

# Instructor/Participant Guide



## **212: Escalator-Inspection & Basic Maintenance**

### ***Module 11: Code Compliance Overview/Jurisdictional Testing***



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PREVIEW ONLY



### Icons Used in This Guide

Throughout the Instructor’s Guide, the following icons indicate the type of content being presented.



Refer To



PowerPoint



Multimedia



Web based Training



Write



Ask



Individual Activity



Small Group Activity



Classroom Activity



Duration

### Agenda

Topic No.	Topic Title	Duration
1	Introduction	5 minutes
2	Location of Codes	15 minutes
3	Frequency of Publication	10 minutes
4	Field Usage/Application of Code <ul style="list-style-type: none"> <li>• Field Usage/Application of Code - External</li> <li>• Field Usage/Application of Code - Internal</li> <li>• Using the Code &amp; Reference Code</li> <li>• Using the Code - Technicians</li> <li>• Code Writing Organizations</li> <li>• How to Use the Codebook</li> <li>• What Code to Use and When</li> <li>• Locations of Information</li> </ul>	45 minutes
5	Summary	5 minutes
<b>Total Time:</b>		<b>1.3 hours</b>



## Overview

### Purpose

The purpose of this module is to:

- Review the Code mandated safety requirements for transit escalators.

### Objectives

At the end of this chapter, the learner will be able to:

- Locate Code references.
- Describe how the Code applies to a given escalator
- Interpret the ASME A17.1 Code
- Apply ASME A17.1 Code standards to escalators

### Materials

Make sure you have the following:

- Laptop (one for leader)
- Participant Guides
- PowerPoint slide deck
- LCD projector
- A17.1 Safety Code for Elevators and Escalators
- A17.2 Guide for Inspection of Elevators, Escalators and Moving Sidewalks
- A17.3 Safety Code for Existing Elevators and Escalators
- Heavy Duty Transportation System Escalator Design Guidelines (APTA RT-RP-FS 007-02)
- Field Employees' Safety Handbook
- Transit Agency Handbook

### Preparation

**PREPARE** flip charts with the following titles:

- Class Expectations



## Instructor's Notes

Code Compliance Overview/Jurisdictional Testing

### Location of Codes

- **ASME Codes can be purchased:**  
ASME Order Department  
22 Lav Drive  
Box 2300  
Fairfield, NJ 07007-2300  
Telephone: (201) 882-1167  
(800) 843-2763
- **The IBC can be purchased:**  
International Code Council  
5203 Leesburg Pike  
Suite 600  
Falls Church, VA 22041  
Telephone: (703) 931-4533  
<http://www.iccsafe.org>
- **NFPA Codes can be purchased:**  
National Fire Protection Association  
1 Batterymarch Park  
Quincy, MA 02269-7471  
Telephone: (617) 770-3000  
<http://www.nfpa.org>

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### Slide 4

**REVIEW** slide 4 and discuss where codes can be purchased.

**ASK:** how many locations offer the option of purchasing the codes?

## Location of Codes

*How many locations offer the option of purchasing the codes?*

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PREVIEW ONLY



## Instructor's Notes

Code Compliance Overview/Jurisdictional Testing

### Field Usage/Application of Code

- The *Guide for Inspection of Elevators, Escalators and Moving Walks (ASME A17.2)* details the testing requirements for this equipment.
- It ensures that during a periodic inspection, the Jurisdictional Inspector will check the following:
  - External
  - Internal

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Slide 6



**REVIEW** slide 6 and 7 and discuss what codes discuss external inspection.



**ASK:** what code and section covers what the jurisdictional inspector will check during an external inspection?

Code Compliance Overview/Jurisdictional Testing

### Field Usage/Application of Code

- External:**
- Fire Protection
  - Geometry
  - Handrails
  - Entrance and Egress Ends
  - Lighting
  - Caution Signs
  - Combplate and Comb Step Impact Device
  - Deck Barricades and Antislid Devices
  - Steps and Upthrust Device
  - Operating and Safety Devices
  - Skirt Obstruction Device
  - Egress Restriction Device
  - Speed
  - Balustrades
  - Ceiling Intersection Guards
  - Step/Skirt Clearances, Panels and Performance
  - Index
  - Outdoor Protection
  - Maintenance Records

