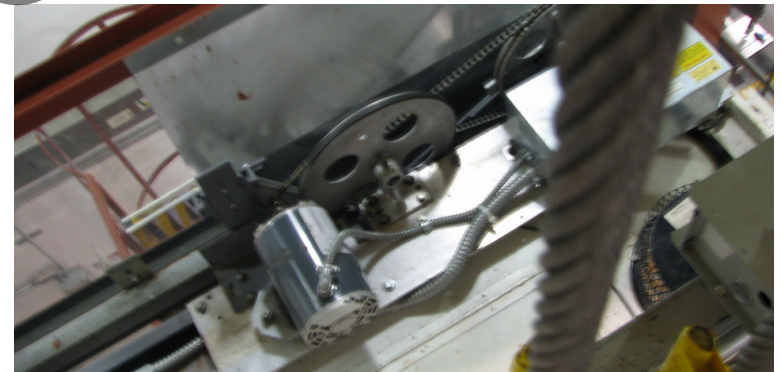
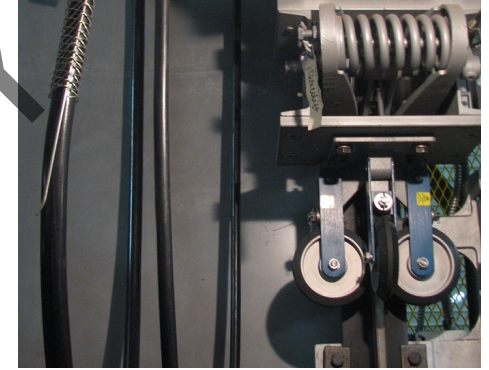


Instructor Guide



216: Elevator: Principles of Door Operation & Maintenance Module 1: Safety Procedures for Elevator Doors

Elevator – Door Safety Procedures

Instructor's Guide



Table of Contents

Overview.....	4
Personal Protective Equipment.....	9
Pinch Point Hazards.....	17
Falls and Securing Worksites.....	19
Field Trip.....	33
Summary.....	34









PREVIEW ONLY

Elevator – Door Safety Procedures

Instructor's Guide



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	10 minutes
2	Personal Protective Equipment	15 minutes
3	Pinch Points	5 minutes
4	Falls and Securing Worksites	20 Minutes
5	Field Trip	30 Minutes
6	Summary	10 Minutes
	Total Time:	90 Minutes

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Elevator – Door Safety Procedures

Instructor's Guide



Overview

Purpose The purpose of this module is to:

- Provide the participant with a general knowledge and understanding of the safety regulations and procedures associated with elevator door maintenance

Objectives

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

- Identify potential pinch points associated with elevator doors and associated mechanisms.
- Identify potential hazards associated with falls associated with elevators.
- Demonstrate and explain proper fall protection procedures.
- Describe general strategies to minimize workplace hazards and prevent workplace injuries.
- List Personal Protective Equipment that may be used to protect the eye, face, head, feet, hands/arms, bodies and hearing associated with elevator door maintenance.

Materials

Mandatory Make sure you have the following

- PowerPoint Presentation
- Coursebook
- Quizzes
- Pencils

Optional

You may also want the following for optional activities:

- Personal Protective Equipment
- Chalk board with chalk, large paper with marker, etc.
- Internet connection
- Lab, simulator or out of service elevator

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 90 min

This section: 10 min (7 slides)

Section start time: _____

Section End Time: _____

DO



REVIEW module objectives

Instructor's Notes

SAY

In your own words:

We will also...

Advance for each objective

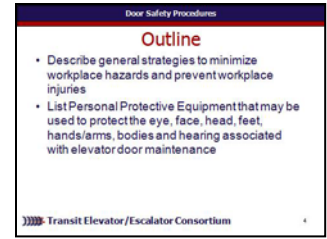
Describe general strategies to minimize workplace hazards and prevent workplace injuries

List Personal Protective Equipment that may be used to protect the eye, face, head, feet, hands/arms, bodies and hearing associated with elevator door maintenance

Advance.

Materials Needed

✓ PPT slide 4



Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min Time remaining: 90 min This section: 10 min (7 slides) Section start time: _____ Section End Time: _____

DO



ASK participants what they remember or already know about safety and elevator doors



CLASSROOM ACTIVITY

Instructor's Notes

SAY

In your own words:

When maintaining elevator doors numerous dangers are present. The primary hazards are from electricity, pinching and from falls. Basic electrical protection has been covered in Course 213, Elevator Specific Principles of Operation. A review of this material may be appropriate at this time.

Advance.

Thinking back to Course 213, who can recall some safety items we will want to review today regarding doors?

[Discuss participant responses, possibly list them on a chalk board or similar.]

Advance.

