



STUDY AND TEST MATERIAL
for the
DCONV
ASSESSMENT

(Denver Conveyance for Elevators and Escalators)
July 1, 2024

This document contains sample questions and information to help participants study for this assessment.

If you intend to use this booklet in the test, make sure it is bound in a binder or stapled. Loose papers are not allowed.

THE FOLLOWING ARE THE ONLY MATERIALS ALLOWED IN AN EXAM COVERED BY THIS STUDY GUIDE

- IBC International Building Code (not year specific)
- IFC International Fire Code (not year specific)
- 2022 Denver Building Code & Fire Code (condensed to 66 pages on our website)
- Safety Code for Elevators and Escalators ASME A17.1 #####/CSA B44 ## (not year specific)
- ANSI/ASSP A10.4-##### Safety Requirements for Personnel Hoists and Employee Elevators on Construction and Demolition Sites (not year specific)
- NFPA 70 – National Electrical Code (not year specific)
- CSA Study and Test Material for the DCONV Assessment
- Non-programmable calculator – Not required for this exam

It is up to the candidate what books they want to take to the exam. The above are the only books that the proctors are to allow into this exam. Proctors have been informed that the edition/year is not specific, and that NFPA handbooks are allowed.

See information on next page for the Edition of codes that the questions are based on.

Quick Example of How Exam Screens May Look

Question and answer options

C. Should
D. Could

Mark this item for later review.

Select "Next" to go to the next question. Note: some exams will not allow you to go "Back", but only forward.

Select "Review All" to review questions before submitting.

Check this box if you want to flag this question for review later with any remaining time

Back Next Review All Submit

DO NOT "Submit" until you are finished as this will end and score your exam.

About the Assessments:

Assessment Abbreviation: DCONV – Denver Conveyance

Number of Questions: 40

Amount of Time for Test: 60 minutes

Exam format: Open book (provide your own books). An on-screen calculator and note section will be provided for online proctored exams. Scratch paper or dry-erase board will be provided for exams at a proctored facility. Any books or exam documents brought into exam must be bound as no loose papers are allowed.

Passing Score: 80%

Cell Phones: Do not bring cell phones, pagers, or radios into the test center.

Codes / Materials Used for DCONV Exam and Editions:

- 2021 International Building Code
- 2021 International Fire Code
- 2022 Denver Building Code & Fire Code (Amendments condensed to a DCONV version on our website)
- NFPA 70 – National Electrical Code - 2023 Edition
- CSA Study Guide for the DCONV Assessment (from CSA website)
- NFPA Handbooks are recommended when available
- Calculator is not required for this

General Assessment Information:

About the Questions: Questions are randomly selected from respective topics within a larger database. Answer choices are randomly mixed, meaning that choice “B” will not always be in position “B”.

Exam Format: Questions are computer based and will be delivered one at a time. You will have the opportunity to go back and review all questions. You can also “check” a box within each question which will flag it for later review. During the review, checked questions will be marked for easier identification.

Time Clock: Some assessments will have a count-down timer displayed on the screen. Do not focus on the clock but use it as a guide.

Important Candidate Information

YOUR SCORE & PRINTING SCORE REPORTS

All scores provided at the end of your exam and in your score email are “preliminary”. Exams are subject to review of audio / video recordings, or concerns raised by proctors.

Your preliminary score will be automatically emailed following the exam. Candidates may also log into their Webassessor account to view/print score reports. Use the link and info in your scheduling emails.

Score reports for failed exams will provide a breakdown of scores by topics/subjects within the exam. Your overall score determines Pass/Fail.

However, the topic scores help to identify areas that need more attention when studying. Topic scores will not be provided on Pass emails.

Taking Materials Into Exams

CSA exams are open book. You must provide your own books and required exam materials, including calculators at physical centers. Online calculator is provided for online proctored exams. Check this guide to verify what editions exams are based on. All material must be bound (no loose papers). Other than items listed on Page 2 of this guide, do not take other items into the exam.

Page tabs must be of permanent type. Do not mark in any materials during an exam.

