ADDENDA

ANSI/ASHRAE Addendum ci to
ANSI/ASHRAE Standard 135-2020

A Data Communication Protocol for Building Automation and Control Networks

Approved by ASHRAE and by the American National Standards Institute on September 30, 2024.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/continuous-maintenance).

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[This foreword, the table of contents, the introduction, and the "rationales" on the following pages are not part of this standard. They are merely informative and do not contain requirements necessary for conformance to the standard.]

FOREWORD

Addendum ci is the result of change proposals made pursuant to the ASHRAE continuous maintenance procedures and of deliberations within Standing Standard Project Committee 135. The changes are summarized as follows:

In the following document, language to be added to existing clauses of ANSI/ASHRAE 135-2020 is indicated through the use of *italics*, while deletions are indicated by ~~strikethrough~~. Where entirely new subclauses are proposed to be added, plain type is used throughout. Only this new and deleted text is open to comment at this time. All other material in this document is provided for context only and is not open for public review comment except as it relates to the proposed changes.

The use of placeholders like XX, YY, ZZ, X1, X2, NN, x, n, ? etc. should not be interpreted as literal values of the final published version. These placeholders will be assigned actual numbers/letters only after final publication approval of the addendum.

135-2020ci-1 Changes to Clause 12 to add OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED

Rationale
BTL-CR-0439 indicates a need to specify what error codes and classes are returned when a properties optional functionality is not supported. There are several properties that should have the OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED error code.

[Change **12.12.7**, p. 233]

12.12.7 Event_Parameters

This~~The Event_Parameters~~ property, of type BACnetEventParameter, determines the *event* algorithm used to monitor the referenced object and provides the parameter values needed for this event algorithm. The parameter values specified in this property serve as event algorithm parameters and as reference type parameters reference properties whose values are used as event algorithm parameters, as defined by the respective event algorithm in Clause 13.3. The mapping to the event algorithm parameters is defined in Table 12-15.

An attempt to write parameters for an unsupported event algorithm shall cause a Result(-) to be returned with an 'Error Class' of PROPERTY and an 'Error Code' of OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED.

…

[Change **12.12.23**, p. 238]

12.12.23 Fault_Parameters

This property, of type BACnetFaultParameter, determines the fault algorithm used to monitor the referenced object and provides the parameter values needed for this fault algorithm. The mapping to the fault algorithm parameter values is defined in Table 12-15.3.

An attempt to write parameters for an unsupported fault algorithm shall cause a Result(-) to be returned with an 'Error Class' of PROPERTY and an 'Error Code' of OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED.

…

[Change **12.28.10**, p. 346]

12.28.10 Requested_Shed_Level

…

The Load Control object's available shed actions are described by the Shed_Level_Descriptions array and are mapped to the BACnet visible values of Requested_Shed_Level by the Shed_Levels array. The SHED_INACTIVE state shall always be represented by the value 0, which is not represented in the Shed_Levels or Shed_Level_Descriptions arrays. If Requested_Shed_Level choice is AMOUNT, the value of Requested_Shed_Level shall be interpreted as an amount, in kilowatts, by which to reduce power usage. Load Control objects are required to support the LEVEL choice. Support for the PERCENT and AMOUNT choices is optional. This allows a manager to be guaranteed the ability to write to the Load Control object by using the LEVEL choice.

An attempt to write an unsupported BACnetShedLevel choice shall cause a Result(-) to be returned with an 'Error Class' of PROPERTY and an 'Error Code' of OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED.

If a load control command has been issued, and execution of the command has completed, Requested_Shed_Level shall be reset to the default value appropriate to the choice of Requested_Shed_Level used for the last command.
…

135-2020ci-2 [This section was removed from this addendum and added to Addendum 135-2020co .]

135-2020ci-3 Clarify optionally supported command procedure

Rationale
Provide clarity on optionality of support for commands.
Provide clarity on what error to return when the functionality associated with a command is disabled.

Note to reviewer: The added text has been aligned with the published language from ANSI/ASHRAE 135-2020 with changes applied from Addendum 135-2020*ce* applied

[Modify **Clause 12.56.14**, p. 527]

12.56.14 Command

This property, of type BACnetNetworkPortCommand, is used to request that the Network Port object perform various actions.

