INTERPRETATION IC 135-2016-18 OF
ANSI/ASHRAE STANDARD 135-2016 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks

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Request from: Carl Neilson, BACnet International, 61 Seagirt Road, BC, V9Z 1A3.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 135-2016, Clauses 13.1 and 13.15.1.1.6, regarding COV_Increment for numeric properties.

Background: Clause 13.1 provides the following discussion on the COV increment for numeric properties:

> For properties listed in Table 13-1 that have a numeric datatype, the COV increment used to determine when to generate notifications will be the COV_Increment property of the object unless a COV_Increment parameter is supplied in the SubscribeCOVProperty or SubscribeCOVPropertyMultiple service. For other properties that have a numeric datatype, the COV increment to use when not supplied with the SubscribeCOVProperty or SubscribeCOVPropertyMultiple service shall be a local matter. This is to allow multiple subscribers that do not require a specific increment to use a common increment to allow for the reduction of the processing burden on the COV-server. The criteria for COV reporting for properties other than those listed in Table 13-1 is based on the datatype of the property subscribed to and is described in Table 13-1a.

Table 13-1a, which applies to all properties not covered by Table 13-1, states:

Datatype	Criteria	Properties Reported
REAL	If the property changes by the increment (from the service if provided; otherwise, as determined by the device) or Status_Flags changes at all (if the object has a Status_Flags property)	The subscribed-to property, Status_Flags (if the object has a Status_Flags property)
All other datatypes	If the property changes at all or Status_Flags changes at all (if the object has a Status_Flags property)	The subscribed-to property, Status_Flags (if the object has a Status_Flags property)

And clause 13.15 describes the COV_Increment parameter of the SubscribeCOVProperty service as:

13.15.1.1.6 COV Increment

This parameter, of type REAL, shall specify the minimum change in the monitored property that will cause a COVNotification to be issued to subscriber COV-clients. This parameter is ignored if the datatype of the monitored property is not numeric. If the monitored property is Present_Value, its datatype is numeric, this parameter is not present, and the monitored object has a COV_Increment property, then the COV increment to use is taken from the COV_Increment property of the monitored object. Otherwise, the COV increment is a local matter. The intent is to allow the subscriber to use a previously established COV increment from another subscription or to allow use of the COV_Increment property in the monitored object.

Table seems indicate that the COV_Increment parameter only applies to REAL datatypes whereas the clauses seem to imply that it applies to all numeric datatypes.

In addition, Interpretation Request 135-2016-14, states:

The COV Increment parameter, when present, shall be used as the COV Increment whenever the monitored property is numeric

Interpretation: Table 13-1a is incorrect; the first row of the table should indicate that the COV_Increment parameter should be applied to all numeric properties not just properties of type REAL.

Question: Is this Interpretation correct?

Answer: Yes.