

ATCM-1801: SPECIAL TOPICS: ADA COMPLIANCE IN THE CONCRETE INDUSTRY

Cuyahoga Community College

Viewing: ATCM-1801 : Special Topics: ADA Compliance in the Concrete Industry

Academic Term:

Fall 2019

Subject Code

ATCM - Appd Indus Tech-Cement Masonry

Course Number:

1801

Title:

Special Topics: ADA Compliance in the Concrete Industry

Catalog Description:

Course covers the Americans with Disability Act ADA standards as they apply to the construction industry including compliance and ADA ramp specifications. Installation procedures and techniques for ADA ramp layout and set up will be demonstrated and practiced.

Credit Hour(s):

1

Lecture Hour(s):

1

Requisites

Prerequisite and Corequisite

Departmental approval and/or enrolled in the cement finishers union apprenticeship program or union member.

Outcomes

Course Outcome(s):

Relate the Americans with Disability Act ADA to the standards of the Concrete Construction Industry

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Examine Title II and Title III of the ADA.
2. Examine FHWA 504 programs.
3. Relate how each applies to the Concrete Construction Industry.
4. Summarize the accessibility requirements of the ADA law and 504 program.

Course Outcome(s):

Identify specifications for overall ADA compliance

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Recognize local city and county ADA specifications.
2. Describe ODOT ADA specifications
3. Examine FHWA ADA specifications

Course Outcome(s):

Demonstrate layout and setup of ADA ramps

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Calculate layout, slope and orientation of an ADA ramp
 2. Prepare form work for an ADA ramp
 3. Examine specifications and test formwork.
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Course Outcome(s):

Demonstrate on the job skills pouring an ADA ramp.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Objective(s):

1. Perform sequential process to pour an ADA ramp.
 2. Produce the correct slope for ADA compliance.
 3. Choose the best method of placement of ADA mats
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Methods of Evaluation:

1. Class participation
2. Quizzes
3. Tests
4. Student must demonstrate an understanding of ADA compliance techniques in a shop setting.

Course Content Outline:

1. Americans With Disabilities Act
 - a. Laws
 - i. Title II
 - ii. Title III
 - b. Government program/504
 - c. Application of laws and programs
 - i. Federal and state facilities
 - ii. Private facilities
 - d. Accessibility requirements
 - i. Federal and state facilities
 - ii. Private facilities
1. Specifications
 - a. Local city and county ADA specifications
 - i. ADA ramp specifications
 1. Traffic pattern slope
 2. Cross traffic slope
 - ii. Side ramp specifications/cross traffic slope
 - iii. ADA mat location
 - b. ODOT ADA specifications
 - i. ADA ramp specifications
 1. Traffic pattern slope
 2. Cross traffic slope
 - ii. Side ramp specifications/cross traffic slope
 - iii. ADA mat location

1. FHWA ADA specifications
 - a. ADA ramp specifications
 - i. Traffic pattern slope
 - ii. Cross traffic slope
 - b. Side ramp specifications/cross traffic slope
 - c. ADA mat location
1. Layout and setup of ADA ramp
 - a. Layout of ADA ramp
 - i. Location
 - ii. Slopes
 - iii. Orientation
 - b. Formwork
 - i. Perimeter formwork
 - ii. Curb formwork
 - c. Specifications and testing
 - i. Test traffic pattern ramp slope
 - ii. Test cross traffic ramp slope
 - iii. Test cross traffic side ramp slope
1. Pouring a concrete ADA ramp
 - a. Procedure
 - i. Wet concrete placement
 - ii. Screeding
 - iii. Floating
 - iv. Control joints
 - v. Broom direction
 - b. Slope test
 - i. Traffic pattern ramp slope test
 - ii. Cross traffic ramp slope test
 - iii. Cross traffic side ramp test
 - c. ADA mat placement
 - i. Location
 - ii. Orientation
 - iii. Procedure
 1. Place mat on wet concrete for outline only
 2. Dig out the outline 1 inch deep
 3. Place ADA mat in the depression

Resources

Builder News. *ADA and ABA Accessibility Guidelines, Buildings and Facilities* . current. washington d.c.;United States Access Board, 2010. July 2010.

Ann Alderson. *Stairs, Ramps and Escalators: Inclusive Design Guidance*. current. RIBA Publishing;London UK, 4/01/2010. 2010.

Gerardus Blokdyk. *Ramp Up* . current. Publisher: Emereo Pty Ltd ;Queensland, Australia, 2018. 2018.

Resources Other

- <https://www.opcmia.org/training/>
- <https://ww.ada.gov>

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