

Residential Hoistway Swing Doors

Code Requirement for Clearances Between Elevator Swinging Hoistway Door, Landing Edge and Folding Car Door and Alternative to Compliance: Hoistway Door Space Guard

READ THIS PACKET THOROUGHLY

State of Florida has adopted the modification to ASME5.3.1.7.2 (sections applicable to the contractor shown below) into the Florida Building Code, effective July 2016, amended in 2017.

R321.4 Clearance requirements between elevator doors for elevators inside a private residence.

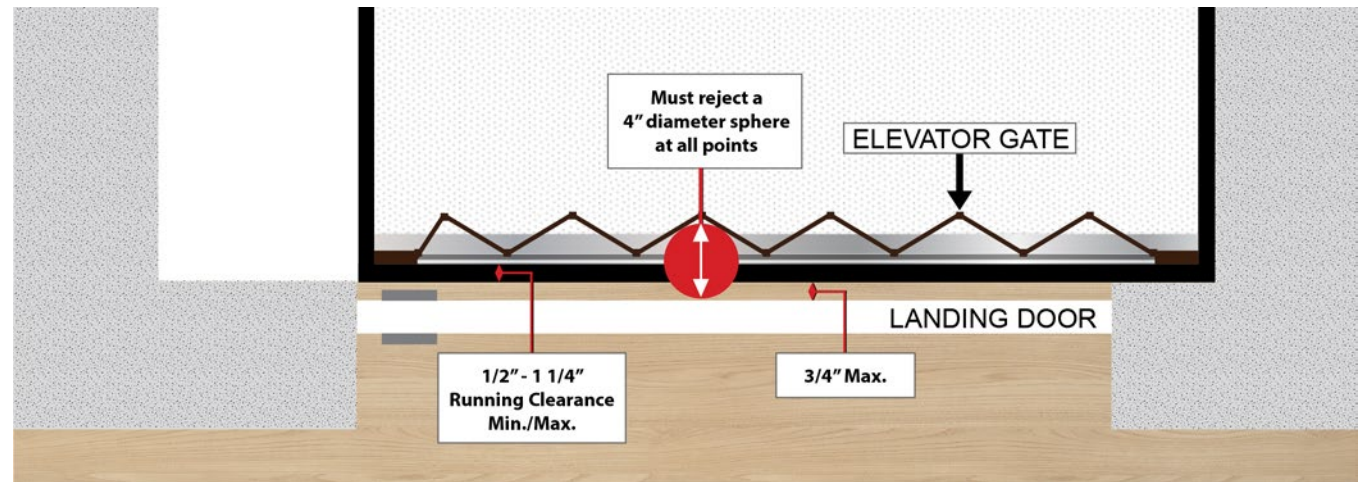
R321.4.1 For elevators installed in a private residence:

- a) The distance between the hoistway face of the hoistway doors and the hoistway edge of the landing sill may not exceed $\frac{3}{4}$ " for swinging doors.
- b) Folding car doors shall be designed and installed to withstand a force of 75 pounds applied horizontally using a 4-inch-diameter sphere at any location within the folds on the car door without permanent deformation. The deflection may not exceed $\frac{3}{4}$ inch and may not displace the door from its guides or tracks. The force must be applied while the door is in its fully closed position.
- c) The distance between the hoistway face of the landing door and the hoistway face if the car door or gate shall conform to one of the following: If swinging hoistway doors and folding car doors are used and both doors are in the fully closed position, the space between the hoistway door and the folding door must reject a 4-inch-diameter sphere at all points.

