404.9 Travel distance. In other than the lowest level of the atrium, where the required *means of egress* is through the atrium space, the portion of *exit access* travel distance within the atrium space shall not exceed 200 feet (60 960 mm). The travel distance requirements for areas of buildings open to the atrium and where access to the *exits* is not through the atrium, shall comply with the requirements of Section 1016.

SECTION 405 UNDERGROUND BUILDINGS

405.1 General. The provisions of this section apply to building spaces having a floor level used for human occupancy more than 30 feet (9144 mm) below the finished floor of the lowest *level of exit discharge*.

Exceptions:

- 1. One- and two-family dwellings, sprinklered in accordance with Section 903.3.1.3.
- 2. Parking garages with automatic sprinkler systems in compliance with Section 405.3.
- 3. Fixed guideway transit systems.
- 4. Grandstands, bleachers, stadiums, arenas and similar facilities.
- 5. Where the lowest *story* is the only *story* that would qualify the building as an underground building and has an area not exceeding 1,500 square feet (139 m^2) and has an *occupant load* less than 10.
- 6. Pumping stations and other similar mechanical spaces intended only for limited periodic use by service or maintenance personnel.
- **405.2 Construction requirements.** The underground portion of the building shall be of Type I construction.
- **405.3 Automatic sprinkler system.** The highest level of *exit discharge* serving the underground portions of the building and all levels below shall be equipped with an *automatic sprinkler system* installed in accordance with Section 903.3.1.1. Water-flow switches and control valves shall be supervised in accordance with Section 903.4. [F]
- **405.4 Compartmentation.** Compartmentation shall be in accordance with Sections 405.4.1 through 405.4.3.
 - **405.4.1 Number of compartments.** A building having a floor level more than 60 feet (18 288 mm) below the finished floor of the lowest *level of exit discharge* shall be divided into a minimum of two compartments of approximately equal size. Such compartmentation shall extend through the highest *level of exit discharge* serving the underground portions of the building and all levels below.

Exception: The lowest *story* need not be compartmented where the area does not exceed 1,500 square feet (139 m²) and has an *occupant load* of less than 10.

405.4.2 Smoke barrier penetration. The compartments shall be separated from each other by a *smoke barrier* in accordance with Section 710. Penetrations between the two compartments shall be limited to plumbing and electrical piping and conduit that are firestopped in accordance with Section 713. Doorways shall be protected by *fire*