



ADVISORY COMMITTEE COMMENT FORM
FOR PROPOSED CODE CHANGES
(This form must be submitted electronically)

IRC-61, R612.4

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Proposed Code Change - Language

~~**R612.4 Garage doors.** Garage doors shall be tested in accordance with either ASTM E 330 or ANSI/DASMA 108, and shall meet the acceptance criteria of ANSI/DASMA 108.~~

Proposed Code Change – Need and Reason

See the following, this rule was put in place because of high wind (hurricane) issues and not relevant to Minnesota. The rule places unnecessary expense on homeowners and contractors. It is sometimes argued that the door fails and then the garage fails as a result. The door isn't a structural component. The assumption is that the garage doors get closed and that there is a garage door to begin with, which is not required. The garage must be designed for required loads whether or not there is a door. Because the door is regulated, a permit is required to check the labeling of the door, even replacements. Permit costs will be high to check such a minor and unnecessary issue. Most door openings will also need to be reinforced to meet the requirements for this standard. Since we are not in a hurricane zone, homeowners will be forced to spend money for design capability that is not necessary. Surprisingly, most local garage door wholesalers are unaware of this requirement even though it was their association (DASMA – Door and Systems Manufacturer's Association) that developed the standard (ANSI/DASMA 108) and that pushed this requirement through the process.

Because of their size, garage doors are highly susceptible to collapse, says Tim Reinhold, vice president of engineering at the Institute of Business and Home Safety (IBHS), a non-profit arm of the insurance industry that has assumed an increasingly important role guiding research in hurricane-protection. The bigger the door, the higher the wind pressure: This makes double-wide garage doors especially vulnerable.

After Hurricane Charley tore across Florida in 2004, Reinhold and colleagues conducted a study that correlated permits to the age of the door that was replaced. Of the four hurricanes in Florida that season, Charley was the only "design wind event" — meaning homes in the path of the storm faced wind speeds at or above the limits established in the building code. The study revealed that new garage doors built to meet the latest code requirements were unaffected by the storm, while older garage doors were likely to fail.

Replace vs. Reinforce

The IBHS study was not able to determine the prior condition of the failed doors, but the evidence suggests that replacing older units with state-of-the-art doors is cost-effective. Mark Westerfield, manager of Product Development and Engineering for Clopay Building Products Co., concurs, pointing out that the only other option is to retrofit existing units to meet wind-load requirements. But this is problematic for several reasons:

- *Impact-resistant garage doors usually require heavier vertical stiles, as well as added horizontal reinforcement. This reinforcement will change the doors' "springing weight."*
- *When the springing weight is changed, the springs must be changed. Given the high-tension stresses on the springs and the special tools involved, this is work for a professional garage-door installer.*

- *More often than not, the track, the track attachments, the hinges, and the rollers must also be upgraded to properly transmit the loads from the door to the building. The need for these heavier-gauge tracks, hinges, and rollers may not be obvious to someone unless they're following detailed instructions or drawings, or they have been trained for garage door installation in high wind-load areas.*
- *Although most remodelers are likely to sub out the installation of a new unit, keep in mind that any garage door is only as good as the supporting structure. In a high-wind zone, the opening must be braced to carry the extreme loads. This may require peeling back the siding on each side of the doors to increase the sheathing nailing and installing metal anchors that secure these small walls to the foundation and header. A one-page bulletin from APA — The Engineered Wood Association illustrates the essential details.*

<http://www.remodeling.hw.net/doors/wind-resistant-garage-doors.aspx>

Proposed Code Change – Cost/Benefit Analysis

This proposal will reduce the cost of construction.

Other Factors to Consider Related to Proposed Code Change

1. Is this proposed code change meant to:

change language contained in a published code book? If so, list section(s).

change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

delete language contained in a published code book? If so, list section(s).
2012 IRC section R612.7

delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

neither; this language will be new language, not found in the code book or in Minnesota Rule.

2. Is this proposed code change required by a Minnesota Statute or new legislation? If so, please provide the citation to the Statute or legislation.

No

3. Will this proposed code change impact other sections of a published code book or of an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.

No

4. Will this proposed code change impact other parts of the Minnesota State Building Code? If so, please list the affected parts of the Minnesota State Building Code.

No

5. Who are the parties affected or segments of industry affected by this proposed code change?

Code officials, building designers, contractors, building owners

6. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

No

7. Are you aware of any federal requirement or regulation related to this proposed code change? If so, please list the regulation or requirement.

No