

UL 203A Table 9.1 Conforms to NFPA 13

Provides uniform basis of comparison

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Since inception in 1968, UL listing of sway brace product is based on an analogy using conservative simplifying assumptions per NFPA 13. UL 203A Table 9.1 incorporates NFPA 13 parameters of maximum spacing and typical seismic system load, referenced per 2013 NFPA 13 as follows:

9.3.5.5.8 “Lateral braces shall be allowed to act as longitudinal braces ...”

9.3.5.6.1 “Longitudinal sway bracing spaced at a maximum of 80 feet...”

9.3.5.9.5 “Where data for determining C_p are not available, the horizontal seismic force acting on the braces shall be determined as specified in 9.3.5.9.3 with $C_p = 0.5$.”

Accordingly, spacing is 80 ft. and the typical load is defined as schedule 40 system pipe with a .5 force factor (C_p) which is the expected force historically referenced per NFPA 13. This conservative analogy helps prevent product misapplication, promotes simplicity of product selection and encourages uniform product ability. It is important to remember that **“Simplicity Enhances Reliability”**.

UL 203A Table 9.1 has historically been subject to revision to correspond to NFPA 13. Recent examples are lateral brace used as longitudinal brace, Zone of Influence calculations and alignment with ASCE 7. In conformance, Table 9.1 revised load ratings through 6 in. fitting size.

Nearly 50 years of documented product performance has vetted the UL 203A listing protocol as sound engineering and a conservative method to evaluate brace product. NFPA 13 documentation of system performance after numerous seismic events confirmed the NFPA 13 sway brace methodology using UL listed products.

In conclusion, UL 203A test protocol which includes Table 9.1 loads in conjunction with static testing constitutes a record of proven product performance.