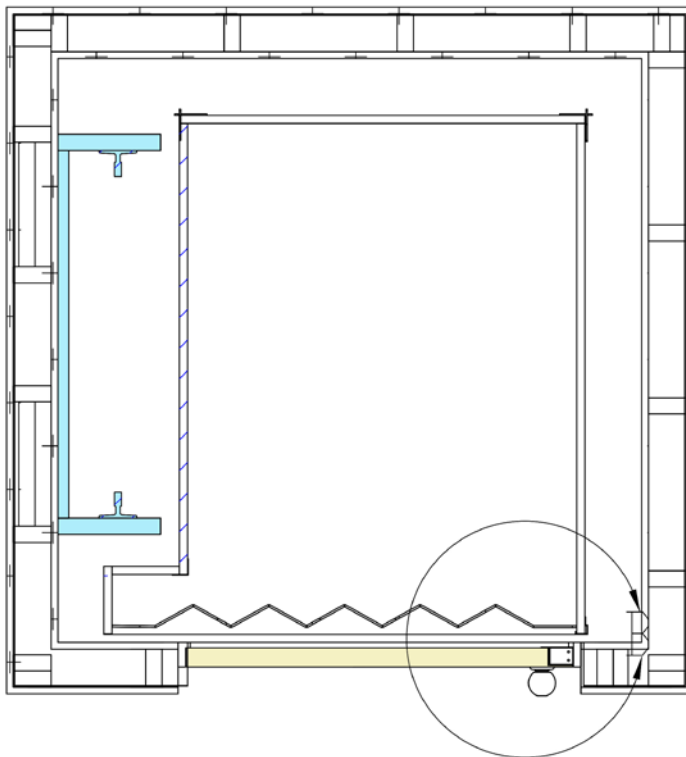
EXCEPTION: As an alternative to compliance with Section R321.4.1, Items 2 through 5, a permanent installation of a non-removable, hoistway door space guard is allowed. The door space guard must be designed and installed to withstand a force of 75 pounds applied horizontally using a 4-inch-diameter sphere at any location within the folds on the car door without permanent deformation. Space guard shall cover the entire shaft-side hoistway door surface.

Door Gap Rule

This is a safety issue where some home elevators with swing-style landing doors have a hazard where it is possible for young children to get trapped between the landing door and the elevator cab gate.



TYPICAL ELEVATOR HOISTWAY



This is a code requirement in Florida. ASME ANSI A17.1-2019 National Safety Code for Elevators - Section 5.3 Private Residence Elevators as modified by various states.

A17.1 National Safety Code for Elevators - Section 5 - 2016 Edition

5.3.1.8.3 Clearances between hoistway doors and car door or gates must not exceed 3/4"

5.3.1.7.2 Clearance Between Hoistway Doors and Landing Sills

The distance between the hoistway face of the hoistway doors and the hoistway edge of the landing sill shall not exceed 19 mm (0.75 in.) for swinging doors.

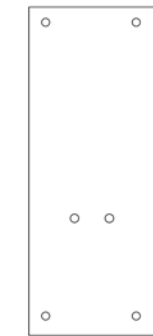
- All swing doors must comply with ASME 17.1, National Elevator Code, and FBC 3x5 rule as required by local jurisdiction.
- Consult factory for changes to door swing or offset location.
- See Rail Bracket Detail sheet for anchoring and support details.
- See Electrical Requirements Sheet for electrical requirements.

This only applies to homes with elevators that have swing-style landing doors.

Door Locks

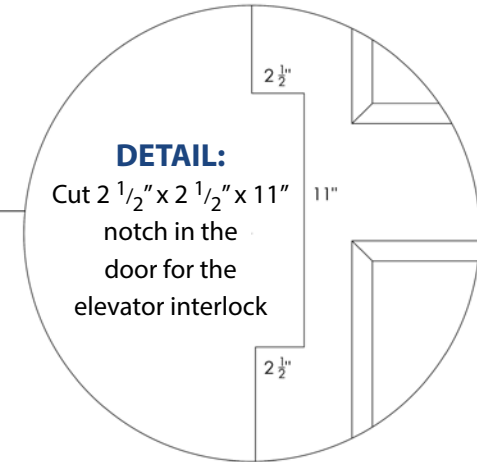
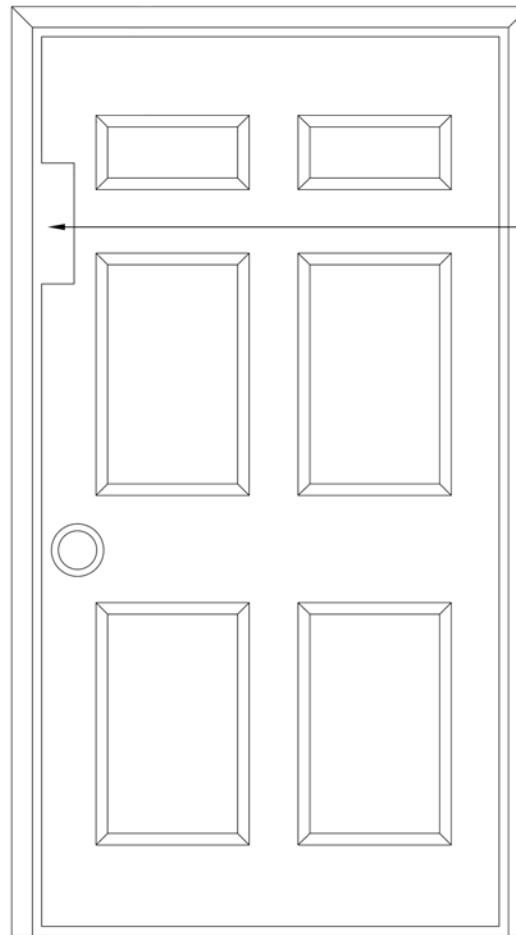
NOTCH COVER PLATE

