

TABLE 1104.9
REVOLVING DOOR SPEEDS

| INSIDE DIAMETER (feet-inches) | POWER-DRIVEN-TYPE SPEED CONTROL (rpm) | MANUAL-TYPE SPEED CONTROL (rpm) |
|----------------------------------|---|---------------------------------------|
| 6-6 | 11 | 12 |
| 7-0 | 10 | 11 |
| 7-6 | 9 | 11 |
| 8-0 | 9 | 10 |
| 8-6 | 8 | 9 |
| 9-0 | 8 | 9 |
| 9-6 | 7 | 8 |
| 10-0 | 7 | 8 |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

1104.9.1 Egress component. A revolving door used as a component of a *means of egress* shall comply with Section 1104.9 and all of the following conditions:

1. Revolving doors shall not be given credit for more than 50 percent of the required egress capacity.
2. Each revolving door shall be credited with not more than a 50-person capacity.
3. Revolving doors shall be capable of being collapsed when a force of not more than 130 pounds (578 N) is applied within 3 inches (76 mm) of the outer edge of a wing.

1104.10 Stair dimensions for existing stairways. Existing *stairways* in buildings shall be permitted to remain if the rise does not exceed 8¹/₄ inches (210 mm) and the run is not less than 9 inches (229 mm). Existing *stairways* can be rebuilt.

Exception: Other *stairways* approved by the *fire code official*.

1104.10.1 Dimensions for replacement stairways. The replacement of an existing *stairway* in a structure shall not be required to comply with the new *stairway* requirements of Section 1009 where the existing space and construction will not allow a reduction in pitch or slope.

1104.11 Winders. Existing *winders* shall be allowed to remain in use if they have a minimum tread depth of 6 inches (152 mm) and a minimum tread depth of 9 inches (229 mm) at a point 12 inches (305 mm) from the narrowest edge.

1104.12 Curved stairways. Existing curved *stairways* shall be allowed to continue in use, provided the minimum depth of tread is 10 inches (254 mm) and the smallest radius shall be not less than twice the width of the *stairway*.

1104.13 Stairway handrails. *Stairways* shall have *handrails* on at least one side. *Handrails* shall be located so that all portions of the *stairway* width required for egress capacity are within 44 inches (1118 mm) of a *handrail*.

Exception: *Aisle stairs* provided with a center *handrail* are not required to have additional *handrails*.

1104.13.1 Height. *Handrail* height, measured above *stair* tread nosings, shall be uniform, not less than 30 inches (762 mm) and not more than 42 inches (1067 mm).

1104.14 Slope of ramps. *Ramp* runs utilized as part of a *means of egress* shall have a running slope not steeper than one unit vertical in 10 units horizontal (10-percent slope). The slope of other *ramps* shall not be steeper than one unit vertical in eight units horizontal (12.5-percent slope).

1104.15 Width of ramps. Existing *ramps* are permitted to have a minimum width of 30 inches (762 mm) but not less than the width required for the number of occupants served as determined by Section 1005.1. In Group I-2, *ramps* serving as a *means of egress* and used for the movement of patients in beds shall comply with Section 1105.5.4.

1104.16 Fire escape stairways. Fire escape *stairways* shall comply with Sections 1104.16.1 through 1104.16.7.

1104.16.1 Existing means of egress. Fire escape *stairways* shall be permitted in existing buildings but shall not constitute more than 50 percent of the required *exit* capacity.

1104.16.2 Protection of openings. Openings within 10 feet (3048 mm) of fire escape *stairways* shall be protected by opening protectives having a minimum ³/₄-hour *fire protection rating*.

Exception: In buildings equipped throughout with an *approved automatic sprinkler system*, opening protection is not required.

1104.16.3 Dimensions. Fire escape *stairways* shall meet the minimum width, capacity, riser height and tread depth as specified in Section 1104.10.

1104.16.4 Access. Access to a fire escape *stairway* from a *corridor* shall not be through an intervening room. Access to a fire escape *stairway* shall be from a door or window meeting the criteria of Section 1005.1. Access to a fire escape *stairway* shall be directly to a balcony, landing or platform. These shall not be higher than the floor or window sill level and not lower than 8 inches (203 mm) below the floor level or 18 inches (457 mm) below the window sill.

1104.16.5 Materials and strength. Components of fire escape *stairways* shall be constructed of noncombustible materials. Fire escape *stairways* and balconies shall support the dead load plus a live load of not less than 100 pounds per square foot (4.78 kN/m²). Fire escape *stairways* and balconies shall be provided with a top and intermediate *handrail* on each side.

1104.16.5.1 Examination. Fire escape *stairways* and balconies shall be examined for structural adequacy and safety in accordance with Section 1104.16.5 by a registered design professional or others acceptable to the *fire code official* every 5 years, or as required by the *fire code official*. An inspection report shall be submitted to the *fire code official* after such examination.