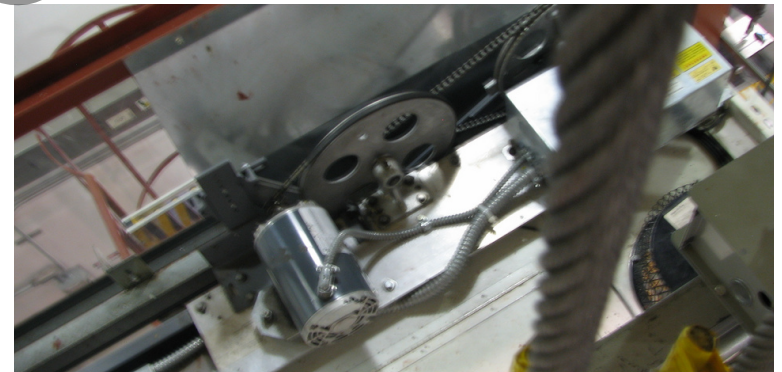
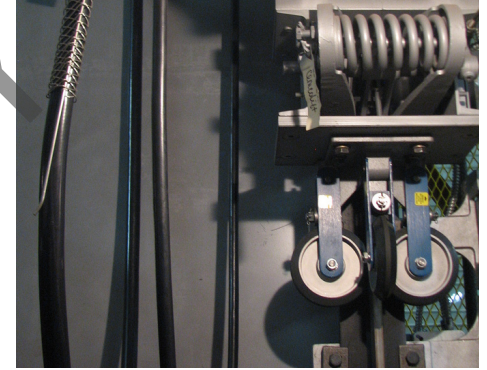


Instructor Guide



213: Elevator: Principles of Operation Module 6: Introduction to Code Specifications



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PREVIEW ONLY

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Icons Used In This Guide

**REVIEW** slides

**INDIVIDUAL ACTIVITY**

**ASK**

**WRITE**

**CLASSROOM ACTIVITY**

Multimedia

**SMALL GROUP ACTIVITY**

**REFER** participants to

Agenda

Topic #	Topic Title	Duration
1	Overview	15 minutes
2	Code Compliance & Organizations	35 minutes
3	Using and Applying Code	60 minutes
4	Access and ADA Requirements	10 Minutes
5	Summary	10 Minutes
	Total Time:	130 Minutes

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Overview

Purpose The purpose of this module is to:

- Provide an overview on what code organizations exist which mandate regulations for transit elevators and to introduce the participant to these organizations' publications.

Objectives

At the end of this lesson, the transit elevator/escalator trainee will be able to:

- Discuss applicable and related codes in ASME A17.1-2010
- Apply standards used in the ASME A17.1-2010 code compliance manual
- Access and review ADA compliance list for elevator doors

Materials **Mandatory**

Make sure you have the following

- PowerPoint Presentation
- Coursebook
- Quizzes
- Pencils

Optional

You may also want the following for optional activities:

- Chalk board with chalk, large paper with marker, etc.
- Internet connection
- Lab, simulator or out of service elevator
- Code Data Plate
- Safety Handbook
- National Electrical Codes
- ASME A17.1 through ASME 17.3
- NFPA 130
- International Building Code
- Any other Applicable Code Books

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Module Length: 180 minutes Time remaining: 180 minutes This section: 15 minutes Section start time: _____ Section End Time: _____

DO	SAY	Materials Needed
<div data-bbox="19 478 125 578"></div> <div data-bbox="154 499 618 542">REVIEW introduction slides</div> <div data-bbox="19 785 444 842">Instructor's Notes</div> <div data-bbox="19 892 608 1242"> <hr/><hr/><hr/><hr/><hr/><hr/> </div>	<div data-bbox="676 421 1023 464">In your own words:</div> <div data-bbox="676 499 1217 628"> <p>Welcome to the module on code specifications.</p> <p>Advance.</p> </div> <div data-bbox="676 678 1449 942"> <p>Most of you have probably heard about this kind of code. This is called Morse Code. Can anyone describe what Morse Code is? Discuss participant responses.</p> <p>Morse code is a system of symbols used to represent a certain meaning.</p> <p>Advance.</p> </div> <div data-bbox="676 1035 1420 1249"> <p>Another type of code, according to merriam-webster's dictionary is a system of principles or rules. And this is the kind of code we will talk about today.</p> <p>Advance.</p> </div>	<div data-bbox="1497 464 1787 506">✓ PPT slides 1, 2</div> <div data-bbox="1535 535 1854 763"> </div> <div data-bbox="1535 785 1854 1021"> </div>

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DO	SAY	Materials Needed
<div data-bbox="19 478 125 578"></div> <div data-bbox="154 499 618 542">REVIEW module objectives</div> <div data-bbox="19 785 444 842">Instructor's Notes</div> <div data-bbox="19 892 608 1242"> <hr/><hr/><hr/><hr/><hr/> </div>	<p>In your own words:</p> <p>An elevator code is a system of regulations pertaining to the design, manufacture, installation and maintenance of elevators. The general purpose of codes is to provide for public safety. Today we will...</p> <p>Advance for each objective.</p> <p>Discuss applicable and related codes in ASME 17.1A</p> <p>Apply standards used in the ASME 17.1A code compliance manual</p> <p>Access and review ADA compliance list for elevator doors</p> <p>Advance.</p>	<p>✓ PPT slide 3</p> <div data-bbox="1506 535 1825 771"> </div>

