

BBS MEMO

Board of Building Standards

August 30, 1995

2323 West Fifth Ave., Box 825, Columbus, Ohio 43216

New Ventilation Requirements

The 1995 edition of the Ohio Basic Building Code became effective on July 1, 1995. Part of the new OBBC is the Mechanical Code, which is based on the 1993 BOCA National Mechanical Code. Chapter 16, "Ventilation," contains revisions to commercial building ventilation requirements.

Table M-1604.3, "Required Mechanical Ventilation Air," based on Table 2 of ASHRAE 62-89, lists required amounts of outside air that must be provided for specific occupancy classifications. Tabular values have been increased from 5 CFM per person to 15 CFM per person in most cases. The estimated occupant load is provided in the table, and is no longer based on occupant load requirements of the Building Code. The resulting revisions increase outside air requirements significantly in office and school occupancies, with minor increases in other occupancies.

Recirculation requirements were also revised. Only the amounts of supply air over the required minimum may be recirculated. This is more restrictive than the 1992 OBBC (based on the 1990 BOCA Mechanical code), which permitted up to 85% recirculation.

The ventilation requirements were made more restrictive because recirculation provisions in the ASHRAE standard were not adopted. Section 6.2 of ASHRAE 62-89, "Indoor Air Quality Procedure", contains permissive and unenforceable language, which was not accepted by BOCA. As with all other sections of the OBBC, deviations from the mechanical code are required to be adjudicated and heard by an appeals board in accordance with Chapter 1 of the OBBC, and can not be granted a variance by the local building official.

On July 13, 1995, OBOA formed an Ad Hoc committee to develop an amendment to Section M-1604 that would permit the use of ASHRAE 62-89 in Ohio. The proposed code text makes a direct reference to Section 6 of ASHRAE 62, permitting the designer to take advantage of various options permitted in Section 6.2, while avoiding conflicting requirements contained in other parts of the standard. Another consideration made during the development of the proposed rule was House Bill 231, which will require a registered design professional to seal all drawings submitted for OBBC approval. The bill will become law on November 24, 1995. Since the registered design professional will be responsible for his design, the building official will only be required to verify the performance of the system (air quality) prior to issuing a certificate of occupancy.