

# STUDY AND TEST MATERIAL FOR THE

# FEX, CKH2, & KHFE2 ASSESSMENTS

(Fire Extinguisher, Commercial Hood Install and Service, and Combination Kitchen Hoods and Fire Extinguisher On-site)

June 16, 2017

Revised May 4, 2018 for clarification page 2 and sample questions for Kitchen Hood Exams

This document contains sample questions and information to help participants study for these assessments.

If you intend to take this booklet into the test, make sure it is bound in a binder or stapled. You will not be allowed to take this material into the test center if it is not bound.

(IMPORTANT: Material provided is not intended to endorse, represent quality, recommend a particular product, or single out any product. Material may be used to provide standardized content for test questions to ensure that participants know how to use data sheets and manufacturer materials to establish listing and installation limitations of these types of products. There is no implied or other relationship between CSA and the manufacturers or suppliers of information used. CSA is not liable for accuracy or content of material contained within these documents. Material in this booklet is for testing purposes only and is not to be used for installation of these systems / components. Check with suppliers for current and specific information to be used in actual design and installation conditions.)



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#### About the Assessment:

**Assessment Abbreviation:** FEX

**Number of Questions: 42** 

**Amount of Time for Test:** 60 minutes

Assessment Abbreviation: CKH2 Commercial Hood Install and Service

**Number of Questions: 49** 

**Amount of Time for Test:** 60 minutes

**Combination Exam:** KHFE2 (Kitchen Hoods and Fire extinguishers)

**Number of Questions: 91** 

**Amount of Time for Test:** 120 minutes

**Exam format:** Open book (bring your own books); calculators will be available, writing tablet or paper will be provided for calculations. 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 FEX Exam and Editions:

• 2010 or 2013 Edition NFPA 10 (if using 2013 edition, see note on page 4)

#### Codes / Materials Used for CKH2 Exam and Editions:

- 2009 or 2017 edition of NFPA 17A (Recommend Handbook for study)
- 2011 or 2017 NFPA 96
- CSA Kitchen Hood Design Manual (on our web site under Test Info)

#### Codes / Materials Used for KHFE2 Exam and Editions: (this is a combination exam)

• Use the above documents for FEX and CKH2 exams

#### **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. See the document on "Screen Shots" under the "Test Info" link on our web site.

**Time Clock:** Most assessments will have a count-down timer displayed on the screen. It may appear as if this timer is fluctuating between questions (gaining time on one question and loosing time on the next

# **Important Candidate Information**

#### PRINTING SCORE REPORTS

Candidates are not able to print reports at PSI centers.

This is a computer restriction at PSI centers.

Reports are <u>not</u> automatically emailed. However, while at the exam center Score Reports can be Sent to the email used to register your exam. At the bottom of window Click on "Send". <u>There is no confirmation</u>, but it will be sent to the email shown at the top of the Score Report.

From your home or office you can log into your
Dashboard and print a copy. Go to
www.CSAexams.com and find links to Dashboard
under the Test Info or Contractor Info pages. You will
need your CA number and password. In the "History"
tab click on the words "Passed" or "Failed" under the
Outcome column for the exam you want to view. Then
either Print to your printer, or Send to email in system.

### **Taking Materials Into Exams**

CSA exams are open book. You must provide your own code books and required exam materials. Check the study guide to verify what editions the exams are based on. All material must be bound (no loose papers). Other than sample questions and materials within a CSA study guide, do not take other study questions 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. ID is required.

#### **Photographs**

Your photograph will be taken when you register at the proctoring center. This is to verify who took the exam. This photo will also be used on your ID card. Although not required, you may want to wear a company shirt/logo. Pictures are cropped to best fit ID card, so there is no guarantee the logo will show. If you are worried about the quality or background, ask the proctor if the picture is good enough to be used on your ID card.

Please be respectful of others taking exams by minimizing noise and interruptions. If you have any exam or computer problems please see 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.

#### How to Schedule Your First Exam / Assessment

To start the process, you must Request an Assessment from www.CSAexams.com. Within 1—3 days you should receive an email from PSI with a link to their website along with your user name and password. Using this link log into PSI, make your payment and schedule your exam. If you do not get the email from PSI in 3 days, reply to your CSA Request email so we can look into it. Please check your spam / junk folders for emails from PSI. Make sure you are paying for the correct exam as there are no refunds.

#### Rescheduling an Exam

To reschedule an exam you must log back into the PSI system where you scheduled the exam, or using links at www.CSAexams.com under Contractor Info. Changes should be made 3 days before your scheduled exam. (You can try up to 48 hours before start time depending on time zones.) If the system will not give you the option to Cancel/Reschedule than you must show up or firefight your fees. There are no refunds.

#### If You Fail an Exam

If you fail an exam, you must Request a new Assessment from www.CSAexams.com. Then, when you get the email from PSI you can go to PSI website and make new full payment and schedule the 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.

Please report cheating to the proctor or CSA.