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Slide 7

## Field Usage/Application of Code - External

*What code and section covers what the Jurisdictional Inspector will check during an external inspection?*

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## Instructor's Notes

Code Compliance Overview/Jurisdictional Testing

### Using the Code & Reference Code

- There are fourteen Codebooks, one employee safety handbook, and several local government Codebooks.
- The following are the employee's safety handbook and the national Codebooks:
  - **ASME A17.1/CSA B44** is the Safety Code for Elevators and Escalators.
  - **ASME A17.2** is the Guide for Inspection of Elevators, Escalators, and Moving Walks.
  - **ASME A17.3** is the Safety Code for Existing Elevators and Escalators (includes requirements for electric and hydraulic elevators and escalators).
  - **ASME A17.4** is the Guide for Emergency Personnel.
  - **ASME A17.5/CSA B44.1** This Code provides the requirements for obtaining, labeling and listing electrical equipment for elevators, escalators, moving walks, dumbwaiters, material lifts and stairway lifts.

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Slide 10

Code Compliance Overview/Jurisdictional Testing

### Using the Code & Reference Code

- **ASME A17.6** is the Standard for Elevator Suspension, Compensation, and Governor Systems.
- **ASME A17.7** is the Performance-Based Safety Code for Elevators and Escalators.
- **ASME A18.1** is the Safety Standard for Platform Lifts and Stairway Chairlifts.
- **ICC/ANSI - 117.1** is the Code for Accessible & Usable Buildings and Facilities.
- **NEC** is the National Electrical Code book.
- **IBC** is the International Building Code.
- **International Electrical Code (NFPA 70)**.
- **Life Safety Code (NFPA 101)**.
- **Standard for Fixed Guide way Transit and Passenger Rail Systems (NFPA 130)**.

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Slide 11



**REVIEW** slide 10 and 11 to review how to use and reference the code.



**ASK** participants to list the code associated with the proper description.

## Using the Code & Reference Code

List the code associated with the following descriptions.

**ASME A17.1**

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**ASME A17.3**

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**ASME A17.5**

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**ASME A18.1**

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## Instructor's Notes

Code Compliance Overview/Jurisdictional Testing

### Code Writing Organizations

- All organizations revise their Code manuals within a three to five year time period.
- The **ASME A17.1** Code applies to the year the escalator was installed and the year the Code was enforced.
- The latest **A17.3** Code requires the owner to install Code data plates on all vertical equipment so maintenance personnel will know when the escalator was installed and be able to determine what year of the Code applies to the escalator.
- The Codebooks are updated every 2-3 years and adopted by the local governments.

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### Slide 13



**REVIEW** slide 13 and review how long it takes for organizations to write codes, and how often they are updated.



**ASK** How often are the codebooks updated?

PREVIEW ONLY

## Code Writing Organizations

*How often are the codebooks updated?*

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## Instructor's Notes

Code Compliance Overview/Jurisdictional Testing

### What Code to Use and When?

- Find the escalator's data plate.
- If it is a new installation, you will use the **ASME A17.1-** Safety Code for Elevators and Escalators and the year applying to the installation.
- If you are planning to inspect the escalator, you can use **ASME A17.2** that is the Guide for Inspection of Elevators, Escalators, and Moving Walks.
- If the escalator has been in service, you can use **ASME A17.3** as the Safety Code for Existing Elevators and Escalators.
- The term **Safety Integrity Level (SIL)** is for specifying the safety integrity requirements of the safety functions allocated to safety devices and systems.

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### Slide 17



**REVIEW** slide 17 and discuss ASME A17.1-A17.3.



**ASK** *where can you locate the escalators data plate?*

## What Code to Use and When

*Where can you locate the escalators data plate?*

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### Instructor's Notes


### Summary

Internal Communications


Summary

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Slide 20

 **REVIEW** slide 20 and summarize the module.

**EVALUATION and CLOSURE:** Recap the main points of the module before moving on to the next topic within this course.

 **ASK** the participants if they have any outstanding questions on what was presented.

PREVIEW ONLY