

at least 40 feet per minute. The velocity of air ventilating each face at a work place shall be at least 20 feet per minute.

**§57.22212 Air flow (I-C, II-A, and V-A mines).**

Air flow across each working face shall be sufficient to carry away any accumulation of methane, smoke, fumes, and dust.

**§57.22213 Air flow (III mines).**

The quantity of air coursed through the last open crosscut in pairs or sets of entries, or through other ventilation openings nearest the face, shall be at least 6,000 cubic feet per minute, or 9,000 cubic feet per minute in longwall and continuous miner sections. The quantity of air across each face at a work place shall be at least 2,000 cubic feet per minute.

**§57.22214 Changes in ventilation (I-A, II-A, III, and V-A mines).**

(a) Changes in ventilation which affect the main air current or any split thereof and which adversely affect the safety of persons in the mine shall be made only when the mine is idle.

(b) Only persons engaged in making such ventilation changes shall be permitted in the mine during changes.

(c) Power shall be deenergized in affected areas prior to making ventilation changes, except power to monitoring equipment determined by MSHA to be intrinsically safe under 30 CFR part 18. Power shall not be restored until the results of the change have been determined and a competent person has examined affected working places for methane.

**§57.22215 Separation of intake and return air (I-A, II-A, III, and V-A mines).**

Main intake and return air currents shall be coursed through separate mine openings and shall be separated throughout the mine, except—

(a) Where multiple shafts are used for ventilation and a single shaft contains a curtain wall or partition for separation of air currents. Such wall or partition shall be constructed of reinforced concrete or other noncombustible

equivalent, and provided with pressure-relief devices.

(b) During development of openings to the surface—

(1) Ventilation tubing approved by MSHA in accordance with 30 CFR part 7 or previously issued a BC or VT acceptance number by the MSHA Approval and Certification Center may be used for separation of main air currents in the same opening. Flexible ventilation tubing shall not exceed 250 feet in length.

(2) Only development related to making a primary ventilation connection may be performed beyond 250 feet of the shaft.

[52 FR 24941, July 1, 1987, as amended at 54 FR 30508, July 20, 1989]

**§57.22216 Separation of intake and return air (I-C mines).**

The main intake and return air currents in single shafts shall be separated by ventilation tubing, curtain walls, or partitions. Ventilation tubing shall be constructed of noncombustible material. Curtain walls or partitions shall be constructed of reinforced concrete or other noncombustible equivalent, and provided with pressure-relief devices.

**§57.22217 Seals and stoppings (I-A, I-B, and I-C mines).**

All seals, and those stoppings that separate main intake from main return airways, shall be of substantial construction and constructed of noncombustible materials, except that stoppings constructed of brattice materials may be used in face areas.

**§57.22218 Seals and stoppings (III, V-A, and V-B mines).**

(a) All seals, and those stoppings that separate main intake from main return airways, shall be of substantial construction, except that stoppings constructed of brattice materials may be used in face areas.

(b) Exposed surfaces on the intake side of stoppings constructed of combustible materials or foam-type blocks shall be coated with at least one inch of construction plaster containing perlite and gypsum; at least one inch of expanded vermiculite, Portland cement and limestone; or other coatings with