



WIND LOAD DESIGN REQUIRED FOR GARAGE DOORS

Section R301.2.1 of the 2000 International Residential Code (IRC) and Section 1609 of the 2000 International Building Code (IBC) require that all doors be able to resist the design wind load for the structure. This is especially critical for garage doors due to their large area. If a garage door fails due to high winds, the resulting building opening could lead to failure of the garage structure under increased wind loads.

The members of the trade association called the Door & Access Systems Manufacturers Association International (DASMA) manufacture over 95% of all garage doors sold in North America. Recognizing a need for uniformity in the industry, DASMA has developed a performance labeling program for garage doors. These labels have been available for garage doors since early 2003. The permanently attached label will clearly indicate the wind loads (in psf) for which the door has been certified.

The Kansas City area has a basic wind speed of 90 mph (3-second gust). For a house in Exposure Category B, this translates to 12.8 psf positive wind pressure and 14.8 psf suction wind pressure for a 9' x 7' door, and 12.4 psf positive wind pressure and 13.8 psf suction wind pressure for a 16' x 7' door. (Exposure Category B may be assumed unless the site meets the definition of another category. See IRC Section R301.2.1.4.)

DASMA has published Technical Data Sheet #155M that summarizes the IRC requirements. A copy can be obtained from DASMA's website at: <http://www.dasma.com/PDF/Publications/TechDataSheets/CommercialResidential/TDS155.pdf> (Data Sheets for other codes are also available.) Additional information about the Certified Labeling program can be viewed at: <http://dasma.com/articles/feature/feature65.asp>.

Final inspections conducted on permits issued after January 1, 2004, builders will be required to install garage doors that bear the certification label indicating compliance to the local wind loads, and that the installment is in the conformance with the manufacturer's installation instructions. The manufacturer's installation instructions shall be left at the house. This initiative has been developed by agreement with the Home Builder's Association (HBA) of Greater Kansas City and in conjunction with the Johnson County Building Officials Association.

**CITY OF OLATHE
BUILDING CODES DIVISION-CODE ENFORCEMENT DIVISION
Effective with permits issued after January 1, 2004**