

TRAVELWAYS—SURFACE ONLY

**§ 57.11025 Railed landings, backguards, and other protection for fixed ladders.**

Fixed ladders, except on mobile equipment, shall be offset and have substantial railed landings at least every 30 feet unless backguards or equivalent protection such as safety belts and safety lines, are provided.

**§ 57.11026 Protection for inclined fixed ladders.**

Fixed ladders 70 degrees to 90 degrees from the horizontal and 30 feet or more in length shall have backguards, cages or equivalent protection, starting at a point not more than seven feet from the bottom of the ladders.

**§ 57.11027 Scaffolds and working platforms.**

Scaffolds and working platforms shall be of substantial construction and provided with handrails and maintained in good condition. Floorboards shall be laid properly and the scaffolds and working platform shall not be overloaded. Working platforms shall be provided with toeboards when necessary.

TRAVELWAYS—UNDERGROUND ONLY

**§ 57.11036 Ladderway trap doors and guards.**

Trap doors or adequate guarding shall be provided in ladderways at each level. Doors shall be kept operable.

**§ 57.11037 Ladderway openings.**

Ladderways constructed after November 15, 1979, shall have a minimum unobstructed cross-sectional opening of 24 inches by 24 inches measured from the face of the ladder.

**§ 57.11038 Entering a manway.**

Before entering a manway where persons may be working or traveling, a warning shall be given by the person entering the manway and acknowledged by any person present in the manway.

**§ 57.11040 Inclined travelways.**

Travelways steeper than 35 degrees from the horizontal shall be provided with ladders or stairways.

**§ 57.11041 Landings for inclined ladderways.**

Fixed ladders with an inclination of more than 70 degrees from the horizontal shall be offset with substantial landings at least every 30 feet or have landing gates at least every 30 feet.

ESCAPEWAYS—UNDERGROUND ONLY

**§ 57.11050 Escapeways and refuges.**

(a) Every mine shall have two or more separate, properly maintained escapeways to the surface from the lowest levels which are so positioned that damage to one shall not lessen the effectiveness of the others. A method of refuge shall be provided while a second opening to the surface is being developed. A second escapeway is recommended, but not required, during the exploration or development of an ore body.

(b) In addition to separate escapeways, a method of refuge shall be provided for every employee who cannot reach the surface from his working place through at least two separate escapeways within a time limit of one hour when using the normal exit method. These refuges must be positioned so that the employee can reach one of them within 30 minutes from the time he leaves his workplace.

**§ 57.11051 Escape routes.**

Escape routes shall be—

(a) Inspected at regular intervals and maintained in safe, travelable condition; and

(b) Marked with conspicuous and easily read direction signs that clearly indicate the ways of escape.

**§ 57.11052 Refuge areas.**

Refuge areas shall be—

(a) Of fire-resistant construction, preferably in untimbered areas of the mine;

(b) Large enough to accommodate readily the normal number of persons in the particular area of the mine;

(c) Constructed so they can be made gastight; and