Standards for Parking Structures 32.17.00

Description:
The purpose of the section is to provide guidelines for the UMD Design Standards for parking lots, space designations and configurations as approved by the UMD Department of Transportation.

Related Sections:
- TBD

Effective Date:
January 1, 2021

Applicable Standards:
- ADA Standards (latest edition)

General Requirements:

Garage Structures:
- Minimum space size of 9' x 18'
- Height Clearance—minimum of 6'-8"
- Wash-down area capabilities for both cleaning and general maintenance include that must include:
  - The wash-down process consists of a University mobile vehicle equipped with a storage tank which accepts a 1-1/2 inch threaded hose connection to fill the tank.
  - The maintenance process consists of a 3/4 inch threaded hose connection for normal FM - Building Landscape maintenance.
- Each parking level shall contain the following hose bibs installations:
  - Wash-down hose bibs shall be located 150 feet apart, a minimum of two (2). Supply piping shall be 1-1/2 inch type L copper with a 1-1/2" threaded hose connection outlet.
  - One (1) maintenance hose bib located at or near the center of structure. Supply piping shall be 3/4" I.D. type L copper with a 3/4" threaded hose connection outlet.
  - All hose bibs shall be tamper proof with a slotted or square operator key and shall have an integral vacuum breaker with a standard hose thread and include a cap and chain.
  - A complete design should include positive shut-off valve(s) that should be located at an identified accessible location to drain hose bib piping system as required for freezing condition.
  - Hose bibs should be terminated at thirty (30) inches from the associated floor level and be protected by a permanent bollard(s).
- Typical floor drain size - 2' x 2' minimum.
- Ramp Drains - Continuous Trench Drain at the base of each ramp, minimum 6 inch pipe.
- Stairwells and elevator shafts preferred location(s) are on exterior walls and designed with maximum visible glass area for security/safety.
- Expansion add-on capability - subject to the direction of the UMD PM - all parking garage structures should be designed structurally to allow for the possibility of future horizontal building expansion and/or additional floor levels in the future.