

## ANSI/BHMA A156.27-2003 American National Standard for Power And Manual Operated Revolving Pedestrian Doors

Standard ANSI/BHMA A156.27-2003 establishes requirements for power operated revolving type doors, which rotate automatically when approached by pedestrians and/or small vehicular traffic, and manual revolving type doors for pedestrians. Included are definitions, general information, performance standards and provisions to reduce the chance of user injury and entrapment. This standard does not cover revolving doors for industrial or trained traffic nor does it attempt to assess any factors that exist with respect to custom installations.

The following are partial descriptions of requirements. Please see the complete standard for detailed requirements, methods and exceptions:

**Egress Component Force Requirements** Each revolving door wing shall be capable of breakout when a force 130 lb. (570 N) is applied at a point 3 in. (75 mm) from the outer edge of the outer wing stile and 40 in. (1020 mm) above the floor. Exception: Two wing doors with automatic center panels per 7.3 are excluded.

**Automatic Door Signs** Automatic revolving doors shall be marked with a visible sign. The sign shall include the words “Automatic Door”, minimum 1” (25mm) tall black letters placed at 50” +/- 12” (1270mm +/- 305mm) from the floor to the centerline of the sign. See standard for additional signage requirements.

**Starting Force** In the initial 1.5 seconds, the force required to prevent a stopped revolving door from rotating shall not exceed 50 lbf (222 N) applied 1 in. (25 mm) from the outer edge of the outer wing stile. The force to prevent the door from revolving after the 1.5 second initial start up shall not exceed 40 lbf (178N).

**Acceptable Door RPM:** The maximum allowable RPM of the Manual Revolving door shall be:

| Inside Diameter (Maximum) | 6ft (mm) | 7ft (2743mm) | 8ft (3048mm) | 9ft (3352mm) | 10ft (3657mm) |
|---------------------------|----------|--------------|--------------|--------------|---------------|
| RPM                       | 12       | 11           | 10           | 9            | 8             |

**Acceptable Door RPM:** The maximum allowable RPM of the Automatic Revolving Door with Center Shaft:

| Inside Diameter (Maximum) | 8ft (2438mm) | 9ft (2743mm) | 10ft (3048mm) | 11ft (3352mm) | 12ft (3657mm) | 12ft 6in. (3810mm) |
|---------------------------|--------------|--------------|---------------|---------------|---------------|--------------------|
| RPM                       | 7.2          | 6.4          | 5.7           | 5.2           | 4.8           | 4.6                |