



Statewide Alternate Method
Rescinded Oct. 1, 2021

No. 14-01
Installation of Vestibules

(Ref.: ORS 455.060)

Statewide Alternate Methods are approved by the Division administrator in consultation with the appropriate advisory board. The advisory board's review includes technical and scientific facts of the proposed alternate method. In addition:

- *Building officials shall approve the use of any material, design or method of construction addressed in a statewide alternate method;*
- *The decision to use a statewide alternate method is at the discretion of the designer; and*
- *Statewide alternate methods do not limit the authority of the building official to consider other proposed alternate methods encompassing the same subject matter.*

Specialty code: 2019 Oregon Zero Energy Ready Code (OZERC),
(Chapter 13 of the Oregon Structural Specialty Code, OSSC & ASHRAE Standard 90.1-2016)

ASHRAE 90.1-2016 Section 5.4.3.4

Date: Oct. 1, 2021 (Rescinded)
Oct. 30, 2014 (Issued)

Initiated by: Building Codes Division

Subject: Alternate method for the installation of vestibules

Background: In accordance with ASHRAE 90.1-2016, Section 5.4.3.4, vestibules are required for *building entrances* with some exceptions.

The proposed alternate has been adopted in the International Energy Conservation Code (IECC) and will be in future version of Standard 90.1. The use of an air curtain is included as a new exception to the vestibule requirement.

Discussion: There are many conditions, especially in retail buildings, where a vestibule may be difficult to construct or less energy efficient. Information cited during the model code adoption process demonstrated that an air curtain provides equivalent energy savings to the baseline vestibule requirement.

Air curtains have been used to reduce air infiltration at entry doors in commercial applications for many years. The technical presentation to the ICC for inclusion in the 2015 IECC and subsequent editions showed equivalent energy efficiency to a vestibule.



Conclusion: This alternate method shall allow the use of an air curtain meeting ANSI/AMCA 220, that produces an air velocity of 400 ft./min. (2 m/s) at floor level, in lieu of a vestibule. Manual or automatic controls shall be provided that will operate the air curtain with the opening and closing of the door. The air curtain controls operation shall be demonstrated to the building official prior to acceptance.

This alternate method provides a model code-recognized equivalent to a vestibule and a flexible option to meet the intent of Standard 90.1-2016 Section 5.4.3.4. The energy savings are equivalent or better than a vestibule in most cases.

The technical and scientific facts for this Statewide Alternate Method are approved.

(Signed Copy on File)

November 3, 2014

Mark Long, Administrator
Building Codes Division

Date