



Structural Applications of Steel Cables for Buildings **ASCE/SEI 19-10**

This document contains interpretations by the Structural Applications of Steel Cables for Buildings Standard Committee regarding the above standard. Interpretations may be periodically updated and posted online (<http://ascelibrary.org/doi/book/10.1061/9780784411247>) .

Interpretation

Effective: January 1, 2013

Section 4.1 Cable Specifications

Section 4.1 (page 6) under ASTM A1023 states: “(for specific application, see Commentary Section C4.0)” The commentary on page 15 indicates that the A1023 wire ropes in Table 9 are listed for “the purpose of providing earthquake-load-resistant sway bracing for nonstructural architectural, electrical, and mechanical components.”

Question: Is it intended to exclude the use of this material for other purposes?

Committee Interpretation: Yes.

Table 3-2 Deflector Reduction Factors

Question: Does the Saddle Radius to Rope Diameter minimum value apply to small diameter wire ropes?

Committee Interpretation: Yes, but only for the types of cables allowed, and only if the cable's use is for purposes outlined in Commentary Section C4.0. Small diameter cables used for purposes outside of those outlined in Commentary Section C4.0 are beyond the scope of the Standard. See answers for questions 1 & 2 related to the restricted use of small diameter cables and the prohibited use of clips.

Section 5.4 Saddles and Clamps

Section 5.4 (page 6) refers to Saddles and Clamps.

Question: Is this for a type of end connection?

Committee Interpretation: No. End fitting are addressed in Section 5.3.

Interpretation

Effective: May 24, 2012

Section 3.3.2 Load Combinations

Question: Does Section 3.3.2 require that all cable and end fitting assemblies be strength tested to confirm that the fittings develop an ultimate strength greater than the specified nominal strength?

Committee Interpretation: No.

Question: Does Section 3.3.2 require that the design strength of end fittings, that have been successfully used and tested by industry on numerous occasions over many years to develop an ultimate strength greater than the specified nominal cable strength, must be computed as identified therein?

Committee Interpretation: No.

Question: Does Section 3.3.2 require that the design strength of end fittings, that are of new configurations or materials that have not been strength tested, must be computed as identified therein?

Committee Interpretation: No.

Section 5.3 End Fittings

Question: Are cable clips and wedge type end fittings not listed as acceptable end fittings for use primarily because they are normally intended to be used in temporary construction activities and are subject to loosening over time and or damaging the cable thereby reducing the cable and end fitting assembly strength below the specified nominal cable strength as is prohibited by Section 3.3.2?

Committee Interpretation: Yes.

Question: Are cable clips and wedge type end fittings unacceptable for use as end fittings?

Committee Interpretation: Yes.