

## **Safety and Buildings Division Instructions for Obtaining Continuing Education Credit Hours for Viewing Online Videos and Correctly Answering Questions**

After viewing the videos, you should print this questions/verification document. Fill in the identifying information at the beginning of the questions. Read the questions and circle the correct answers.

Fill in the attendance verification form at the end of the questions.

Make a copy of the filled-in packet to keep for your records.

Send the original answers and the attendance form to Safety and Buildings, PO box 2658, Madison, WI 53701-2658. Enclose a check for \$30 for the class fee.

You will not be sent an acknowledgement of S&B receiving your submission unless you fail to answer at least 70 percent of the questions correctly.

After allowing two weeks for processing, you can check your continuing education records by going online to [http://apps.commerce.state.wi.us/SB\\_Credential/SB\\_CredentialApp](http://apps.commerce.state.wi.us/SB_Credential/SB_CredentialApp). Enter your S&B customer number in the search box. Double-click "Search." In the search results at the bottom of the page, double-click on your name and you will see the S&B records of continuing education for that credential.

In order to be given credit hours for the continuing education term ending December 31, for renewal of a credential that expires on March 31, your submittal must be postmarked on or before December 31.

If you submit the forms and fees after that date, and do not have sufficient credit hours to renew, you will be sent a letter telling to submit an additional \$25 late fee.

Go to the next page to fill out your customer information and answers questions concerning the video you have viewed.

# Safety and Buildings Division

## 30 Questions for Sizing the Water Supply Class #6485

\$30 fee for three continuing education credit hours for Commercial Plumbing Inspectors, Journeyman Plumbers, Journeyman Plumbers-Restricted Appliance, Journeyman Plumbers-Restricted Service, Master Plumbers, Master Plumbers-Restricted Appliance, Master Plumbers-Restricted Service, and UDC-Plumbing Inspectors

Your name \_\_\_\_\_

Your address \_\_\_\_\_

Your S&B customer identification number \_\_\_\_\_ - Fiscal Code 7632

Daytime telephone number \_\_\_\_\_

1. A building control valve is required to be located within what distance of entering the building.
  - a. 30"
  - b. 3 feet
  - c. 6 feet
  - d. No distance requirement.
  
2. What is the total water fixture units (wsfu's) for a bathroom group (w/shower), a kitchen sink, and a laundry tub using Table 82.40-1?
  - a. 7 wsfu's
  - b. 6.5 wsfu's
  - c. 6 wsfu's
  - d. 7.5 wsfu's
  
3. What is the GPM equivalent of 90 wsfu's on a predominately flush tank water closet system (Table 82.40-3)?
  - a. 24
  - b. 41
  - c. 65
  - d. 10
  
4. Calculations for sizing a water distribution system shall include:
  - a. Load factor in dfu's on the piping
  - b. Maximum pressure available
  - c. Pressure losses due to reverse osmosis
  - d. Pressure losses due to friction through piping, valves and appurtenances

5. What is the minimum size private water main or water service allowed?
- $\frac{1}{2}$ "
  - $\frac{3}{4}$ "
  - 1"
  - 1  $\frac{1}{4}$ "
6. In Table 82.40-6 if a flush tank system has an "A" value of 12 what is the wsfu load on  $\frac{3}{4}$ " pipe?
- 11
  - 12.5
  - 16.5
  - 18
7. In Table 82.40-9, if a flush tank system has an "A" value of 12 what is the wsfu load on  $\frac{3}{4}$ " pipe?
- 8
  - 9
  - 9.5
  - 11
8. What is the minimum pressure requirement for a pressure balanced tub or shower valve?
- 8
  - 15
  - 20
  - 25
9.  $\frac{1}{2}$ " water distribution piping serving 2 or more plumbing fixtures may not have a load of more than how many wsfu's?
- 1
  - 2
  - 4
  - 5
10.  $\frac{1}{2}$ " water distribution piping serving a shower with no pressure balancing or thermostatically blended capabilities may serve how many additional fixtures?
- 0
  - 1
  - 2
  - 3
11. The minimum size fixture supply serving a flushometer water closet is what?
- $\frac{3}{4}$ "
  - 1"
  - 1  $\frac{1}{4}$ "
  - $\frac{1}{2}$ "

