



DQA CODE QUESTION AND ANSWER

Q&A 99-1 Anesthetic Smoke Venting

Occupancy: Hospital

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 criteria does DQA use to determine compliance with the “smoke venting” requirements in anesthetizing locations?

2. Code Quotation

Hospitals that use an inhalation anesthetic, in locations designated by the governing body (NFPA 99 Section 12 – 2.7) must comply with NFPA 99 (1999 edition) Chapter 5:

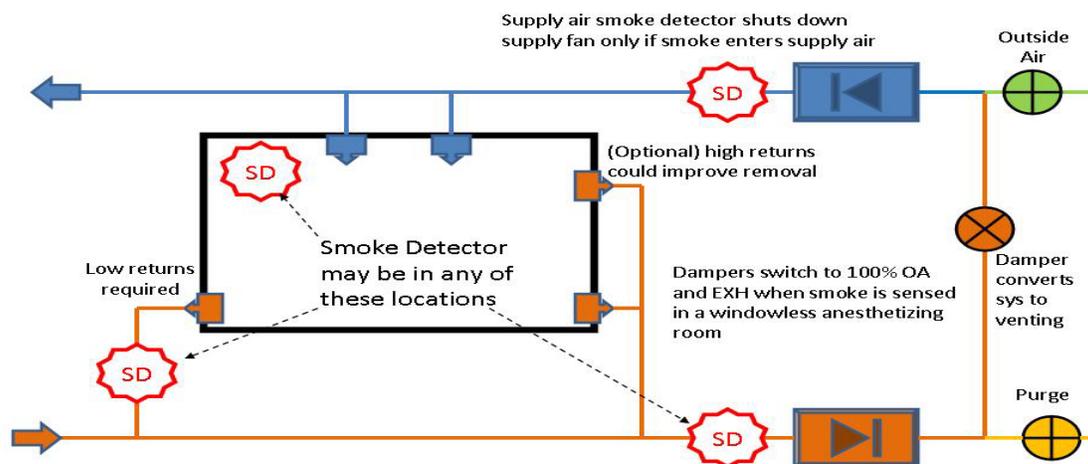
Chapter 2 Definition: Anesthetizing Location: Any area of a facility that has been designated to be used for the administration of nonflammable inhalation anesthetic agents in the course of examination, treatment, or relative analgesia.

5 – 4.1.2.: *Supply and exhaust systems for windowless anesthetizing locations shall be arranged to automatically vent smoke and products of combustion.*

5 – 4.1.3.: *Ventilating systems for anesthetizing locations shall be provided that automatically (a) prevent recirculation of smoke originating within the surgical suite and (b) prevent the circulation of smoke entering the system intake, without in either case interfering with the exhaust function of the system.*

3. Response

1. NFPA 99 Chapter 5 is providing a performance based requirement which can be achieved with **differing** designs.
2. The goal is to have the capability to continue a hospital procedure even if a minor fire is present within the anesthetizing location.
3. The smoke venting system needs to exhaust the procedure room and prevent smoke from progressing to other portions of the building.
4. The smoke venting system needs to continue to operate even if no supply air is being provided to the anesthetizing location.
5. The applicable requirements of NFPA 90A and the International Mechanical Code remain in effect.
6. The following schematic illustrates one method of achieving compliance.



4. DQA Final Action

DQA Fire Authority Approval: David R. Soens

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