347—74.1(89A) Escalators.

74.1(1) Each escalator shall be provided with an electrically released mechanically applied brake capable of stopping the up and down traveling escalator with any load up to and including the rated load. The brake shall be located either on the driving machine or on the main drive shaft.

74.1(2) Starting switches shall be of the key-operated type. Starting switches shall be located on or near the escalator.

74.1(3) Emergency stop buttons or other type manually operated switches having red buttons or handles shall be accessibly located at or near the bottom and top landings. The buttons or levers shall be protected to prevent accidental operation.

74.1(4) A broken step-chain device shall be provided on each escalator that will cause interruption of power to the driving machine if a step chain breaks or if excessive sag occurs in either step chain.

74.1(5) Each escalator shall have comb plates at top and bottom landings of the escalator. Comb-plate teeth shall be meshed with and set into slots in the tread surface of the steps so that the points of the teeth are always below the upper surface of the treads.

74.1(6) Each escalator balustrade or moulding on the balustrade shall have a smooth surface. Screwheads shall set flush with the surface or be of the oval head type without any burrs or rough places on their surface.

74.1(7) The clearance on either side of the steps between the step tread and the adjacent skirt panel shall be not more than 3/16 inch.

74.1(8) Step treads shall be illuminated throughout their run. The light intensity shall be not less than 2 foot-candles.

74.1(9) An enclosed fused disconnect switch or circuit breaker arranged to disconnect the power supply to the escalator shall be in each machine room or wherever the controller is located.

74.1(10) A stop switch shall be provided in each machinery space where means of access to the space is provided. The switch when opened shall cause electric power to be removed from the escalator driving-machine motor and brake. The switch shall be of the manually opened and closed type and shall be marked “STOP”.

74.1(11) Hand or finger guards shall be provided at the point where the handrail enters the balustrade.

74.1(12) Where the clearance of the upper outside edge of the balustrade and a ceiling or scaffold is less than 12 inches or where the intersection of the outside balustrade and a ceiling or soffit is less than 24 inches from the centerline of the handrail, a solid guard shall be provided in the intersection of the angle of the outside balustrade and the ceiling or soffit. The vertical front edge of the guard shall project a minimum of 14 inches horizontally from the apex of the angle. The escalator side of the vertical face of the guard shall be flush with the face of the wellway. The exposed edge of the guard shall be rounded.

This rule is intended to implement Iowa Code chapter 89A.