

**§57.19109 Shaft inspection and repair.**

Shaft inspection and repair work in vertical shafts shall be performed from substantial platforms equipped with bonnets or equivalent overhead protection.

**§57.19110 Overhead protection for shaft deepening work.**

A substantial bulkhead or equivalent protection shall be provided above persons at work deepening a shaft.

**§57.19111 Shaft-sinking ladders.**

Substantial fixed ladders shall be provided from the collar to as near the shaft bottom as practical during shaft-sinking operations, or an escape hoist powered by an emergency power source shall be provided. When persons are on the shaft bottom, a chain ladder, wire rope ladder, or other extension ladders shall be used from the fixed ladder or lower limit of the escape hoist to the shaft bottom.

INSPECTION AND MAINTENANCE

**§57.19120 Procedures for inspection, testing, and maintenance.**

A systematic procedure of inspection, testing and maintenance of shaft and hoisting equipment shall be developed and followed. If it is found or suspected that any part is not functioning properly, the hoist shall not be used until the malfunction has been located and repaired or adjustments have been made.

**§57.19121 Recordkeeping.**

At the time of completion, the person performing inspections, tests, and maintenance of shafts and hoisting equipment required in standard 57.19120 shall certify, by signature and date, that they have been done. A record of any part that is not functioning properly shall be made and dated. Certifications and records shall be retained for one year.

(Sec. 101, Pub. L. 91-173 as amended by Pub. L. 95-164, 91 Stat. 1291 (30 U.S.C. 811))

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**§57.19122 Replacement parts.**

Parts used to repair hoists shall have properties that will ensure the proper and safe function of the hoist.

**§57.19129 Examinations and tests at beginning of shift.**

Hoistmen shall examine their hoists and shall test overtravel, deadman controls, position indicators, and braking mechanisms at the beginning of each shift.

**§57.19130 Conveyance shaft test.**

Before hoisting persons and to assure that the hoisting compartments are clear of obstructions, empty hoist conveyances shall be operated at least one round trip after—

(a) Any hoist or shaft repairs or related equipment repairs that might restrict or obstruct conveyance clearance;

(b) Any oversize or overweight material or equipment trips that might restrict or obstruct conveyance clearance;

(c) Blasting in or near the shaft that might restrict or obstruct conveyance clearance; or

(d) Remaining idle for one shift or longer.

**§57.19131 Hoist conveyance connections.**

Hoist conveyance connections shall be inspected at least once during any 24-hour period that the conveyance is used for hoisting persons.

**§57.19132 Safety catches.**

(a) A performance drop test of hoist conveyance safety catches shall be made at the time of installation, or prior to installation in a mockup of the actual installation. The test shall be certified to in writing by the manufacturer or by a registered professional engineer performing the test.

(b) After installation and before use, and at the beginning of any seven day period during which the conveyance is to be used, the conveyance shall be suitably rested and the hoist rope slackened to test for the unrestricted functioning of the safety catches and their activating mechanisms.

(c) The safety catches shall be inspected by a competent person at the