Phones, radios, pagers are not allowed in exam rooms, please leave these in your vehicles.

Two forms of ID are required for exams.

Photographs

Your photo is required to be submitted to CSA with your initial registration request. This photo may be used by proctors to verify who is scheduled for the exam. Although not required, you may want to wear a company shirt/logo for your picture. Pictures are cropped to best fit ID card, so there is no guarantee the logo will show. You will be recorded and a photo may be taken during exam sessions.

Respectful of Others

At a proctoring center, please be respectful of others taking exams by minimizing noise and interruptions. If you have any exam or computer problems please notify the proctor so they can assist. If necessary, the proctor can log a report for further investigation. Then notify CSA so we can look into the problem.

If taking an Online proctored exam, please make sure others know to not interrupt. Your exam may be terminated and require new payments for interruptions or suspicious behavior.

Proctoring Options

You have two options for proctoring. Online proctoring where you use your computer and USB webcam to take the exam with a proctor watching you via camera, or at a physical proctoring center.

See website for info.

How to Request Your First Exam / Assessment

First, download study material and get the required codes/standards needed for your exam.

Then, review our website to understand the options for proctoring, and decide which option works best for you.

You are required to pay for your assessment and submit a picture at the time of submitting the request. Have payment and a photo file ready.

To start the process, you must “Request an Assessment” from www.CSAexams.com. Within 3 days you should receive an email with information to schedule your exam. Make sure you are requesting and paying for the correct exam as there are no refunds.

Cancel or Rescheduling an Exam

To cancel or reschedule an exam you must log back into the system where you scheduled the exam, or using links at www.CSAexams.com under Contractor Info. Online Proctored exams require 24 hrs and Proctoring Centers require 72 hrs notice. If the system will not give you the option to Cancel/Reschedule than you must show up or fireproof your fees. There are no refunds.

If You Fail an Exam

If you fail an exam, you must Request a new Assessment and make full payment from www.CSAexams.com. Within 3 days you will get an email to schedule your exam.

When you Pass an Exam

ID cards and certificates will generally be mailed out within three weeks. They will be mailed to the address provided when requesting the assessment. If the address has changed, please email CSA with new address.

If You Need a New ID Card

To change the company name, change your last name, or if you have lost your card, go to www.CSAexams.com and select Replacement ID link. Exams are good for 3 years. Then a new exam is required for renewal.

Please report cheating to the proctor or CSA.

Denver Conveyance Exam

Key areas to study:

- Where “amendments” are indicated, this will be from the Denver Building and Fire Code Amendments referenced on page 3 of this document. Make sure to review sections of the model code (such as IBC or IFC) and the amendments. The amendments may add to the model code criteria, or delete / change the language altogether.
- International Fire Code Amendments - IFCA Chapter 604, and other sections referenced in this section.
- International Fire Code Amendments – IFCA Chapter 9, with anything related to elevators, escalators, or similar systems (fire alarms, sprinklers, etc.).
- International Fire Code – IFC, with anything related to elevators, escalators, or similar systems. Including definitions in Ch 2, 604, Ch 9.
- International Building Code and International Building Code Amendments– IBC/IBCA, with anything related to elevators, escalators, or similar systems. Includes 403.6; Ch 30; 911; other sections referenced by these sections.
- ASME A17.1
- ANSI/ASSE A10.4
- NFPA 70 / NEC, with anything related to elevators, escalators, similar systems, general wiring requirements, clearance in front of equipment, etc. Includes 620; 110.

The following questions are related to the DCONV assessment. These are sample questions. Questions on the assessment may come from the body of a standard, any of the Annex sections, or general theory as necessary to have a thorough understanding of elevators, escalators, or other covered equipment. It is recognized that individuals taking this exam have also taken / passed other industry related exams. This exam is to focus on Denver Amendments, Building and Fire Codes, and the NEC. Questions are asked from industry specific documents to validate your understanding and use of those documents. Questions will generally start off indicating what code/ document they are from, such as [IFCA], [IBC/IBCA], [NEC], etc.

The questions below are not intended to provide an in-depth review. Rather, they are only intended to give you an idea of what to expect.