The following questions are related to the FEX assessment. These are sample questions. Questions on FEX assessment may come from the body of the code or any of the Annex sections. Please review and be familiar with all of NFPA 10. 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.

Code editions for NFPA 10. We have evaluated exam questions for both 2010 and 2013 editions and only one question was impacted. To be fair, we are providing the answer to this question here. If you get this question, <u>please answer False</u> (based on the 2010 edition). However, in the 2013 edition the answer would be allowed.

"Labels indicating the company that services the extinguishers may be placed on the front of the extinguisher as long as they do not cover up the instructions". FALSE

#### Question 1:

Which would represent a Class A fire?

- Trash Can
- Cooking oil on a gas stove
- Electrical power strip
- Bucket of Magnesium Shavings

#### Question 2:

A "three-dimensional Class B fire" identifies:

- A computer generated 3-D fire commonly used in training videos
- An interactive holographic fire
- A flammable liquid pool fire in a corner with higher radiant heat from the three enclosed sides (floor and two walls).
- A fire involving flammable liquids running down a set of stairs.

Information on three dimensional fires can be found in NFPA 10, A.5.5.1.1.2. Such fires often create a unique challenge to fight.

#### Ouestion 3:

Select those extinguishers that are considered obsolete and shall be removed from service. Select all that apply.

- Vaporizing liquid (carbon tetrachloride)
- Soda acid
- Copper or brass shell (excluding pump tanks) joined by soft solder or rivets
- Chemical foam (excluding film-forming agents)
- Cartridge-operated loaded stream
- Any extinguisher with 4B, 6B, 8B, 12B, and 16B fire ratings
- Each type indicated may continue to be used even though some are no longer manufactured

#### Question 4:

A "water mist fire extinguisher" is defined as a fire extinguisher in which the agents have sufficient vapor pressure at normal operating temperatures to expel themselves.

- True
- False

#### Ouestion 5:

In accordance with Annex C, which of the following could be used in selecting the best portable fire extinguisher for a given situation?

- Ease of use of the fire extinguisher
- Potential severity of any resulting fire
- Nature of combustibles or flammables that could be ignited
- Upkeep and maintenance requirements for the fire extinguisher
- Whether office trash cans are round or square

#### Ouestion 6:

Fire extinguishers will likely be used by one or more of the following groups of people, listed in descending order of their probable skill. Select which option <u>does not</u> apply:

- Trained fire departments
- Trained or untrained employees
- Untrained private owners
- Untrained fire department personnel

Annex D provides information regarding operation and use. In this question, you will need to find the corresponding section to match the options.

Additional fire extinguisher information to study includes, but is not limited to:

- Make sure you understand the difference of maximum distance to reach an extinguisher, and the maximum distance between two extinguishers.
- Review Annex material to understand what type of extinguisher agent works best on a particular type of fire.

#### **Kitchen Hood Exams:**

For those taking the Kitchen Hood exam, make sure you understand the limitations of piping, fittings, and elbows and nozzles for particular protection.

Since most systems utilize wet chemical, be very comfortable with NFPA 17A.

The following are some sample questions that may be found on Kitchen Hood Exams.

#### Question 7

[NFPA 96] Equipment and devices used for the purpose of cleaning air passing through them or by them in such a manner as to reduce or remove the impurities contained therein would be defined as:

- Detection Device
- Duct

- Baffle Plate
- Air Pollution Control Device

#### Question 8

[NFPA 96] Work including, but not limited to, repair, replacement, and service, performed to ensure that equipment operates properly is defined as:

- Inspection
- Testing
- Maintenance
- Discharge
- Activation

#### Question 9

[NFPA 96] A device or series of devices whose purpose is to reclaim only the heat content of air, vapors, gases, or fluids that are being expelled through the exhaust system and to transfer the thermal energy so reclaimed to a location whereby a useful purpose can be served is defined as:

- Thermal Recovery Unit
- Heater
- Air Conditioner
- Water Wash System

#### Question 10

# [CSA Hood Manual]

The maximum number of pressure operated actuators that can be used with a CO2 control box is 1.

- True
- False

#### Question 11

[CSA Hood Manual] The maximum exposure temperature is stamped onto the fusible link.

- True
- False

#### Question 12

[NFPA 96] The hood exhaust fan shall start upon activation of the extinguishing system if the exhaust fan and all cooking equipment served by the fan have been shut down, unless fan shutdown is required by a listed component of the ventilation system or by the listing of the extinguishing system.

- True
- False

#### Question 13

[NFPA 17A] We chemical fire extinguishing systems for the protection of cooking operations shall be listed and shall meet or exceed the requirements of \_\_\_\_\_:

• UL 100

- UL 200
- UL 300
- UL 425

# Question 14

[NFPA 17A] At least three manual actuation devices are required with one being at the front entrance, one being at the rear entrance, and one being within 15' of the appliance.

- True
- False

# Question 15

[NFPA 17A] Common exhaust ducts shall be protected by wet sprinklers.

- True
- False