

**INTERPRETATION IC 135-2016-8 OF  
ANSI/ASHRAE STANDARD 135-2016 BACnet® -  
A Data Communication Protocol for Building  
Automation and Control Networks**

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**Request from:** Horst Hannappel, MBS GmbH, Roemerstr. 15, Krefeld D-47809.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 135-2016 regarding adding properties from future protocol revisions.

**Background:** Situation:

The BACnet standard advances in steps of Addenda, that are published at the same time. Each such step is assigned a protocol revision number. A given BACnet device is implemented conforming to the rules defined by the standard at a specific revision. The supported revision is documented as a property in the device object and in documents like PICS.

For each object type there is a set of properties, that are defined as required in a given protocol revision and there is a set of properties, that is defined as optional in that protocol revision.

Question:

Is it allowed for a device, to provide properties from the ASHRAE reserved range, that are neither defined as required nor as optional for the protocol revision supported by the device?

The intention may be to support single features from future protocol revisions without actually implementing proper support for the newer revision.

Possible Problems:

If a device supports a mixture of different protocol revisions it can become difficult to decide which rules from the newer revision then should apply. Examples may be the question which properties are returned from ReadPropertyMultiple (OPTIONAL). Or take the network port object: with introduction of that new object certain properties like Slave\_Proxy\* were removed from the device object. Should then a lower revision device that implements network port be required or allowed to support the Slave\_Proxy properties?

**Interpretation:** In a device that is implemented according to a specific protocol revision, as documented in the device object, for each object type exactly the standard properties defined for that protocol revision are allowed to be supported. Other properties from the ASHRAE reserved range are not allowed to be present in the device even when these are defined in a published later or previous protocol revision. If features from a more current revision are required for a device it needs to implement according to that more current revision.

**Question:** Is this Interpretation correct?

**Answer:** Yes