When this property is written, the sequence of operations shall be as follows:

(1) Perform any necessary validation. If Result(-) is returned, this property shall retain the value that it had before the write was attempted and no change shall be made to any other property of the object.
If validation succeeds, this property shall be set to the value written and a Result(+) be returned.
The device shall begin performing the requested command actions.
When the object is able to accept another command, the Command property shall be set to IDLE. This may occur immediately, when the actions have completed, or when the actions have proceeded to a point that allows the implementation to accept another command. The exact timing is a local matter.

When this property has a value other than IDLE, any attempt to write to it shall result in the return of a Result(-) with an 'Error Class' of OBJECT and an 'Error Code' of BUSY.

Writing a value of IDLE to this property shall result in the return of a Result(-) with an 'Error Class' of PROPERTY and an 'Error Code' of OUT_OF_RANGE.

If the value of the Changes_Pending property is TRUE, writing a value other than DISCARD_CHANGES (if supported) to the Command property shall result in the return of a Result(-) with an ‘Error Class’ of PROPERTY and an ‘Error Code’ of INVALID_VALUE_IN_THIS_STATE.

If the Network Port object supports the functionality associated with a command, but that functionality is disabled, writing a value to that Command property shall result in the return of a Result(-) with an 'Error Class' of PROPERTY and an 'Error Code' of NOT_ENABLED.

If the Network Port object does not support a command written to this property, the device shall return a Result(-) with an 'Error Class' of PROPERTY and an 'Error Code' of OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED.

Unless otherwise stated, it is a local matter which command values a Network Port object supports, regardless of whether, or not, the Network Port object supports the functionality associated with the command.

…

[Modify RESTART_SUBORDINATE_DISCOVERY portion of **Clause12.56.14**, p. 553]

RESTART_SLAVE_DISCOVERY The port shall restart the subordinate detection algorithm as described in Clauses 12.56.53 through 12.56.56, and 16.10.2.

If the Network_Type is MSTP and the device is capable of being a Subordinate-Proxy, the Command property and this command shall be supported.

If the value of Network_Type is not MSTP, writing this value shall result in the return of a Result(-) with an 'Error Class' of PROPERTY and an 'Error Code' of VALUE_OUT_OF_RANGE. If the value of Network_Type is MSTP but the device does not support MS/TP Subordinate Proxy functionality, writing this value shall result in the return of a Result(-) with an 'Error Class' of PROPERTY and an 'Error Code' of OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED.

The value of the Command property shall return to IDLE as soon as discovery has been initiated. The discovery process will typically require a significant amount of additional time

[Modify **Clause 18.3**, p. 736]
[Insert the below text

Error Class - PROPERTY

This Error Class pertains to problems related to identifying, accessing, and manipulating the properties of BACnet objects, whether BACnet-defined or not. Since these errors generally apply to individual property characteristics, they do not necessarily signal that an entire service request has failed.

…

NOT_ENABLED *- The attempt to write the property failed as the provided value requires that optional functionality be enabled in order to fulfill the request.*

…

[Modify Error production in **Clause 21**, p. 736]

Error ::= SEQUENCE {

```
                …
                not-cov-property                (44),
                not-enabled                     (206),
                not-key-server                  (102),
                …
                -- see invalid-value-in-this-state (138),
                -- not-enabled                  (206),
                ...
                }
}
```

135-2020ci-4 Clarify Schedule Object requirements

Rationale
Change the Schedule Object requirements In order to increase interoperability.

12.24 Schedule Object Type

…
The current state of the Schedule object is represented by the value of its Present_Value property, which is normally calculated using the time/value pairs from the Weekly_Schedule and Exception_Schedule properties, with a default value for use when no schedules are in effect. Details of this calculation are provided in the description of the Present_Value property. *For maximum interoperability with other devices and user interfaces, it is recommended to schedule binary occupancy modes as BACnetBinaryPV values.*
…

[Change clause **K.3.8** as follows]

K.3.8. BIBB - Scheduling-Weekly Schedule Internal-B (SCHED-WS-I-B)

…
The Schedule object shall support at least 6 entries per day in the Weekly_Schedule property. ~~The schedule shall support the scheduling of BACnetBinaryPV values. The Priority_For_Writing property in the Schedule object shall be writable.~~ *If the List_of_Object_Property_References property is capable of referencing a commandable property, then the Priority_For_Writing property shall be writable.*

135-2020ci-5 [This section was removed from this addendum and added to Addendum 135-2020co .]