For door interlock
supplied by Southeast Elevator



73" For doors 86" - 108"
67" For doors 80" - 85"

Finish Floor



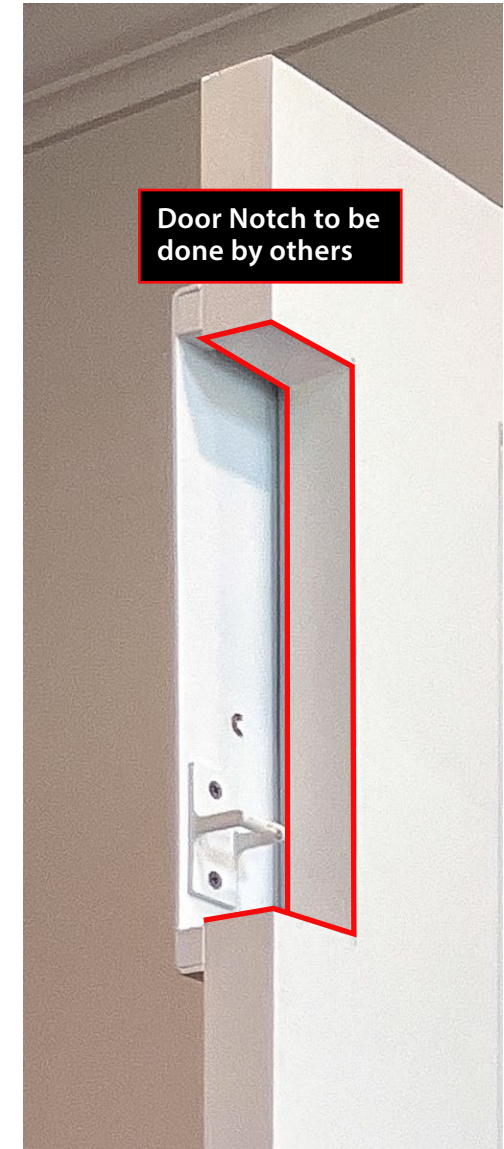
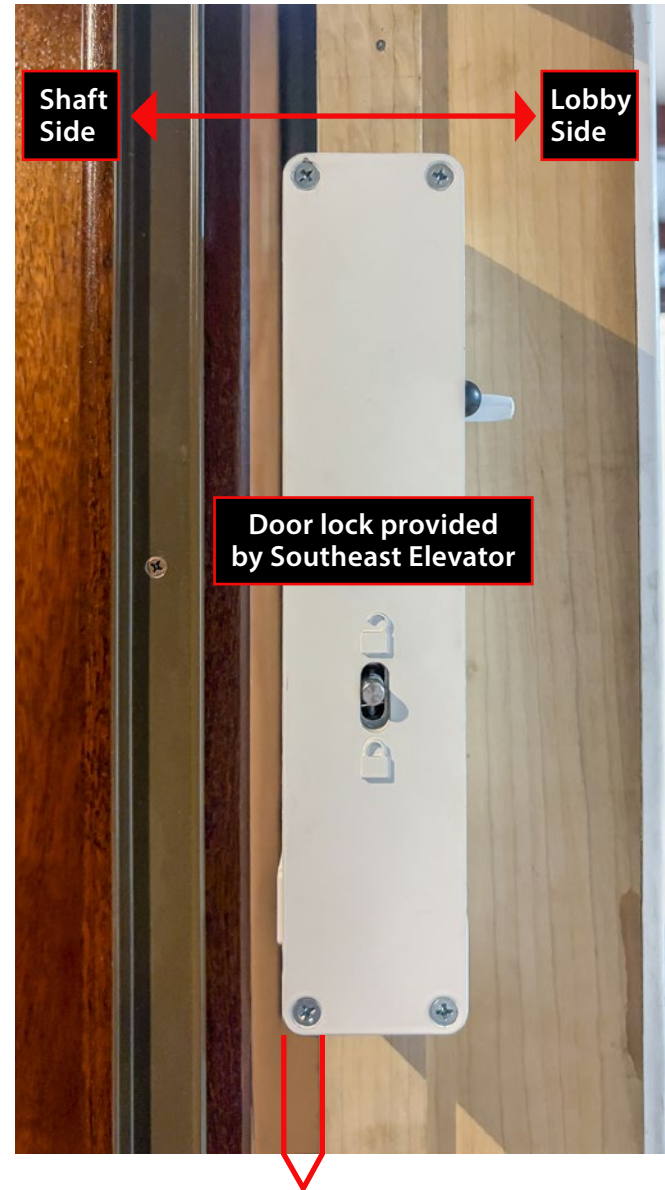
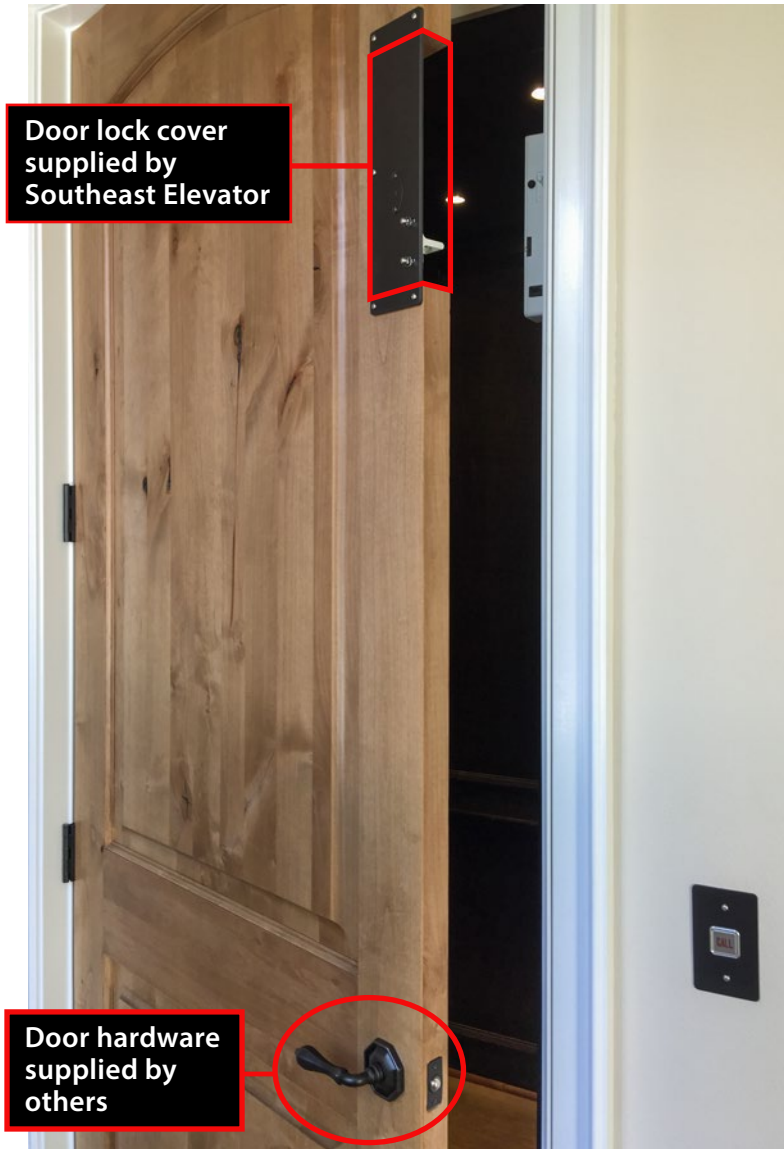
NOTE: Shaft doors are required to be solid core.

- All swing doors must comply with ASME 17.1, National Elevator Code, and FBC 3x5 rule as required by local jurisdiction.
- Consult factory for changes to door swing or offset location.

Door Locks

Provided by Southeast Elevator: Door locks and door lock cover plates

Provided by Others: (Contractor and/or Homeowner): Solid core hoistway doors at elevator hoistway, notch cut-out in hoistway door to accept door lock and door lock cover plate, and all door hardware which includes flush-mount pull ring on shaft side of swing door, ball catch and plate and dummy-type door handle on lobby side of hoistway door



Hardware: Flush-mount pull ring on shaft side of swing door, ball catch and plate, and dummy door handle on the lobby side of the hoistway door.

The distance between the shaft side of the door to the finished elevator shaft should be 1/4", and cannot exceed 3/4"

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Flush-Mount Door Pull



Build.com

Home Depot

Amazon

Ball Catch



Lowes

Build.com

Dummy Door Knob



Build.com

Door Hardware Center

Home Depot

Amazon

