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MINNESOTA DEPARTMENT OF LABOR & INDUSTRY

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Inquiry: #2009-01

Subject: Garage Doors, permits, replacement requirements

Code: 2007 Minnesota State Building Code chapter 1309
2006 International Residential Code (IRC)

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Approved By: Stephen Hernick, State Building Official

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Questions: A. Is a permit required to replace an existing garage door with a new door?

B. Are new and replacement garage doors required to comply with the wind load requirements of the 2006 IRC?

Answer: A. Yes. Garage doors are not exempt from permits. See Minnesota Rule 1300.0120 subpart 4.

Answer: B. Yes. Minnesota Rule chapter 1309.0100 subpart 2, states that repairs to existing one and two family dwellings including townhouses may be made without requiring the existing building or structure to comply with all requirements of the code provided that any addition or alteration conforms to the code. Repairs to existing buildings or structures may be made that are nonstructural and do not adversely affect any structural member.

Section R301.2.1of the 2006 International Residential Code (IRC) identifies wind limitation requirements for buildings or portions thereof including garage doors. Garage doors are considered a structural component of the structure and regulated accordingly. This section further explains that loads for construction components (i.e. garage doors...) shall be adjusted for height and exposure using Tables R301.2(2) and R301.2(3) to determine the design load.

Minnesota Rule (MR) chapter 1309.0301 subpart 2 indicates that IRC Table R301.2(1) is amended to require a basic design wind speed of 90 mph for a 3-second gust in the State of Minnesota.

Section R613.5 of the 2006 IRC requires that vehicular access doors shall be tested in accordance with either ASTM E 330 or ANSI/DASMA 108. These standards are intended only for evaluating the structural performance of exterior doors or sectional garage doors under uniform static air pressure difference and not the structural performance of adjacent construction.

Building officials may require compliance documentation at the time of plan review or prior to the garage door installation. These documents must include the basic wind speed design and

installation requirements for the garage door based on a basic speed of 90 mph for a 3-second gust and acknowledge ASTM E 330 or ANSI/DASMA 108 testing approval.

Background Information:
Section R301.2.1 of the 2006 IRC (shown below) contains new language specifically adding garage doors to a list of building components limited by a wind speed of 90 mph for a 3-second gust. The wind loads are specified in Table R301.2 (2) as adjusted for height and exposure by Table R301.2 (3).

R301.2.1 Wind limitations. Buildings and portions thereof shall be limited by wind speed, as defined in Table R301.2(1) and construction methods in accordance with this code. Basic wind speeds shall be determined from Figure R301.2(4). Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this section for each portion shall apply. Where loads for wall coverings, curtainwalls, roof coverings, exterior windows, skylights, **garage doors** and exterior doors are not otherwise specified, the loads listed in Table R301.2(2) adjusted for height and exposure using Table R301.2(3) shall be used to determine design load performance requirements for wall coverings, curtain walls, roof coverings, exterior windows, skylights, garage doors and exterior doors. Asphalt shingles shall be designed for wind speeds in accordance with Section R905.2.6.

Note: Similar provisions regulating garage doors of IBC buildings and structures are located in IBC sections 1609 and 1714.