135-2020ci-6 Clarify INVALID_ARRAY_SIZE

Rationale

Several BTL tests test for the condition of writing to an array index that is larger than the current size of the array, yet the error condition tables are ambiguous on this topic.

[Change in **Clause 13.16.3.2.2.3** in SubscribeCOVPropertyMultiple]

13.16.3.2.2.3 Error Type

Situation	Error Class	Error Code
Specified object does not exist	OBJECT	UNKNOWN_OBJECT
Specified property does not exist	PROPERTY	UNKNOWN_PROPERTY
Specified object does not support COV-multiple notifications	OBJECT	OPTIONAL_FUNCTIONALITY_NOT_SUPPORTED
Specified property does not support COV-multiple notifications	PROPERTY	NOT_COV_PROPERTY
An array index is provided but the property is not an array.	PROPERTY	PROPERTY_IS_NOT_AN_ARRAY
An array index is provided that is *greater than the current length of the array*~~outside the range existing in the property~~.	PROPERTY	INVALID_ARRAY_INDEX

[Change in **Clause 15.1.1.3.1**, in AddListElement]

15.1.1.3.1 Error Type

Situation	Error Class	Error Code
Specified object does not exist.	OBJECT	UNKNOWN_OBJECT
Specified property does not exist.	PROPERTY	UNKNOWN_PROPERTY
...		
An array index is provided but the property is not an array.	PROPERTY	PROPERTY_IS_NOT_AN_ARRAY
An array index is provided that is *greater than the current length of the array or is 0*~~outside the range existing in the property~~.	PROPERTY	INVALID_ARRAY_INDEX

[Change in **Clause 15.2.1.3.1**, in RemoveListElement]

15.2.1.3.1 Error Type

Situation	Error Class	Error Code
Specified object does not exist.	OBJECT	UNKNOWN_OBJECT
Specified property does not exist.	PROPERTY	UNKNOWN_PROPERTY
...		
An array index is provided but the property is not an array.	PROPERTY	PROPERTY_IS_NOT_AN_ARRAY
An array index is provided that is *greater than the current length of the array or is 0*~~outside the range existing in the property~~.	PROPERTY	INVALID_ARRAY_INDEX

[Change in **Clause 15.5.1.3.1**, in ReadProperty]

15.5.1.3.1 Error Type

Situation	Error Class	Error Code
Specified object does not exist.	OBJECT	UNKNOWN_OBJECT
Specified property does not exist.	PROPERTY	UNKNOWN_PROPERTY
An array index is provided but the property is not an array.	PROPERTY	PROPERTY_IS_NOT_AN_ARRAY
An array index is provided that is *greater than the current length of the array*~~outside the range existing in the property~~.	PROPERTY	INVALID_ARRAY_INDEX
...		

[Change in **Clause 15.7.1.3.1**, in ReadPropertyMultiple]

15.7.1.3.1 Error Type

Situation	Error Class	Error Code
Specified object does not exist.	OBJECT	UNKNOWN_OBJECT
Specified property does not exist.	PROPERTY	UNKNOWN_PROPERTY
An array index is provided but the property is not an array.	PROPERTY	PROPERTY_IS_NOT_AN_ARRAY
An array index is provided that is *greater than the current length of the array*~~outside the range existing in the property~~.	PROPERTY	INVALID_ARRAY_INDEX
...		

