

FORMULA SYSTEMS

VISION PLUS

ASME CODE COMPLIANCY



A17.1-2022/CSA B44-22 - VISION PLUS COMPLIANCY OVERVIEW

The ASME A17 or CSA B44 is the recognised safety code for elevators throughout North America. It was developed to uphold the highest standards for elevator safety, efficiency and usability.

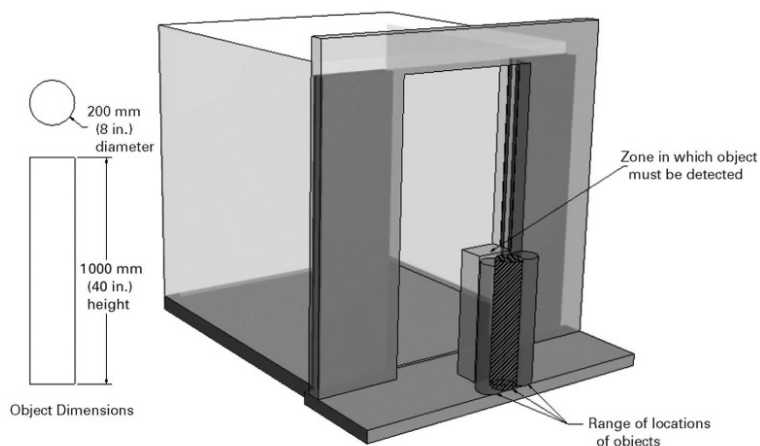
The latest release in 2022 saw updated requirements to those initially introduced in 2019 with respect to door protection. Formula Systems have designed Vision Plus, a code-certified door safety solution that satisfies both the 2D and 3D requirements of object detection, all incorporated into the existing edge profile.

The ASME A17/ CSA B44 safety code was updated to cover the following specific points:

1. Detection zone
2. Self-monitoring test
3. 5 second delay
4. Rendering inoperative 18 inches before closing

2.13.5.3 - DETECTION OF APPROACHING OBJECTS

The reopening device(s) shall be designed to detect a cylindrical target(s) approaching the entrance opening of the landing-side doors as required by **2.13.5.3.1**.



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We can accomplish this with a human body (walking) and objects moving toward the doors as they start to close.

(a) The reopening device(s) shall be permitted to be rendered inoperative (1) when the closing kinetic energy is reduced in accordance with **2.13.4.2.1(c)(1)** and **2.13.4.2.1(c)(2)**.

(2) for detection of approaching objects (-a) within 450mm (18in.) of the point at which the leading edge of the leading door panel contacts the door jamb or opposing door panel.

2.13.5.5 - SELF MONITORING OF DETECTION MEANS

The system shall be designed to be self-monitoring. After the door has reached its fully opened position and before door closing is initiated, the detection means shall be self-checked to verify the detection means is operational. If the self-check outcome is unsuccessful, power closing of the door(s) shall be at reduced kinetic energy conforming to **2.13.4.2.1(c)(2)**.

When 5 seconds have transpired after the detection means of approaching objects first detects an object. When an object is detected in the path of the doors, the 5 second duration shall reset.

The approaching object detection means shall be effective until the leading edge of the doors is within 450mm (18in.) of the fully closed position and shall be permitted to be effective up to the fully closed position.



VISION PLUS IS CERTIFIED BY THE LIFTINSTITUUT TO MEET ALL OF THE ABOVE REQUIREMENTS AS STIPULATED IN THE 2022 ASME A17/ CSA B44 SAFETY CODE.

FOR MORE INFORMATION PLEASE VISIT [FORMULA-SYSTEMS.COM](https://formula-systems.com) OR CONTACT: SALES@FORMULA-SYSTEMS.COM.