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Module Length: 180 minutes Time remaining: 165 minutes This section: 45 minutes Section start time: _____ Section End Time: _____

DO	SAY	Materials Needed
<div data-bbox="34 464 144 564" data-label="Image"> </div> <div data-bbox="170 492 409 528" data-label="Text"> <p>REVIEW slide</p> </div> <div data-bbox="28 792 444 835" data-label="Section-Header"> <h3>Instructor's Notes</h3> </div> <div data-bbox="28 892 608 1242" data-label="Form"> <hr/><hr/><hr/><hr/><hr/> </div>	<div data-bbox="676 421 1023 464" data-label="Section-Header"> <h4>In your own words:</h4> </div> <div data-bbox="676 485 1371 621" data-label="Text"> <p>Municipal and state building codes invoke most, or all, of the following standards developed by the following:</p> </div> <div data-bbox="676 621 1420 664" data-label="Text"> <p>Advance. International Building Code (IBC)</p> </div> <div data-bbox="676 664 1362 792" data-label="Text"> <p>Advance. National Fire Protection Association which publishes the National Electric Code (NFPA 70)</p> </div> <div data-bbox="676 792 1439 928" data-label="Text"> <p>Advance. National Fire Protection Association which publishes Life Safety Code (NFPA 101)</p> </div> <div data-bbox="676 935 1400 1078" data-label="Text"> <p>Advance. American Society of Mechanical Engineers which publishes Safety Code for Elevators and Escalators (ASME A17.1)</p> </div> <div data-bbox="676 1085 1400 1263" data-label="Text"> <p>Advance. American Society of Mechanical Engineers which publishes Safety Code for <u>Existing</u> Elevators and Escalators (ASME A17.3)</p> </div> <div data-bbox="676 1263 850 1306" data-label="Text"> <p>Advance.</p> </div>	<div data-bbox="1497 471 1729 506" data-label="Text"> <p>✓ PPT slide 7</p> </div> <div data-bbox="1506 535 1825 771" data-label="Image"> </div>

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DO	SAY	Materials Needed
<div data-bbox="34 464 141 566"></div> <div data-bbox="170 492 253 528">ASK</div> <div data-bbox="28 792 444 835"> <p>Instructor's Notes</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> </div>	<div data-bbox="678 425 1022 464"> <p>In your own words:</p> </div> <div data-bbox="678 542 1288 581"> <p>The code data plate can be found on</p> </div> <div data-bbox="774 596 1363 792"> <ul style="list-style-type: none"> a. the controller b. the main disconnect switch c. top of elevator cab crosshead d. all of the above </div> <div data-bbox="678 808 1257 846"> <p>Call on participants for answers.</p> </div> <div data-bbox="678 862 1045 901"> <p>Advance for answer.</p> </div> <div data-bbox="678 916 865 955"> <p>Answer: d.</p> </div> <div data-bbox="678 956 846 995"> <p>Advance.</p> </div>	<div data-bbox="1499 472 1744 511"> <p>✓ PPT slide 15</p> </div> <div data-bbox="1526 552 1839 785"> <p>The screenshot shows a presentation slide titled "Introduction to Code Specifications" and "Code Compliance and Organizations". It contains a "Knowledge Check" section with the question: "2. The code data plate can be found on" followed by four multiple-choice options: a. the controller, b. the main disconnect switch, c. top of elevator cab crosshead, and d. all of the above. The answer is listed as "Answer: d." at the bottom. The footer of the slide reads "Transit Elevator/ Escalator Consortium".</p> </div>

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DO	SAY	Materials Needed
<div data-bbox="34 464 144 564" data-label="Image"></div> <div data-bbox="170 492 428 528" data-label="Text"> <p>REVIEW slides</p> </div> <div data-bbox="28 792 444 835" data-label="Section-Header"> <h3>Instructor's Notes</h3> </div> <div data-bbox="28 892 608 1242" data-label="Form"> <hr/><hr/><hr/><hr/><hr/> </div>	<div data-bbox="676 421 1023 464" data-label="Section-Header"> <p>In your own words:</p> </div> <div data-bbox="676 485 1342 614" data-label="Text"> <p>The next objective looks at how to apply standards used in ASME 17.1a code compliance manual.</p> </div> <div data-bbox="676 621 850 656" data-label="Section-Header"> <p>Advance.</p> </div> <div data-bbox="676 706 1439 878" data-label="Text"> <p>According to the Guide for Inspection for Elevator (ASME A17.2), periodic inspection of elevators is recommended and includes the inside of</p> </div> <div data-bbox="676 885 1091 921" data-label="Section-Header"> <p>Advance for each area.</p> </div> <div data-bbox="676 928 1362 1056" data-label="Text"> <p>cab, the machine room, the top of the car, outside of the hoistway, in the pit, and fire service.</p> </div> <div data-bbox="676 1063 850 1099" data-label="Section-Header"> <p>Advance.</p> </div>	<div data-bbox="1497 471 1825 506" data-label="Text"> <p>✓ PPT slides 16, 17</p> </div> <div data-bbox="1526 535 1835 763" data-label="Image"></div> <div data-bbox="1526 792 1835 1021" data-label="Image"></div>