[Change in **Clause 15.8.1.3.1**, in ReadRange]

15.8.1.3.1 Error Type

Situation	Error Class	Error Code
Specified object does not exist.	OBJECT	UNKNOWN_OBJECT
Specified property does not exist.	PROPERTY	UNKNOWN_PROPERTY
...		
An array index is provided but the property is not an array.	PROPERTY	PROPERTY_IS_NOT_AN_ARRAY
An array index is provided that is *greater than the current length of the array or is 0*~~outside the range existing in the property~~.	PROPERTY	INVALID_ARRAY_INDEX

[Change in **Clause 15.9.1.3.1**, in WriteProperty]

15.9.1.3.1 Error Type

This parameter consists of two component parameters: (1) an 'Error Class' and (2) an 'Error Code'. See Clause 18. The 'Error Class' and 'Error Code' to be returned for specific situations are as follows:

Situation	Error Class	Error Code
Specified object does not exist.	OBJECT	UNKNOWN_OBJECT
Specified property does not exist.	PROPERTY	UNKNOWN_PROPERTY
An array index is provided but the property is not an array.	PROPERTY	PROPERTY_IS_NOT_AN_ARRAY
An array index is provided that is *greater than the current length of the array*~~outside the range existing in the property~~.	PROPERTY	INVALID_ARRAY_INDEX
The specified property is currently not writable by the requestor.	PROPERTY	WRITE_ACCESS_DENIED
The datatype of the value provided is incorrect for the specified property.	PROPERTY	INVALID_DATATYPE
The property is Object_Name and the name is already in use in the device.	PROPERTY	DUPLICATE_NAME
The property is Object Identifier and the identifier is already in use in the device.	PROPERTY	DUPLICATE_OBJECT_ID
The value provided is outside the range of values that the property can take on.	PROPERTY	VALUE_OUT_OF_RANGE
The supplied value would resize the array to a size that is not supported.	*PROPERTY*	*INVALID_ARRAY_SIZE*
There is not enough space to store the new value.	RESOURCES	NO_SPACE_TO_WRITE_PROPERTY

The data being written has a datatype not supported by the property.	PROPERTY	DATATYPE_NOT_SUPPORTED
The Priority parameter is not within the defined range of 1..16. This condition may be ignored if the property is not commandable.	SERVICES	PARAMETER_OUT_OF_RANGE

15.9.2 Service Procedure

After verifying the validity of the request, the responding BACnet-user shall attempt to modify the specified property of the specified object using the value provided in the 'Property Value' parameter. If the modification attempt is successful, a 'Result(+)' primitive shall be issued. If the modification attempt fails, a 'Result(-)' primitive shall be issued indicating the reason for the failure. Interpretation of the conditional Priority parameter shall be as defined in Clause 19.

[Change in **Clause 15.10.1.3**, in WritePropertyMultiple]

15.10.1.3

The 'Result(-)' parameter shall indicate that at least one of the specified properties could not be modified as requested. The reason for the failure shall be conveyed by the 'Error Type' parameter along with the 'Object Identifier', 'Property Identifier', and 'Property Array Index' *if present in the request,* of the first encountered property that, for the reason specified by the 'Error Type' parameter, could not be properly written.

[Change in **Clause 15.10.1.3.1**, in WritePropertyMultiple]

15.10.1.3.1 Error Type

This parameter consists of two component parameters: (1) an 'Error Class' and (2) an 'Error Code'. See Clause 18. The 'Error Class' and 'Error Code' to be returned in a 'Result(-)' for specific situations are as follows:

Situation	Error Class	Error Code
Specified object does not exist.	OBJECT	UNKNOWN_OBJECT
Specified property does not exist.	PROPERTY	UNKNOWN_PROPERTY
An array index is provided but the property is not an array.	PROPERTY	PROPERTY_IS_NOT_AN_ARRAY
An array index is provided that is *greater than the current size of the array*~~outside the range existing in the property~~.	PROPERTY	INVALID_ARRAY_INDEX
The specified property is currently read-only.	PROPERTY	WRITE_ACCESS_DENIED
The datatype of the value provided is incorrect for the specified property.	PROPERTY	INVALID_DATATYPE
The property is Object_Name and the name is already in use in the device.	PROPERTY	DUPLICATE_NAME
The property is Object Identifier and the identifier is already in use in the device.	PROPERTY	DUPLICATE_OBJECT_ID
The value provided is outside the range of values that the property can take on.	PROPERTY	VALUE_OUT_OF_RANGE
The supplied value would resize the array to a size that is not supported.	*PROPERTY*	*INVALID_ARRAY_SIZE*
There is not enough space to store the new value.	RESOURCES	NO_SPACE_TO_WRITE_PROPERTY
The data being written has a datatype not supported by the property.	PROPERTY	DATATYPE_NOT_SUPPORTED
The Priority parameter is not within the defined range of 1..16. This condition may be ignored if the property is not commandable.	SERVICES	PARAMETER_OUT_OF_RANGE
A syntax error is encountered in the message after one or more properties have been successfully written.	SERVICES	INVALID_TAG