1. [IFCA] In buildings and structures where emergency or standby power is required or furnished to operate an elevator, emergency or standby power shall be provided in accordance with Section _____.

- A. IFCA 604.3.4
- B. IFCA 1203
- C. IFCA 920.9
- D. IFCA 308

2. [IFCA] Elevator keys shall be Group 4 security in accordance with ASME A17.1 and shall comply with the DFD policy 604.61.

True
False

3. [IFCA] in accordance with 604.6.2.4, The building owner shall provide up to three standardized fire service elevator keys, where required by the fire code official, upon installation of a standardized fire service key switch or switches in the building.

True

False

4. [IBC/IBCA] Where installed in accordance with Section 3008, passenger elevators for general public use shall be permitted to be used for occupant self-evacuation. Areas of rescue assistance is not required to be located at these elevators.

True

False

5. [IBC/IBCA] Emergency Elevator Communication System: An emergency two-way communication system shall be provided. The system shall provide visible text and audible modes that meet all of the following requirements. Select all that apply.

A. When operating in each mode, include a live interactive system that allows back and forth conversation between the elevator occupants and emergency personnel.

B. Allows elevator occupants to select the text-based or audible mode depending on their communication needs to interact with emergency personnel.

C. Is operational when the elevator is operational.

D. Allows Bluetooth connection to the occupant's smartphone for texting.

6. [IBC/IBCA] Elevator, dumbwaiter and other hoistway enclosures shall be shaft enclosures complying with Sections _____ and _____ of the IBC.

A. 301, 303

B. 402, 405

C. 712, 713

D. 904, 907

7. [NEC] Product testing, evaluation, and listing (product certification) shall be performed by a qualified electrician licensed in the state the equipment is to be installed.

True

False

8. [NEC] Cables and conductors installed exposed on the surfaces of ceilings and sidewalls shall be supported by the building structure in such a manner that the cables and conductors will not be damaged by normal building use. Such cables and conductors shall be secured by hardware including straps, staples, cable ties, hangers, or similar fittings designed and installed so as not to damage the cable. The installation shall also conform with _____ and _____. Select each that applies.

A. 300.4 Protection Against Physical Damage

B. 300.11 Securing and Supporting

C. 340 Underground Feeder Type UF

D. 353 High Density Polyethylene Conduit

9. [NEC] Electrical equipment, such as switchboards, switchgear, enclosed panelboards, industrial control panels, meter socket enclosures, and motor control centers, that is in other than dwelling units, and is likely to require examination, adjustment, servicing, or maintenance while energized, shall be field or factory marked to warn qualified persons of potential electric arc flash hazards. The marking shall meet the requirements in 110.21(B) and shall be located so as to be clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment.

True
False

10. [NEC] An elevator control panel is located within an equipment room. The front of the control panel sticks out 24” from the wall behind it. There are additional electrical panels 40” in front of the control panel on (across from elevator control panel). The elevator controls have 220-volts serving the panel equipment when exposed. Is this distance in compliance with NEC.

Yes
No

Supplemental information:

Table from NFPA 70 (NEC) for required space in front of sources of exposed electrical components.

Pin Header Table 110.26(A)(1) Working Spaces ×			
Minimum Clear Distance			
Nominal Voltage to Ground	Condition 1	Condition 2	Condition 3
0–150	900 mm (3 ft)	900 mm (3 ft)	900 mm (3 ft)
151–600	900 mm (3 ft)	1.0 m (3 ft 6 in.)	1.2 m (4 ft)
601–1000	900 mm (3 ft)	1.2 m (4 ft)	1.5 m (5 ft)

Note: Where the conditions are as follows:
Condition 1 – Exposed live parts on one side of the working space and no live or grounded parts on the other side of the working space, or exposed live parts on both sides of the working space that are effectively guarded by insulating materials.
Condition 2 – Exposed live parts on one side of the working space and grounded parts on the other side of the working space. Concrete, brick, or tile walls shall be considered as grounded.
Condition 3 – Exposed live parts on both sides of the working space.