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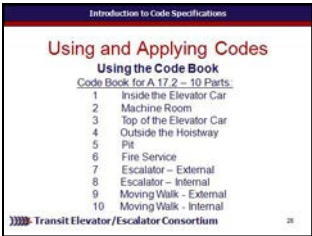
DO	SAY	Materials Needed
<div data-bbox="34 464 144 564" data-label="Image"></div> <div data-bbox="170 492 409 528" data-label="Text"> <p>REVIEW slide</p> </div> <div data-bbox="28 792 444 835" data-label="Section-Header"> <h3>Instructor's Notes</h3> </div> <div data-bbox="28 892 608 1242" data-label="Form"> <hr/><hr/><hr/><hr/><hr/> </div>	<div data-bbox="676 421 1023 464" data-label="Section-Header"> <p>In your own words:</p> </div> <div data-bbox="676 485 1449 971" data-label="Text"> <p>For code books, The technician needs to be able to identify the location of the transit agency's code manuals and should be able to use them when necessary. The maintenance technician should know how to use and get information from the Safety Handbook, the National Electrical Codes, ASME A17.1 through ASME A17.3, and local codes. The technician should communicate with his or her supervisor for more information that is specific to the transit agency.</p> </div> <div data-bbox="676 978 1323 1106" data-label="Text"> <p><i>[Discuss the location of your transit authority's location of these books.] Advance.</i></p> </div>	<div data-bbox="1497 471 1738 506" data-label="Text"> <p>✓ PPT slide 21</p> </div> <div data-bbox="1526 535 1835 763" data-label="Image"> </div>

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Module Length: 180 minutes Time remaining: 165 minutes This section: 45 minutes Section start time: _____ Section End Time: _____

DO	SAY	Materials Needed
<div> REVIEW slide</div> <div>Instructor's Notes <hr/><hr/><hr/><hr/><hr/><hr/></div>	<p>In your own words:</p> <p>The Code Book for A 17.2 has 10 parts:</p> <ul style="list-style-type: none">1 Inside the Elevator Car2 Machine Room3 Top of the Elevator Car4 Outside the Hoistway5 Pit6 Fire Service7 Escalator – External8 Escalator – Internal9 Moving Walk – External10 Moving Walk - Internal <p>Advance.</p>	<p>✓PPT slide 29</p> <div></div>

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DO	SAY	Materials Needed
<div data-bbox="34 464 144 564" data-label="Image"></div> <div data-bbox="170 492 409 528" data-label="Text"> <p>REVIEW slide</p> </div> <div data-bbox="28 792 444 835" data-label="Section-Header"> <h3>Instructor's Notes</h3> </div> <div data-bbox="28 892 608 1242" data-label="Form"> <hr/><hr/><hr/><hr/><hr/> </div>	<div data-bbox="676 421 1023 464" data-label="Section-Header"> <p>In your own words:</p> </div> <div data-bbox="676 485 1449 1056" data-label="Text"> <p>Where would a Technician find the requirements for existing hall call buttons' height? How long must the elevator doors stay open when answering a call? These issues are about accessibility therefore they are covered in ICC-ANSI 117.1 Accessible and Usable Buildings & Facilities code manual. This manual is divided into chapters. Elevators requirements are covered in Chapter 4 "Accessibility Routes", The answer to the height of the existing hall call buttons the requirement is 54inches which is covered in 407.2.1.1.</p> </div> <div data-bbox="676 1063 1226 1106" data-label="Text"> <p><i>Continued – DO NOT Advance.</i></p> </div>	<div data-bbox="1497 471 1748 506" data-label="Text"> <p>✓ PPT slide 40</p> </div> <div data-bbox="1526 535 1835 763" data-label="Image"> </div>

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DO	SAY	Materials Needed
<div data-bbox="34 464 144 564"></div> <div data-bbox="170 485 428 525">REVIEW slides</div> <div data-bbox="34 588 144 688"></div> <div data-bbox="177 614 260 649">ASK</div> <div data-bbox="28 792 444 835"> <h3>Instructor's Notes</h3> <hr/><hr/><hr/><hr/><hr/><hr/> </div>	<p>In your own words:</p> <p><i>Read slide.</i> <i>[For each objective, briefly review what was learned in this module or ask participants to share what they have learned for each learning objective and briefly discuss as a class.]</i> Advance.</p> <p>Lets take a look at some of the key words we have defined as moved through this module. <i>[Read slide. Discuss definitions as a group.]</i> Advance. <i>[Read slide. Discuss definitions as a group.]</i> Advance.</p> <p>Administer quiz.</p>	<p>✓PPT slides 41, 42</p> <div data-bbox="1510 535 1821 768"> </div> <div data-bbox="1510 792 1821 1025"> </div>