[Insert in **Clause 18.3**]

18.3

. . .

INVALID_ARRAY_SIZE - An attempt was made to resize an array to a size that property is not capable of holding.

[Change **Clause 21**]

```
error-code ::= ENUMERATED {
        ...
        invalid-array-index             (42),
        invalid-array-size              (139),
        invalid-configuration-data      (46),
        ...
        -- see invalid-value-in-this-state     (138),
        -- see invalid-array-size       (139),
        ...
```

135-2020ci-7 [This section was removed from this addendum and added to Addendum 135-2020co.]

135-2020ci-8 Clarify Accumulator Object Scale Datatype

Rationale

Clarify what datatypes are required by the scale property of the Accumulator Object

[Change in **Clause 12.61.11**]

12.61.11 Scale

This property, of type BACnetScale, indicates the conversion factor to be multiplied with the value of the Present_Value property to provide a value in the units indicated by Units. *If this property is writable, then implementations are not required to accept both real and integer values.* The choice of options for this property determine how the scaling operation which is performed by the client after reading this object:

Option	Datatype	Indicated Value in Units
float-scale	REAL	Present_Value x Scale
integer-scale	INTEGER	Present_Value x 10^{Scale}

135-2020ci-9a Clarify BVLC-Result in BACnet/SC

Rationale

Change the description of the BVLC-Result message to state that only BVLC-Result-NAK messages should be used in response to standard BVLC messages. The change mentions that BVLC-Result-ACK can be used for Proprietary BVLC messages. The change also mentions the use of BVLC-Result-NAK messages for errors in the BVLC message itself. Clarify how to handle BVLC messages that are less than four octets in AB.3.1.5. Add missing error situations to AB.3.1.5.

[Change **AB.2.4**, p. 1386]

AB.2.4 BVLC-Result

This unicast BVLC message provides a mechanism to acknowledge the result of those ~~BVLL service requests~~ *BVLC messages* that require an acknowledgment, whether successful (ACK) or unsuccessful (NAK). *For standard BVLC messages, it is only used to indicate an unsuccessful result as described in subsequent clauses. It can be used for Proprietary messages that require acknowledgement of successful and/or unsuccessful results. This message shall be returned for an unknown or unsupported destination option whose 'Must Understand' flag is set (see Clause AB.3.1.4) and for BVLC message errors (see Clause AB.3.1.5).* This message is the result of a BVLC function request and is not a response to the payload or data options. This response message is generated by a BACnet/SC node's BVLL entity and shall not convey data options.

[Change **AB.3.1.5**, p. 1394]

AB.3.1.5 Common Error Situations

If a BVLC message is received that does not contain a Message ID, a BVLC-Result NAK shall not be returned. The message shall be discarded and not be processed.

If a BVLC message is received that *contains a Message ID but is otherwise* ~~is~~ truncated, for example there are missing fields or incomplete fields, a BVLC-Result NAK shall be returned if it was a unicast message, indicating an 'Error Class' of ~~COMMUNICATON~~*COMMUNICATION* and 'Error Code' of MESSAGE_INCOMPLETE. The message shall be discarded and not be processed.

…

If a BVLC message is received that is longer than expected, a BVLC-Result NAK shall be returned if it was a unicast message, indicating an 'Error Class' of COMMUNICATION and 'Error Code' of UNEXPECTED_DATA. The message shall be discarded and not be processed.

