INTERPRETATION IC 135-2016-6 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 the exact meaning of some defined units in the BACnet standard.

Background: Situation: The BACnet standard defines engineering units, among them the mass unit “tons”.

Problem: I had always assumed “tons” would naturally refer to metrical tons (one thousand kilograms). This would be in line with the fact, that other related SI units like KILOGRAMS (39), GRAMS (195), and MILLIGRAMS (196) are also defined in the standard.

Now I came across an implementation that assumes tons to mean “American short tons” which are off by a factor of 1.102.

Same question applies to a number of derived units like tons per hour.

Interpretation: All units in the standard refer to metrical or SI definitions if not explicitly stated otherwise. Tons are 1000 kilograms.

Question: Is this Interpretation correct?

Answer: No.

Comments: The "tons" engineering unit refers to American short tons. In American English, a metric tonne is spelled "tonne".