Materials Needed

✓ PPT slides 6, 7



✓ **Optional:** Chalk board/chalk or white paper/marker

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 80 min

This section: 15 min (8 slides)

Section start time: _____

Section End Time: _____

DO	SAY	Materials Needed
<div data-bbox="34 464 144 564" data-label="Image"> </div> <p data-bbox="164 492 627 614">ASK participants what they remember about safety and doors.</p> <div data-bbox="34 635 144 749" data-label="Image"> </div> <p data-bbox="164 664 569 699">CLASSROOM ACTIVITY</p> <p data-bbox="28 792 444 835">Instructor's Notes</p> <hr/> <hr/> <hr/> <hr/> <hr/>	<p data-bbox="676 428 1023 464">In your own words:</p> <p data-bbox="676 492 1352 614">Lets begin by looking at some personal protective equipment that may be helpful when working with elevator doors.</p> <p data-bbox="676 621 1226 656">Who can remember this symbol?</p> <p data-bbox="676 664 1429 792">[Call on participants to name each PPE as they appear on the screen. Advance for each symbol.]</p> <ul style="list-style-type: none"> <li data-bbox="676 799 985 835">1 – safety harness <li data-bbox="676 842 908 878">2 – safety hat <li data-bbox="676 885 1149 921">3 – noise/hearing protection <li data-bbox="676 928 1159 963">4 – protective shoes or boots <li data-bbox="676 971 985 1006">5 – safety goggles <li data-bbox="676 1013 850 1049">6 – LOTO <li data-bbox="676 1056 1371 1149">7 – protective clothing (including securing loose clothing) <li data-bbox="676 1156 994 1192">8 – dust protection <li data-bbox="676 1199 1023 1235">9 – protective gloves <li data-bbox="676 1242 937 1278">10 – face mask <p data-bbox="676 1285 850 1320">Advance.</p>	<p data-bbox="1497 471 1748 506">✓ PPT slides 9</p> <div data-bbox="1516 535 1845 771" data-label="Image"> </div>

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 80 min

This section: 15 min (8 slides)

Section start time: _____

Section End Time: _____

DO

SAY

Materials Needed



REVIEW slide

In your own words:

The employer is responsible to assess the workplace to determine if hazards are present. If such hazards are present, or likely to be present, the employer shall:

Select, and have each affected employee use the type of PPE that will protect the affected employee from the hazards identified in the hazard assessment.

Communicate selection decisions to each affected employee.

Select PPE that properly fits.

Verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated.

Advance.

✓ PPT slide 11



Instructor's Notes

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 80 min

This section: 15 min (8 slides)

Section start time: _____

Section End Time: _____

DO	SAY	Materials Needed
<div data-bbox="34 464 144 564" data-label="Image"> </div> <div data-bbox="164 492 415 535" 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> <hr/> <hr/> <hr/> <hr/> <hr/>	<div data-bbox="666 428 1023 464" data-label="Section-Header"> <p>In your own words:</p> </div> <div data-bbox="666 492 1420 649" data-label="Text"> <p>The employer shall provide training to each employee who is required to use PPE. Each such employee shall be trained to know at least the following:</p> </div> <div data-bbox="666 656 840 692" data-label="Text"> <p>Advance.</p> </div> <div data-bbox="666 699 1062 735" data-label="Text"> <p>When PPE is necessary.</p> </div> <div data-bbox="666 742 840 778" data-label="Text"> <p>Advance.</p> </div> <div data-bbox="666 785 1439 821" data-label="Text"> <p>How to properly don, doff, adjust, and wear PPE.</p> </div> <div data-bbox="666 828 840 863" data-label="Text"> <p>Advance.</p> </div> <div data-bbox="666 871 1091 906" data-label="Text"> <p>The limitations of the PPE.</p> </div> <div data-bbox="666 913 840 949" data-label="Text"> <p>Advance.</p> </div> <div data-bbox="666 956 1381 1021" data-label="Text"> <p>The proper care, maintenance, useful life and disposal of the PPE.</p> </div> <div data-bbox="666 1028 840 1063" data-label="Text"> <p>Advance.</p> </div> <div data-bbox="666 1071 1381 1106" data-label="Text"> <p>Defective or damaged PPE shall not be used.</p> </div> <div data-bbox="666 1113 1439 1192" data-label="Text"> <p>You will receive training on the authority's procedures and in the proper use of issued PPE.</p> </div> <div data-bbox="666 1199 840 1235" data-label="Text"> <p>Advance.</p> </div>	<div data-bbox="1497 478 1748 514" data-label="Text"> <p>✓ PPT slide 13</p> </div> <div data-bbox="1516 535 1845 771" data-label="Image"> </div>

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 80 min

This section: 15 min (8 slides)

Section start time: _____

Section End Time: _____

DO

SAY

Materials Needed



ASK

In your own words:

A responsibility of an employee with regard to PPE is

- a. Proper wear.
- b. Proper care of PPE.
- c. Attend training.
- d. Inform supervisor for PPE in need of repair.
- e. All of the above.

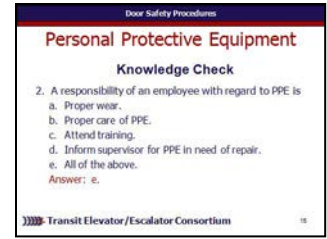
Call on participants for answer.

Advance for correct answer.

Answer: e.

Advance.

