



DQA CODE QUESTION AND ANSWER

Q&A 101-2 Ambulance Separation

Occupancy: Hospital, Nursing Home

This response is issued to provide general guidance to designers, facilities, and DQA regulators in Wisconsin. Individual situations may be considered, so contact the assigned DQA regulator. DQA reserves the right to revise any and all responses since the codes, standards, and conditions used to formulate this answer are subject to change. Nothing in this response can be construed as a waiver or variance. This response does not supersede or waive plan review authority.

1. Question

What wall separation is required between an ambulance garage and a health care facility?

2. Code Quotation

NFPA 101 (2000 edition), 18.1.2: Non-health care occupancies must be separated by 2-hour construction.

2000 LSC 8.2.1: requires a minimum two-hour fire barrier for connected structures of differing construction classifications.

2006 IBC 508.3.1: An ambulance garage is considered an "accessory" occupancy if it is not separated by 2-hour walls from a health care occupancy and less than 10% of the space.

2006 IBC 406: If the garage is separated from the health care facility by rated walls it would be a storage group occupancy and governed by IBC 406.4 and 509 and separation walls per Table 508.3.3 and Table 705.4.

3. Response

The rating of walls that separate the ambulance garage from the remainder of the health care facility depends on the intent of the owner and architectural design circumstances.

- 1 – Hour Separation.** When construction types match between the hospital and ambulance garage, the garage remains, at a minimum, as a hazardous area within the health care occupancy because of the flammable fuel (similar to fuel-fired heater rooms) and must be separated by 1-hour rated fire barrier walls per LSC 18.3.2.1. This is a higher requirement than the IBC accessory separation requirement of 508.3.1.3, which does not require any separation. This is similar to the IBC incidental use requirement of Table 508.2, which requires 1-hour fire barrier separation and sprinkling. NFPA 30 – Flammable Liquids Code (2000 edition) does not apply, since it specifically excludes fuel in vehicles. **Typical application:** *No overnight vehicle storage.*
- 2 – Hour Separation.** The ambulance garage may be constructed as a separate occupancy under the LSC if it is separated by a 2-hour rated fire barrier. This is a higher requirement than the IBC, where a garage best fits within group "S-2" [since it is closer to a parking garage (S-2-low hazard) than a motor vehicle repair garage (S-1 – moderate hazard)]. Table 508.3.3 requires at least a 1-hour separation between a Group I and S-2 occupancy, if sprinkled, or 2-hour, if not sprinkled. **Typical application:** *Vehicle storage capacity on site within garage.*
- 3-Hour Separation.** If the ambulance garage is constructed as a separate building, it must be separated from the I-2 occupancy per IBC Table 705.4 which requires a 3-hour rated fire wall to separate any occupancy from a Group I occupancy group. This is a higher requirement than the LSC. **Typical application:** *Garage within a parking ramp.*
- Fuel Tank Storage.** In the remote chance that the ambulance garage contains a fuel tank within the garage, it may trigger consideration of a Group H-3 occupancy. Fuel within vehicles is specifically excluded from consideration in the amount of hazardous materials, per footnote 'p' in Table 307.1(1). Table 307.1(1) permits up to 60 gallons of Class A1 flammable liquid (gasoline, flashpoint -40° C) in a sprinkled garage before an H-3 occupancy is triggered. If a Group H-3 occupancy is appropriate, the occupancy separation of IBC Table 508.3 requires a 2-hour rated fire barrier from a sprinkler protected Group I occupancy.

Position: 1, 2, or 3-hour fire rated separation.

4. DQA Final Action

DQA Fire Authority Approval: David R. Soens

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