

**INTERPRETATION IC 135-2020-9 OF
ANSI/ASHRAE STANDARD 135-2020 BACnet® -
A Data Communication Protocol for Building
Automation and Control Networks**

Approval Date: March 25, 2022

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

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 135-2020, Clause 12.62.4.1 regarding staging object writing to target references.

Background: The third paragraph of Clause 12.62.4.1:

Subsequently if any write to a referenced object fails, Reliability shall be changed to COMMUNICATION_FAILURE. The COMMUNICATION_FAILURE shall remain in effect until all reference writes have been completed successfully. How a particular implementation handles other failures during writing to referenced objects shall be a local matter except that Reliability shall indicate a value other than NO_FAULT_DETECTED.

The definition of COMMUNICATION_FAILURE is:

Proper operation of the object is dependent on communication with a remote sensor or device and communication with the remote sensor or device has been lost.

The first sentence of 12.62.4.1 appears to require COMMUNICATION_FAILURE to be used in all cases of failures (even those not in alignment with the definition of COMMUNICATION_FAILURE), yet sentence 3 provides an allowance to use other reliability values.

Interpretation: Any failure to write to a target reference, be it local or remote, shall result in Reliability taking on a value other than NO_FAULT_DETECTED. In the specific case where the target is remote, and no response to the write action is received from the remote device, Reliability shall take on the value COMMUNICATION_FAILURE.

Question: Is this Interpretation correct?

Answer: Yes

Comments: The presence of the phrase “other failures” implies that the first condition was based on remote device operations.