- (iii) Planks shall be at least 6 inches wide and 1 inch thick.
- (3) Cribbing materials shall have at least two parallel flat sides.
- (c) A cluster of two or more posts that provide equivalent strength may be used to meet the requirements of paragraph (b)(1) of this section, except that no post shall have a diameter less than 4 inches or have a cross-sectional area less than 13 square inches.
- (d) Materials other than wood used for support shall have support strength at least equivalent to wooden material meeting the applicable provisions of this section.
- (e) Posts and jacks shall be tightly installed on solid footing.
- (f) When posts are installed under roof susceptible to sloughing a cap block, plank, crossbar or materials that are equally effective shall be placed between the post and the roof.
- (g) Blocks used for lagging between the roof and crossbars shall be spaced to distribute the load.
- (h) Jacks used for roof support shall be used with at least 36 square inches of roof bearing surface.

[53 FR 2375, Jan. 27, 1988, as amended at 55 FR 14228, April 16, 1990; 55 FR 20137, May 15, 1990]

§ 75.207 Pillar recovery.

Pillar recovery shall be conducted in the following manner, unless otherwise specified in the roof control plan:

- (a) Full and partial pillar recovery shall not be conducted on the same pillar line, except where physical conditions such as unstable floor or roof, falls of roof, oil and gas well barriers or surface subsidence require that pillars be left in place.
- (b) Before mining is started in a pillar split or lift—
- (1) At least two rows of breaker posts or equivalent support shall be installed—
- (i) As close to the initial intended breakline as practicable; and
- (ii) Across each opening leading into an area where full or partial pillar extraction has been completed.
- (2) A row of roadside-radius (turn) posts or equivalent support shall be installed leading into the split or lift.
- (c) Before mining is started on a final stump—

- (1) At least 2 rows of posts or equivalent support shall be installed on not more than 4-foot centers on each side of the roadway; and
- (2) Only one open roadway, which shall not exceed 16 feet wide, shall lead from solid pillars to the final stump of a pillar. Where posts are used as the sole means of roof support, the width of the roadway shall not exceed 14 feet.
- (d) During open-end pillar extraction, at least 2 rows of breaker posts or equivalent support shall be installed on not more than 4-foot centers. These supports shall be installed between the lift to be started and the area where pillars have been extracted. These supports shall be maintained to within 7 feet of the face and the width of the roadway shall not exceed 16 feet. Where posts are used as the sole means of roof support, the width of the roadway shall not exceed 14 feet.

§ 75.208 Warning devices.

Except during the installation of roof supports, the end of permanent roof support shall be posted with a readily visible warning, or a physical barrier shall be installed to impede travel beyond permanent support.

§ 75.209 Automated Temporary Roof Support (ATRS) systems.

- (a) Except in anthracite mines and as specified in paragraphs (b) and (c) of this section, an ATRS system shall be used with roof bolting machines and continuous-mining machines with integral roof bolters operated in a working section. The requirements of this paragraph shall be met according to the following schedule:
- (1) All new machines ordered after March 28, 1988.
- (2) All existing machines operated in mining heights of 36 inches or more after March 28, 1989; and
- (3) All existing machines operated in mining heights of 30 inches or more but less than 36 inches after March 28, 1990.
- (b) After March 28, 1990 the use of ATRS systems with existing roof bolting machines and continuous-mining machines with integral roof bolters operated in a working section where the mining height is less than 30 inches shall be addressed in the roof control plan.