12. The minimum size fixture supply serving all plumbing fixtures , appliances, and pieces of equipment shall be at least what diameter?
- 3/8"
  - 1/2"
  - 1/4"
  - None of the above.
13. Stop and waste control valves may be installed underground..
- In barns
  - In public parks and campgrounds
  - At Fire Stations
  - May not be installed at any time.
14. What kind of valve requires hammer arrestors?
- Quick closing valves with 3/8" or larger inlet.
  - Slow closing valves with 1/2" or smaller inlet.
  - Quick closing valves with 1/4" or larger inlet.
  - None of the above.
15. What kind of piping systems can be installed by unlicensed persons?
- Water distribution piping
  - Private water mains and water services
  - Piping systems not for human use or consumption
  - All of the above.
16. What is the allowable range of Ph for a copper pipe system?
- 5.5 ---10
  - 3---8
  - 7---12
  - 6.5---10
17. When is a full fixture count of the building necessary to determine GPM load for water calculations?
- New home
  - New commercial building
  - Addition or remodel
  - All of the above
18. Water service piping, water distribution piping, and fixture supply connectors make up the potable water supply system for a 1 or 2 family dwelling.
- True
  - False

19. When you first size a building for water supply fixture units, you total up the wsfu's back to the what to find the building demand?
- Hot water heater
  - Municipal Main
  - Building control valve
  - None of the above.
20. What graph would you reference to find pressure loss due to friction for type K copper tubing?
- A-82.40(7)-2
  - A-82.40(9)-2
  - B-82.30\_2
  - A-82.40(5)-2
21. On a water calc worksheet, what are we solving for?
- Pressure available for uniform loss ("A" value).
  - Pressure loss through the water service.
  - Pressure loss through the water distribution system.
  - All of the above.
22. If you have an "A" value on a water supply system that exceeds what is allowed in the table 82.40-6 for copper type M tubing, what "A" value should you use?
- Ignore the table "A" values
  - Find another table with higher "A" values.
  - Use the highest "A" value provided in the table for each corresponding pipe size.
  - None of the above.
23. A building "controlling fixture" is the fixture that requires the highest amount of water pressure to operate, due to elevation, friction loss through the water piping and pressure losses through the fixture itself.
- True
  - False
24. What is the total wsfu load for a flush valve or flush meter water closet in Table 82.40-1?
- 7.5
  - 4
  - 6
  - 2
25. Maximum velocity throughout the water distribution system shall not exceed?
- 6 feet per second
  - 2 feet per second
  - 8 feet per second
  - 10 feet per second

26. When sizing cold or hot water branches, use the total column in tables 82.40-1 or 82.40-2.
- True
  - False
27. The pressure loss in a water distribution system through a standard tank type water heater is:
- 8 psi
  - 15 psi
  - 20 psi
  - 0 psi
28. Never exceed a wsfu hot load, cold load, total load, or building load when assigning wsfu loads to the water distribution system.
- True
  - False
29. What is the wsfu load for a tank type water closet in table 82.40-2?
- 2
  - 3
  - 4
  - 6.5
30. What is the maximum water pressure allowed on a water distribution system?
- 40 psi
  - 60 psi
  - 80 psi

# Educational Course Attendance Verification

Safety & Buildings Division  
 201 W Washington Avenue  
 P O Box 7082  
 Madison WI 53707-7082  
 Phone: ( 608) 261-8500  
 TTY: ( 608) 264-8777

Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1)(m)].

**Instructions:** Print all information clearly

Attendee's Name (Last, First, Middle Initial):	Course Title/Name:		
Credential Number:		Course ID #:	Course Date (mo/dy/yr):
<b>Cannot process without this information</b>			
Street Address or PO Box:	List the name of each credential held by attendee that is relevant to this course Use space below if needed.		
City, State and Zip Code + 4:			
Daytime Telephone Number (include area code):			
Attendee's Signature:			
	DECLARATION: I believe that the information given on this form is true. I realize that a misstatement could result in disciplinary action under Comm 5.10, Wis. Adm. Code.		

Credit hours obtained at least 90 days prior to the expiration date of a credential apply as credit to the current credential period. Credit hours obtained less than 90 days to the expiration date of a credential are applied as credit to the next credential period.  
 SBD-9142 (R.2/03)