



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

**Public Review Draft**

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

**First Public Review (March 2024)  
(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.)**

## FOREWORD

*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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This addendum fixes an error for multiple zone VAV Air Handling Units with a separate minimum outdoor air damper, which can cause both the outside air and return air dampers to close when the supply air temperature control loop is wound up and minimum outdoor air control is enabled.

**Addendum y to Guideline 36-2021**

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*(IP and SI Units)*

Revise Section 5.16.4.4.a.3 as follows:

3. When minimum outdoor air control is enabled, the normal sequencing of economizer outdoor air and return air dampers per Section **Error! Reference source not found.** shall be suspended per the following sequence:

- i. Fully open return air damper; and

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*Economizer outdoor air damper is closed when minimum outdoor air control is enabled to ensure a good signal across the minimum outdoor air damper.*

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- ii. Wait 15 seconds, then close the economizer outdoor air damper; and
- iii. Wait 3 minutes, then release return air damper position to MaxRA-P for minimum outdoor air control ~~by the SAT control loop in Section **Error! Reference source not found.**~~. Economizer outdoor air damper remains closed.
- iv. The maximum return air damper position endpoint MaxRA-P shall be modulated from 100% to 0% to maintain DP across the minimum outdoor air damper at setpoint MinDPsp.

Revise Section 5.16.5.4.a.3 as follows:

3. When minimum outdoor air control is enabled, the normal sequencing of economizer outdoor air and return air dampers per Section **Error! Reference source not found.** shall be suspended per the following sequence:

- i. Fully open return air damper; and

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*Economizer outdoor air damper is closed when minimum outdoor air control is enabled to ensure a good signal across the minimum outdoor air damper.*

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- ii. Wait 15 seconds, then close the economizer outdoor air damper; and
- iii. Wait 3 minutes, then release return air damper position to MaxRA-P for minimum outdoor air control ~~by the SAT control loop in Section **Error! Reference source not found.**~~. Economizer outdoor air damper remains closed.
- iv. The maximum return air damper position endpoint MaxRA-P shall be modulated from 100% to 0% to maintain airflow across the minimum outdoor air damper at setpoint MinOAsp.