



August 16, 2010

Regulations Division
Office of the General Counsel
U.S. Department of Housing and Urban Development (HUD)
Room 10276
451 7th Street, S.W.
Washington, D.C. 20410-0500

RE: RIN 2502-A172 Manufactured Home Construction and Safety Standards, Test Procedures for Roof Trusses

Dear Office of the General Counsel:

The Manufactured Housing Institute (MHI), a trade association representing all segments of the factory-built housing industry including manufacturers, lenders, community owners, retailers, and state associations, appreciates the opportunity to comment on the Department of Housing and Urban Development's (HUD) proposed rule to amend §3280.402 of the Manufactured Home Construction and Safety Standards (MHCCS) establishing new test procedures for roof trusses.

MHI opposes the adoption of the proposed rule. The increased costs resulting from the new roof truss testing requirements will hinder consumer's ability to afford and purchase a manufactured home. More importantly, changes to the current testing procedures will not yield any benefit.

BACKGROUND

HUD published changes to roof truss test procedures recommended by the Manufactured Housing Consensus Committee (MHCC) in a proposed rule on December 1, 2004 (69 FR 70016). In response to the comments received in the proposed rule, those recommendations were not included in HUD's final rule published in the Federal Register on November 30, 2005 (70 FR 72024). In general, the comments received opposed HUD's recommended proposed changes because they were not consistent with statutory directives to consider affordability; HUD's estimates of cost increases posed by the recommendations were too low; and HUD was unable to adequately justify the proposed changes.

The proposed changes to the roof truss procedures were sent back to the MHCC for further review. The MHCC established a Truss Test Task Force and had five teleconferences to consider additional changes to the roof test procedures. During 2005 and 2006, the full MHCC held two teleconferences to review and vote on the new truss testing procedures. This proposed rule, with one major exception, includes the recommendations of the MHCC. Although some changes were made from its initial proposal, MHI believes that the reasons (see above) HUD withdrew the roof truss recommendations from its 2004 proposed rule are still valid.

PROPOSED ROOF TRUSS TEST PROCEDURES

The proposed rule would require additional, duplicative full scale testing of each truss assembly in order to qualify a design. For Wind Zone I designs, three tests (or possibly four if deemed necessary) would be required rather than the current two. For Wind Zones II and III designs, a total of six tests would be required for each truss design, (three uplift tests and three gravity tests as opposed to the current requirement of one uplift test and two gravity tests). This requirement will unnecessarily add additional costs for the consumer without adding any additional value to the safety of the home.

First, the proposed rule establishes new requirements for uplift testing to require such testing in an upright position in Wind Zones II and III. This change HUD is proposing goes beyond that which was recommended by the MHCC. The MHCC recommendation permitted both upright and inverted testing of trusses in all three Wind Zones. Instead of relying on the MHCC, HUD has chosen to rely on uplift testing requirements of the National Fire Protection Association's NFPA 501 "Standard on Manufactured Housing" published by NFPA using a study conducted by NAHB Research Center as a justification for this change. MHI believes that this is insufficient justification for making changes to the current uplift testing procedures.

The NFPA does not represent the collective consensus of the manufactured housing industry, and is a standard that is not in use for manufactured housing. This process has been replaced by the MHCC process and the MHCC recommended that both types of testing inverted and upright, be permitted for the uplift testing of roof trusses. The NFPA process did not consider a balance between affordability and the cost of regulation, which is a fundamental, statutory premise of the MHCCS. Similarly, the NAHB Research Center study failed to consider the cost of additional testing, which could be as much as 25% more than current practice.

Second, MHI member roof truss suppliers have indicated that they are constrained by a limited number of qualified personnel and testing racks to recertify all the roof truss designs currently in circulation. HUD estimates there are about 1500 roof truss designs which will be required to be retested and recertified, and as manufacturers respond to design innovations there is a constant need for new roof truss designs. It is unrealistic to expect that additional full assembly testing can be accomplished within the time frame required for design production and to meet consumer demand. It will unnecessarily result in price inflation and delayed production which will be passed on to the consumer.