✓PPT slide 15



Instructor's Notes

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 65 min

This section: 5 min (3 slides)

Section start time: _____

Section End Time: _____

DO



ASK

Instructor's Notes

SAY

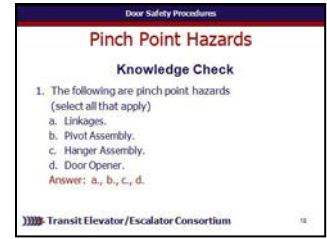
In your own words:
 So,
 The following are pinch point hazards
 (select all that apply)

- a. Linkages.
- b. Pivot Assembly.
- c. Hanger Assembly.
- d. Door Opener.

Call on participants for answer.
Advance for correct answer.
 Answer: a., b., c., d.
 Advance.

Materials Needed

✓PPT slide 18



Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 60 min

This section: 20 min (13 slides)

Section start time: _____

Section End Time: _____

DO

SAY

Materials Needed



REVIEW slide

In your own words:

When working on top of the car is required, follow all Authority procedures, local mandates and code requirements. The top of an elevator car may or may not be an area where fall protection or fall arresting equipment will be needed. This will be determined by specific site conditions. Review procedures for each location before beginning work.

If fall protection or arresting is required care must be taken to install all equipment according to design. If a fall arrest harness is required you must carefully and thoroughly adjust the harness and properly connect it to the life line. Specifics on these procedures will be covered elsewhere as required by your Authority and are beyond the scope of this course.

Advance.

✓ PPT slide 21



Instructor's Notes

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 60 min

This section: 20 min (13 slides)

Section start time: _____

Section End Time: _____

DO	SAY	Materials Needed
<div data-bbox="34 464 144 564" data-label="Image"> </div> <p data-bbox="164 492 415 535">REVIEW slide</p> <div data-bbox="34 606 144 714" data-label="Image"> </div> <p data-bbox="164 628 569 671">CLASSROOM ACTIVITY</p> <p data-bbox="28 792 454 842">Instructor's Notes</p> <hr/> <hr/> <hr/> <hr/> <hr/>	<p data-bbox="666 428 1033 471">In your own words:</p> <p data-bbox="666 492 1429 664">Any time a worker Advance is at a height of six feet or more (construction industry) Advance or four feet or more (general industry), the worker must be protected.</p> <p data-bbox="666 714 1410 842">Optional Activity: Ask participants “So in the elevator industry, when should a worker be protected?”</p> <p data-bbox="666 892 1207 935">Discuss participant answers.</p> <p data-bbox="666 978 859 1021">Advance.</p>	<p data-bbox="1497 478 1758 521">✓ PPT slide 23</p> <div data-bbox="1516 535 1845 771" data-label="Image"> </div>

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 60 min

This section: 20 min (13 slides)

Section start time: _____

Section End Time: _____

DO

SAY

Materials Needed



REVIEW slide

In your own words:

Employers are required to assess the workplace to determine if the walking/working surfaces on which employees are to work have the strength and structural integrity to safely support workers. Once employers have determined that the surface is safe for employees to work on, the employer must select one of the options listed for the work operation if a fall hazard is present.

Employers are required to:

Advance.

Select appropriate fall protection systems.

Advance.

Use proper construction and installation of safety systems.

Advance.

Properly supervise.

Advance.

Train workers.

Advance.

✓ PPT slide 25



Instructor's Notes

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 60 min

This section: 20 min (13 slides)

Section start time: _____

Section End Time: _____

DO

SAY

Materials Needed



REVIEW slide

In your own words:

Working on elevator doors can expose the elevator technician and patrons to an open elevator hoistway like in these photos. When maintenance is being performed on a machine, the area in which you are working may need to be secured. For instance, a portion of a floor plate or side panel may need to be removed to gain access in order to perform maintenance or inspection on the machine. In this case, a hazardous condition has been created. The area needs to be barricaded so that patrons and other employees are aware of the hazard and its location.

Advance twice.

Like our opening photo, your undivided attention is required when you are working on a machine or a piece of equipment. Any distractions could prove to be dangerous and even fatal.

✓ PPT slide 32



Instructor's Notes

Elevator – Door Safety Procedures

Instructor's Guide



Module Length: 90 min

Time remaining: 10 min

This section: 10 min (4 slides)

Section start time: _____

Section End Time: _____

DO

SAY

Materials Needed



REVIEW slides



ASK

In your own words:

Read slide.

[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.]

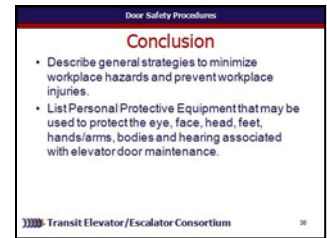
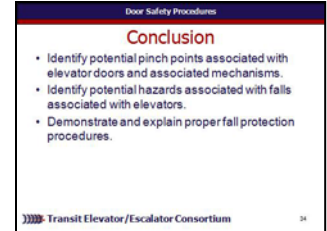
Advance.

Read slide.

[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.]

Advance.

✓ PPT slides 34, 35



Instructor's Notes
