



**Addendum w to  
ASHRAE Guideline 36-2021**

**Public Review Draft**

# **Proposed Addendum w to Guideline 36-2021, High-Performance Sequences of Operation for HVAC Systems**

**First Public Review (November 2023)  
(Draft shows Proposed Changes to Current Guideline)**

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**(This foreword is not part of this guideline. It is merely informative and does not contain requirements necessary for conformance to the guideline. It has not been processed according to the ANSI requirements for a guideline and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)**

## **FOREWORD**

This addendum removes the need to update the list of all parameters and setpoints referenced in the chilled water and hot water plant paragraphs 5.20.1 and 5.21.1 based on selected options. All other parameter and setpoint references for other equipment are also updated to maintain consistent style throughout the document.

This addendum also adds a reference to the generic thermal zones alarms section for the General Constant Speed Exhaust Fan sequence.

*Note: In this addendum, changes to the current guideline are indicated in the text by underlining (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes. Only these changes are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed substantive changes.*

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**Addendum w to Guideline 36-2021**

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*(IP and SI Units)*

















*Revise Sections 5.5.3 as follows:*

- 5.5.3. See Sections 3.1.13.1.1.1 and 3.1.2.1 for zone minimum airflow setpoint  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool\ max}$ , and zone maximum heating airflow setpoint  $V_{heat\ max}$  operating parameters and setpoints.

*Revise Section 5.6.3 as follows:*

- 5.6.3. See Sections 3.1.1 and 3.1.2.2 for zone minimum airflow setpoints  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool\ max}$ , zone maximum heating airflow setpoint  $V_{heat\ max}$ , zone minimum heating airflow setpoint  $V_{heat\ min}$ , and the maximum DAT rise above heating setpoint  $Max\Delta T$  operating parameters and setpoints.

*Revise Section 2 5.7.3 as follows:*

- 5.7.3. See Sections 3.1.1 and 3.1.2.3 for zone minimum airflow setpoint  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool\ max}$ , and the maximum DAT rise above heating setpoint  $Max\Delta T$  operating parameters and setpoints.

*Revise Section 5.8.3 as follows:*

- 5.8.3. See Sections 3.1.1 and 3.1.2.4 for zone minimum airflow setpoint  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool\ max}$ , the parallel fan maximum heating airflow setpoint  $P_{fan\ htg\ max}$ , and the maximum DAT rise above heating setpoint  $Max\Delta T$  operating parameters and setpoints.

*Revise Section 5.9.3 as follows:*

- 5.9.3. See Sections 3.1.1 and 3.1.2.5 for zone minimum airflow setpoints  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool\ max}$ , and the maximum DAT rise above heating setpoint  $Max\Delta T$  operating parameters and setpoints.

*Revise Sections 5.10.3 as follows:*

- 5.10.3. See Sections 3.1.1 and 3.1.2.6 for ~~zone minimum airflow setpoint  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool-max}$ , the series fan maximum heating airflow  $S_{fan-htgmax}$ , and the maximum DAT rise above heating setpoint  $Max\Delta T$~~ operating parameters and setpoints.

*Revise Section 5.11.3 as follows:*

- 5.11.3. See Sections 3.1.1 and 3.1.2.7 for ~~zone minimum airflow setpoint  $V_{min}$ , maximum cooling airflow setpoint  $V_{cool-max}$ , and the zone maximum heating airflow setpoint  $V_{heat-max}$~~ operating parameters and setpoints.

*Revise Section 5.12.3 as follows:*

- 5.12.3. See Sections 3.1.1 and 3.1.2.7 for ~~zone minimum airflow setpoint  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool-max}$ , and the zone maximum heating airflow setpoint  $V_{heat-max}$~~ operating parameters and setpoints.

*Revise Section 5.13.3 as follows:*

- 5.13.3. See Sections 3.1.1 and 3.1.2.7 for ~~zone minimum airflow setpoint  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool-max}$ , and the zone maximum heating airflow setpoint  $V_{heat-max}$~~ operating parameters and setpoints.

*Revise Section 5.14.3 as follows:*

- 5.14.3. See Sections 3.1.1 and 3.1.2.7 for ~~zone minimum airflow setpoint  $V_{min}$ , zone maximum cooling airflow setpoint  $V_{cool-max}$ , and the zone maximum heating airflow setpoint  $V_{heat-max}$~~ operating parameters and setpoints.

*Revise Sections 5.18.2 and 5.18.3 as follows:*

- 5.18.2. See Sections 3.1.6 and 3.2.23-1.6.1 for Cool\_SAT, Heat\_SAT, and MaxDPT operating parameters and setpoints.
- 5.18.3. See Section 3.2.2 for MinSpeed, MaxHeatSpeed, MaxCoolSpeed, MinPosMin, MinPosMax, DesPosMin, DesPosMax, MinRelief, MaxRelief, and S R DIFF Not Used.

*Add Paragraph 5.19.2.3 as follows:*

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**Retain the following paragraph if the exhaust fan is to be cycled to maintain room temperature. Delete otherwise**

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- 5.19.2.3. See Section 5.3.6 for zone temperature alarms.

Revise Section 5.20.1 as follows:

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**Retain the applicable variables listed in Sections 3.1.7 and 3.2.3. Delete variables that are not applicable.**

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- 5.20.1. See Sections 3.1.7 for ~~CHWSTminX, CWRTdesX, CWSTdesX, CH LOT, CHW MinFlowX, CHW DesFlowX, LIFTminX, LIFTmaxX, QehX, PCHWFdesign, SCHWFdesign, MinUnloadCapX, DA<sub>HX</sub>, DT<sub>WB</sub>, DA<sub>CT</sub>, HXFdesign, and HX<sub>DP-Design</sub>~~. See Section and 3.2.3 for CHW DPmax, LocalCHW DPmax, Cw DesPumpSpdStage, MinCWVlvPos, MinCWPspeed, HxPumpDesSpd, Ch MaxPriPumpSpdStage, and CH MinPriPumpSpdStage operating parameters and setpoints.

Revise Section 5.21.1 as follows:

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**Retain the applicable variables from Sections 3.1.8 and 3.2.4. Delete variables that are not applicable.**

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- 5.21.1. See Sections 3.1.8 for ~~HWSTmax, HW LOT, HW MinFlowX, HW DesFlowX, QbX, B FiringMinX, PHWFdesign, and SHWFdesign~~. See Section and 3.2.4 for HW DPmax, LocalHW DPmax, and B MinPriPumpSpdStage operating parameters and setpoints.

Revise Sections 5.22.2 and 5.22.3 as follows:

- 5.22.2. See Sections 3.1.7 and 3.2.3 for Cool\_SAT, Heat\_SAT, and DP100 operating parameters and setpoints.
- 5.22.3. See Section 3.2.3 for MinSpeed, DeadbandSpeed, MaxHeatSpeed, and MaxCoolSpeed. ~~Not Used.~~