



# BUILDINGS 2022-010 BULLETIN O T C R

ISSUANCE DATE  
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**ISSUER:** Alan Price, P.E.   
Director, Office of Technical Certification and Research

**PURPOSE:** This document recognizes the integrated touchless call button device technology used to initiate calls at elevator car operating panels and hall call stations.

**SUBJECT(S):** Elevator, call button, call station, operating panel, touchless, accessibility, Fire Service Access Elevator (FSAE), Occupant Evacuation Elevator (OEE), Limited Use/Limited Access (LULA)

**RELATED CODE & ZONING SECTIONS:** BC 3001.2, BC 3001.3, ASME A17.1, ASME A17.5, NYC EC 410, NYC EC 620, AC 28-113.2, AC 28-113.4

## I. BACKGROUND

The NYC Construction Codes indirectly prescribe requirements for elevator call buttons. Integrated touchless elevator call button devices, as described below, are not prescribed, and are considered an alternative material. Pursuant to AC-113.2.2, this bulletin establishes criteria for the acceptance of integrated touchless elevator call button device technology installed at elevator hall call buttons and at operating panels in elevator cabs.

## II. DESCRIPTION

Integrated touchless elevator call button devices consisting of holographic or laser light field systems, create a touchless key surface\* by using precisely angled laser light beams to project over an elevator operating panel or hall call button. The devices detect light interference patterns of precisely when and where the touchless key surface is broken (by a finger or other object) and communicates with the call button panel, causing the same response as touching the call button. In the case of the elevator car operating panel, annunciation of the floor level is initiated or, in the case of the hall call button, annunciation of the **up** or **down** direction.

\* *NOTE: Key surface as defined in ICC A117.1 is the surface or plane of any key or button that must be touched to activate or deactivate an operable part, a machine function or enter data.*

Using voice activated talking technology to call a car or request a floor may be used in conjunction with the above holographic or laser light field systems.

## III. USES

Integrated touchless call button devices proposed for use in elevator cabs or hall call stations may be installed in new or retrofitted to existing passenger or freight elevators, Fire Service Access Elevators (FSAE's), Occupant Evacuation Elevator (OEE's), and Limited Use/Limited Access Elevators (LULA's).

### Restrictions

Integrated touchless elevator call button devices may not take the place of the physical call buttons. The device shall be installed so that it does not impede the normal operation, emergency operation or evacuation of the elevator.

#### **IV. EVALUATION SCOPE**

NYC Construction Codes and NYC Electrical Code

#### **V. ACCEPTANCE CRITERIA**

Pursuant to AC 28-113.2, the Office of Technical Certification and Research (OTCR) recognizes integrated touchless call button devices at elevator operating panels and hall call stations when tested and designed in accordance with ASME A17.5 (2019), *Elevator and Escalator Electrical Equipment*.

#### **VI. ADDITIONAL CRITERIA FOR DESIGN, FILING, INSTALLATION AND MAINTENANCE**

Integrated touchless call button devices installed in elevator cars and at hall call stations shall be designed, filed, installed, inspected, labeled, and maintained in accordance with the NYC Construction Codes and the following applicable provisions:

##### **1. Design**

Integrated touchless call button devices in elevators and at hall call stations shall be designed in accordance with the NYC Construction Codes, manufacturer's installation instructions, the conditions of the required listing of the device and the conditions of this bulletin, including the following:

##### **a) Building Code**

Section BC 3001.2 requires elevators to comply with ASME A17.1 as modified by Appendix K, and with ASME A17.5. In accordance with ASME A17.1, section 2.27.3.1 for Phase I Emergency Recall Operation, and with ASME A17.1, section 2.27.3.3 for Phase II Emergency In-car Operation, integrated touchless call button devices shall become inoperative upon initiation of Phase I or Phase II Emergency Operations. This requirement also applies to Fire Service Access Elevators and Occupant Evacuation Elevators during emergency operations.

Where installed in a Limited Use/Limited Access (LULA) Elevator, the location of the touchless technology shall comply with ASME A17.1, section 5.2.1.16.1(b).

Section BC 3001.3 requires elevators and lifts to conform to ICC A117.1-2009. The touchless technology shall not interfere with the normal operation of the panel and shall be mounted at the existing operating panel or mounted separately at a height that complies with Section 308 of ICC A117.1. Sections 407.2 and 407.4 of ICC A117.1 contain requirements for hall call buttons and elevator call buttons, respectively. Informational signage complying with Section 703 of ICC A117.1, indicating touchless technology option shall be posted above the operating panel.

##### **b) Electrical Code**

The integrated touchless call button device is required to comply with the New York City Electrical Code including provisions in Article 620 for elevators, Article 620.22 (A) for branch circuits requirements, and Article 410 for luminaires.

##### **2. Certification**

The manufacturer shall supply a third-party certification that the integrated touchless call button device has been tested to ASME A17.5, as applicable.

**3. Filing Requirements** (filed in DOB NOW: *Build*)

A VT application (EBN-PPN) must be filed by a licensed elevator agency director indicating that the scope of work includes integrated touchless call button devices.

**4. Installation Requirements**

Installation requirements shall be in accordance with the NYC Construction Codes, manufacturer's installation instructions, the conditions of the required certification, and the conditions of this bulletin. Such work shall be performed by a licensed electrician.

**5. Labeling**

Integrated touchless call button devices shall be labeled as per AC 28-113.4.

**6. Inspection & Testing**

Wherever periodic inspection or category testing of operating panels or call buttons is required, any associated integrated touchless call button devices shall be inspected and tested as part of the required periodic inspection and category testing in accordance with AC 28-304 and ASME A17.1, Table N1, by a licensed elevator agency inspector as required in AC 28-422 and qualified as prescribed in 1RCNY 101-07.

**7. Maintenance**

Maintenance of integrated touchless call button device shall be performed by a qualified elevator mechanic, in accordance with the published manufacturer's instructions and the New York City Construction Codes.

**REFERENCES:**

1. *ASME A17.5 – 2019 Elevator and Escalator Electrical Equipment*
2. *ICC A117.1 – 2009 Accessible and Usable Buildings and Facilities*