

**INTERPRETATION IC 135-2024-5 OF
ANSI/ASHRAE STANDARD 135-2024 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks**

Approval Date: April 30, 2025

Request from: Michael Osborne, BTB Consulting, 408 - 9864 Fourth St, Sidney, BC, V8L 2Z4.

Reference: This request for interpretation refers to ANSI/ASHRAE Standard 135-2024 and pertains to the day of week parameter in properties that require a specified date.

Background:

3.2 Terms Defined for this Standard

...

specific date: a fully specified date. For example, January 24, 1991, Day of week = Thursday. **A specific date shall contain no unspecified octets or Special Date Values.**

...

unspecified date: a date composed entirely of unspecified octets (A value of X'FF' = D'255').

...

21.5 Application Types

...

Date ::= DatePattern – restricted to be a specific date or an unspecified date, see Clause 3

...

12.1.7 Unspecified Dates and Times

...

There are a number of objects defined in this clause that have properties of the type BACnetDateRange, for example the Date_List property in the Calendar object, whose construct includes a startDate and an endDate. Both startDate and endDate may be an unspecified date or a specific date only. For purposes of comparing date ranges, the following logic shall be applied.

...

20.2.12 Encoding of a Date Value

...

The processing of a day of week received in a service that is in the range 1 to 7 and is inconsistent with the values in the other octets shall be a local matter.

...

Problem:

Certain properties like the Schedule object's Effective_Period are allowed to contain an unspecified date or specified date. A specified date must contain a valid year, month, day of month

and day of week. Clause 20.2.12 allows a device to fix an incorrect day of week parameter that is in the range of 1 to 7. This clause does not disallow a device from fixing a day of week parameter that is invalid (0x08 to 0xFF).

Some historical client devices send valid dates with unspecified day of week and newer devices need to continue interoperating with these legacy devices.

Prior to July 2022, the Test Package did not test unspecified day of week. Presently, the tests require a write with a valid date and unspecified day of week to be rejected.

Interpretation: If a device receives a BACnet write request that contains a valid date with an invalid day of week, such as X'FF (the pattern used to denote an unspecified day of week), for a property that requires a specified date, it is a local matter whether the device accepts or rejects the request.

Question: Is this Interpretation correct?

Answer: Yes