are employees on them.

6.1.10 Scaffolds annexed to floating equipment or barges alongside of vessels must be built in such a way that the floor and guardrails are fixed instead of sustained in place only by gravity. Employees who work in this type of scaffolds shall also be tied to or wear an approved floating device in case they accidentally fall into the water.

6.2 Access Requirements

6.2.1 Employers must provide safe access when the scaffold platform is more than (2) two feet above or below an access point.

6.2.2 Direct access is allowed when the scaffold is not more than 36 centimeters (14") horizontally and not more than 61 centimeters (24") vertically from the other surfaces.

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6.2.3 The use of diagonal braces as a means of access is prohibited.

6.2.4 The following types of access to the platform are permitted:

6.2.4.1 Ladders, such as portable, hook-on, attachable, and stairway.

6.2.4.2 Stair towers.

6.2.4.3 Ramps and walkways.

6.2.4.4 Integral prefabricated frames.

6.2.5 Workers erecting or dismantling supported scaffolding must have a safe means of access.

6.3 Use Requirements

6.3.1 Employees are prohibited from working on slippery surfaces, except to correct the deficiency.

6.4 Requirements for Specific Scaffolds

6.4.1 There are many types of scaffolds which have additional requirements applicable in accordance with the specific type of scaffolding. In case there is a need to use a specific type of equipment or structure, it must be approved by the area safety specialist.

6.5 Personnel Training Requirements. Training is provided by the Industrial and Safety Training Unit (RHSI). Contractor shall provide training for their own employees.

6.5.1 Ladders and scaffolds.

6.5.2 Fall protection.

6.5.3 Retraining is necessary when:

6.5.3.1 A change was made in the work area or in the structure.

6.5.3.2 The employer believes the employee lacks the necessary understanding and skills to work safely in the structures.

6.6 Equipment Inspection

6.6.1 On suspended scaffolds, a competent person must inspect:

6.6.1.1 The ropes or suspension system prior to each work shift and after occurrence of any incident that may affect system integrity.

6.6.1.2 Evaluate anchorage points.

6.6.1.3 Evaluate the danger of swaying.

6.6.2 On supported scaffolds, a competent person must inspect:



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6.6.2.1 The scaffolds and its components for visible defects before each work shift and after occurrence of any incident that could affect the structural integrity of the scaffold.

6.6.2.2 Make sure that components from different manufacturers are not intermixed.

6.6.2.3 Check that scaffold erectors have received training.

6.6.2.4 Determine if galvanic action has affected components of dissimilar metals.

6.6.3 A competent person must inspect manila, nylon, or any other type of rope used as handrails to verify compliance with resistance regulations.

6.7 Equipment Purchase

6.7.1 All supported or suspended scaffolds acquired by the ACP must comply with ANSI A10.8 – 2001.

7.0 RESPONSIBILITIES

7.1 The user must:

7.1.1 Comply with section 6.0 of this standard.

7.1.2 Keep in mind his safety and that of his fellow workers.

7.1.3 Visually inspect the scaffolding systems prior to each use.

7.1.4 Inspect the work area to ensure that it is clear of objects, grease, or oil that may cause a person to stumble or slip around the base or top part of the scaffolding.

7.2 The supervisor must:

7.2.1 Comply with and enforce the requirements of this standard.

7.2.2 Provide training for his workers.

7.2.3 Keep inspection records.

7.2.4 Ensure that any scaffold that does not comply with applicable regulations is eliminated.

7.3 The ACP must:

7.3.1 Provide workers with the necessary training.

7.3.2 Provide training and certification to safety and occupational health specialists so that they become competent and qualified individuals in scaffolding systems.

8.0 INQUIRIES



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Any information or clarification of the content or application of this standard may be requested in writing to the Safety and Industrial Hygiene Unit (RHSH).

9.0 EXCEPTIONS

Any requests for changes or temporary exceptions to this Standard must be made in writing to the Safety and Industrial Hygiene Unit (RHSH).

10.0 TERM

This standard shall remain in force until revised or amended.