

PROPOSAL 8-2R (2009)

SCOPE: Sec. 15.5.3, and 23.1 of ASCE 7-05.

PROPOSAL FOR CHANGE:

Revise section 15.5.3 to read:

15.5.3 Steel Storage Racks. Steel storage racks supported at or below grade shall be designed in accordance with Section 2.7 of the ANSI MH 16.1-2007 standard and its force and displacement requirements.

For storage racks supported above grade, the value of V in Section 2.7.2 of ANSI MH 16.1-2007 shall not be taken less than the value of F_p determined in accordance with Section 13.3.1 of this standard, where R_p is taken equal to R , and a_p is taken equal to 2.5.

Alternatively, in addition to the requirements of section 15.5.1, steel storage racks shall be designed in accordance with the requirements of Sections 15.5.3.1 through 15.5.3.4.

~~1. The values of C_a and C_v used shall equal $0.4 S_{DS}$ and S_{DI} , respectively, where S_{DS} and S_{DI} are determined in accordance with Section 11.4.4 of this standard.~~

~~2. The importance factor for storage racks in structures open to the public, such as retail warehouse stores, shall be taken equal to 1.5.~~

~~3. For storage racks supported at or below grade, the value of C_s used shall not be less than $0.14 S_{DS}$. For storage racks supported above grade, the value of C_s used shall not be less than the value for F_p determined in accordance with Section 13.3.1 of this standard where R_p is taken as equal to R from RMI and a_p is taken as equal to 2.5.~~

15.5.3.1 (no change)

15.5.3.2 (no change)

15.5.3.3 (no change)

15.5.3.4 (no change)

Revise Chapter 23. The reference in Section 23.1 in Chapter 23 should be replaced with “ANSI MH 16.1-2007, Specification for the Design, Testing, and Utilization of Industrial Steel Storage Racks.”

Commentary to Support Proposal 8-2

Modify Commentary Section C15.5.3 as follows:

C15.5.3 Steel Storage Racks. The two approaches to the design of steel storage racks set forth by the standard are intended to produce comparable results. The specific revisions to the RMI Specification and the detailed requirements of the standard reflect the recommendations of FEMA 460 “Seismic

1 Considerations for Steel Storage Racks Located in Areas Accessible to the Public”.
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5 **REASON FOR PROPOSAL:**
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7 ANSI MH 16.1-2007, Specification for the Design, Testing, and Utilization of Industrial Steel Storage
8 Racks, is designed to be a stand-alone Standard to be adopted by reference. For a number of years and
9 several provision- and code-change cycles, the Rack Manufacturers Institute has worked to harmonize
10 its Specification with the model codes and with the code-resource and seismic-provision documents.
11 Working with the Non-Building Structures committees of the FEMA/BSSC TS-8 and ASCE 7, and the
12 Task Group on FEMA/BSSC 460(2005), Seismic Considerations for Steel Storage Racks Located in
13 Areas Open to the Public, the seismic provisions have been developed and stated to be self-sufficient,
14 incorporating the results of the work of those efforts. For those who abide by ANSI MH 16.1-2007,
15 there is no longer a need for the qualifying remarks and amendments as expressed in Section 15.4 and
16 Section 15.5.1.
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