MHI believes the objectives of this proposed rule are already being met through the enhanced quality control and assessment procedures that the industry has in place. Manufacturers' quality assurance programs include rigorous provisions to ensure that the materials (such as roof trusses) used in the production of their homes are meeting the required construction standards. Such procedures, combined with the increased attention on control during the assembly process, are the most effective method to ensure against truss failures.

COST BENEFIT OF THE PROPOSED RULE IS FLAWED

MHI believes that HUD's justification for this proposed rule is seriously flawed. HUD argues that the proposed testing procedures will make manufactured homes less susceptible to wind damage and downward pressure and will reduce collateral damage to housing and other structures

MHI Roof Truss Procedures

adjacent to manufactured housing (FR 522-P-01, page 34068). MHI and dozens of industry members and experts do not believe the proposed changes to the roof truss testing procedures will have any impact on performance.

The industry has a strong record for producing homes that withstand normal design load requirements and there is no evidence of roof failures as a result of inadequate truss design and construction. This is particularly true since 1994 when new wind standards were adopted (24CFR §3280.305). HUD has provided no data demonstrating failures in roof trusses to justify the additional testing procedures, increased testing requirements, and recertification of all truss designs.

Furthermore, there is simply no data supporting HUD's assertion that new roof truss testing procedures will reduce property damage that occurs during hurricanes and other high wind events. (FR 522-P-01, page 34068).

HUD's report, *An Assessment of Damage to Manufactured Homes Caused by Hurricane Charley*, demonstrated that manufactured home performance exceeded design conditions and that homes built since 1994 (when the HUD standards were first significantly revised with regard to wind resistance) were virtually unscathed by the hurricanes. Homes built after 1999 when the Florida manufactured home installation requirements were implemented, survived the storm with little or no damage. Additionally, the study indicated that the property damage caused by Hurricane Charley was attributable to the "add-on" features of the home (such as a deck or carport), and not to the manufactured home itself. The damage to the manufactured homes was found to be to roof shingles and roof sheathing, not roof truss design or construction failure.

A HUD report, *Assessment of Damage to Single-Family Homes Caused by Hurricanes Andrew and Iniki* in 1992 found that the three major characteristics for property damage during hurricanes were opening protection (windows and doors), roof coverings, and sheathing attachment. Roof truss failure was not mentioned as a major characteristic for property damage.

A 2004 report, *Mobile Home Damage Assessments From Hurricanes Charley, Frances, Ivan, and Jeanne* by the Florida Department of Highway Safety and Motor Vehicles in 2004 concluded that "mobile homes constructed post-1994 to the enhanced construction requirements adopted in 1994 withstood hurricane force winds as well as other severe weather conditions and remained intact with minor to no damage."

In its report *Protecting Manufactured Homes from Floods and Other Hazards*, the Federal Emergency Management Agency (FEMA) reported on its assessment of manufactured homes in Monroe County, Florida after Hurricane Andrew which occurred in 1992. FEMA found that the homes that were damaged were those that were not anchored properly. It concluded that homes built after 1994 and anchored properly suffered minimal structural damage and remained secured to their foundations.

As HUD is aware, 36 states have adopted manufactured home installation programs in accordance with Section 605 of the Manufactured Housing Improvements Act of 2000. These HUD approved programs have been implemented since the MHCC and HUD began considering changes to the roof truss testing procedures. HUD should assess the impact of these programs on the property damage to manufactured homes in hurricanes and high wind events before changing its regulations regarding roof truss testing.

Page 4

MHI Roof Truss Procedures

There is no value to amend the current roof truss testing procedures. MHI respectfully requests that HUD withdraw its proposed rule establishing new roof truss test procedures.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Lois Starkey". The signature is written in a cursive, flowing style.

Lois Starkey, Vice President
Regulatory Affairs
Manufactured Housing Institute

cc: Teresa Payne
Elizabeth Cocke