…

135-2020ci-9b Relax DS-COV-A and DS-COVP-A

Rationale

Update DS-COV-A and DS-COVP-A to be consistent with the more recent DS-COVM-A.

[Change clause **K.1.9**, p. 1070]

K.1.9 BIBB - Data Sharing-Change Of Value-A (DS-COV-A)

The A device is a user of COV data from device B.

BACnet Service	Initiate	Execute
SubscribeCOV	x	
ConfirmedCOVNotification		x[1]
UnconfirmedCOVNotification		x[1]

[1] ~~Execution of at least one of these services is required.~~ *Conditional based on the SubscribeCOV, see below for details.*

Support for subscriptions of a limited lifetime is required, and support for subscriptions of indefinite lifetime is optional. Support for cancellation is optional, except in the case where the device is able to request indefinite subscriptions, in which case it is required. *Support for issuing both forms of 'Issue Confirmed Notifications' is not required. Support for execution of ConfirmedCOVNotification is not required if 'Issue Confirmed Notifications' in SubscribeCOV is never sent as TRUE. Support for execution of UnconfirmedCOVNotification is not required if 'Issue Confirmed Notifications' in SubscribeCOV is never sent as FALSE.*

[Change clause **K.1.11**, p. 1070]

K.1.11 BIBB - Data Sharing-Change Of Value Property-A (DS-COVP-A)

The A device is a user of COV data from device B.

BACnet Service	Initiate	Execute
SubscribeCOVProperty	x	
ConfirmedCOVNotification		x[1]
UnconfirmedCOVNotification		x[1]

[1] ~~Execution of at least one of these services is required.~~ *Conditional based on the SubscribeCOVProperty, see below for details.*

Support for cancellation of subscriptions is optional. *Support for issuing both forms of 'Issue Confirmed Notifications' is not required. Support for execution of ConfirmedCOVNotification is not required if 'Issue Confirmed Notifications' in SubscribeCOVProperty is never sent as TRUE. Support for execution of UnconfirmedCOVNotification is not required if 'Issue Confirmed Notifications' in SubscribeCOVProperty is never sent as FALSE.*

135-2020ci-10 Add Time Series Exchange Format BIBBs

Rationale

Defines BIBBs for importing and exporting the standardized time series data exchange files.

[Append new clause **K.5.X**, p. 1075]

K.5.X1 BIBB - Device Management-Times Series Data Import-A (DM-TSDI-A)

Devices claiming conformance to this BIBB import times series data in the format defined in Annex AA from any Trend Log or Trend Log Multiple objects available on the BACnet internetwork.

K.5.X2 BIBB - Device Management-Times Series Data Export-A (DM-TSDE-A)

Devices claiming conformance to this BIBB export times series data in the format defined in Annex AA from any Trend Log or Trend Log Multiple objects available on the BACnet internetwork.

135-2020ci-11 Clarify use of UNSUPPORTED_OBJECT_TYPE

Rationale

Specify when the error code UNSUPPORTED_OBJECT_TYPE is not to be used.

[Change clause **18.2**, p. 795]

UNSUPPORTED_OBJECT_TYPE - An object type has been specified in a service parameter that is unknown or unsupported in the addressed BACnet device. *This error code is not to be used in cases where the error code UNKNOWN_OBJECT is specified to be used.*

[Add a new entry to **History of Revisions**, p. 1364]

(This History of Revisions is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard.)

HISTORY OF REVISIONS

. . .	. . .	**. . .**
1	27	**Addendum *ci* to ANSI/ASHRAE Standard 135-2020** Approved by ASHRAE on September 30, 2024; and by the American National Standards Institute on September 30, 2024. **1. Changes to Clause 12 to add OPTION_FUNCTIONALITY_NOT_SUPPORTED** **2. Clarify optionally supported command procedure** **3. Clarify Schedule Object requirements** **4. Clarify INVALID_ARRAY_SIZE** **5. Clarify Accumulator Object Scale Datatype** **6. Clarify BVLC-Result in BACnet/SC** **7. Relax DS-COV-A and DS-COVP-A** **8. Add Time Series Exchange Format BIBBs** **9. Clarify use of UNSUPPORTED_OBJECT_TYPE**

POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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9/24