EXAM

Course 16185
Dwelling Contractor Initial Qualifier & Continuing Education Course
[Version 2]

Construction Standards
And
ATCP 110

USCONTRACTORLICENSE LLC dba Kevin Wunderlin
PO Box 268
Platteville, Wisconsin 53818
608-348-6688

Email: ***michael@uscontractorlicense.com***

USCONTRACTORLICENSE LLC dba Kevin Wunderlin
PO Box 268
Platteville, Wisconsin 53818
608-348-6688
www.uscontractorlicense.com

We would like to thank you for ordering our 12 Hour Initial Qualifier or 12 Hour Continuing Education Course # 16185.

Materials included

1. REVIEW MATERIALS
2. EXAM
3. Answer Sheet

Once you complete the course

Return the bubble answer sheets to our company.

Fax: (608) 571-0096
E-mail: michael@uscontractorlicense.com
US Mail: Above address

We will grade the course and notify you of the results. You will receive written verification that you have passed the course.

The State of Wisconsin requires that you attain a passing score of 70%. In the event that you did not attain the required score we will notify you of the incorrect answers. You will need to retake only the incorrect questions and resubmit them to us for grading purposes.

After you are notified that you passed the course

Initial

Complete the Credential Application (Dwelling Contractor Qualifier Certification); *send this form to the State of Wisconsin along with the credential fee. Attach a copy of our Certificate of Completion to the form.*

Continuing Education Course **Once you complete the course, we will notify the Dept. of Safety & Professional Services of your successful completion. They will send you a renewal reminder prior to the expiration of your certification/registration or license. *If you are notified that you can renew online, click on this link;***
https://dsps.wi.gov/Pages/SelfService/ElectronicPayments.aspx

If you did not receive the renewal reminder or obtained your continuing education after the expiration date; contact the Dept. of Safety & Professional Services by e-mail: DspsSbCredentialing@wi.gov or call them at 608-266-2112 to request information about the renewal requirements.

Please feel free to contact us with any questions and/or suggestions on improving this course or future educational courses you would like to see us offer.

Thank you for your business!

USCONTRACTORLICENSE LLC
dba Kevin Wunderlin
PO Box 268
Platteville, Wisconsin 53818
608-348-6688

Questions 1 to 10 (Refer to Review Materials SPS 321.02 Loads and Materials)

1. _____. Every dwelling shall be designed and constructed to support the actual dead load, live loads and wind loads acting upon it without exceeding the allowable stresses of the material. The construction of buildings and structures shall result in a system that provides a complete load path capable of transferring all loads from point of origin through the load resisting elements to the foundation.

a. Dead Loads
b. Live Loads
c. Design Load
d. Snow Loads

2. _____. 1. Floors and ceilings. Floors and ceilings shall be designed and constructed to support the minimum live loads listed in Table 321.02. The design load shall be applied uniformly over the component area.

a. Live Loads
b. Snow Loads
c. Wind Loads
d. Dead Loads

3. _____. Dwellings shall be designed and constructed to withstand either a horizontal and uplift pressure of 20 pounds per square foot acting over the surface area or the wind loads determined in accordance with ASCE 7–05, *Minimum Design Loads for Buildings and Other Structures*.
Note: ASCE 7–05 allows for substantial reduction from 20 psf as applied to the surface area.

a. Dead Loads
b. Live Loads
c. Wind Loads
d. Snow Loads

4. STRUCTURAL STANDARDS. (h) *Fasteners.* All building components shall be fastened to withstand the snow load, _____.

a. Dead load
b. Wind load
c. Live load
d. All of the above

5. _____. Every dwelling shall be designed and constructed to support the actual weight of all components and materials. Earth- sheltered dwellings shall be designed and constructed to support the actual weight of all soil loads.

a. Wind Loads
b. Snow Loads
c. Dead Loads
d. Live Loads

6. _____. Roofs shall be designed and constructed to support the minimum snow loads listed on the zone map. The loads shall be assumed to act vertically over the roof area projected upon a horizontal plane.

a. Snow Loads
b. Wind Loads
c. Dead Loads
d. Live Loads

7. STRUCTURAL STANDARDS. *General.* Design, construction, installation, practice and structural analysis shall conform to the following nationally recognized standards.

a. True
b. False

8. STRUCTURAL STANDARDS. *Wood.* 3. Sawn lumber that is not graded in accordance with the standards under subd. 1., shall use the NDS published allowable design stresses for the lumber species using grade number 3 when used for _____ and may use grade number 1 when used for beams, posts or timbers.

a. Studs
b. Stringers
c. Rafters or joists
d. All of the above

9. STRUCTURAL STANDARDS. *Masonry.* The design and construction of masonry shall conform to the following standards:

1. ACI 530, Building Code Requirements for Masonry Structures.
2. ACI 530.1, Specification for Masonry Structures.

a. True
b. False

10. STRUCTURAL STANDARDS. *Whole logs.* Dwellings constructed of whole logs shall conform to ICC 600, Standard on the Design and Construction of Log Structures.
Note: This standard requires the minimum log diameter to be 12 inches.

a. True
b. False

Questions 11 to 29 (Refer to Review Materials SPS 321.03 Exits and 321.035 Interior Circulation)

11. DOORS USED FOR EXITING. 4. (b) All exit doors shall be openable from the interior without the use of a key.

a. True
b. False

12. EXITS FROM BASEMENTS AND GROUND FLOORS. *Basement and ground floors used for sleeping.*
1. Basements and ground floors used for sleeping shall be provided with at least _____.

a. one exit
b. two exits
c. one exit and one small window
d. Three exits

13. EXITS FROM THE FIRST FLOOR. (a) Except as allowed under par. (h), every dwelling unit shall be provided with at least ____ exit doors accessible from the first floor.

a. one
b. two
c. three
d. none of the above

14. EXITS FROM THE FIRST FLOOR. (b) Both exits shall discharge to grade and may not go through a garage. This exit may include interior or exterior stairs.

a. True
b. False

15. TWO−FAMILY DWELLINGS. In a 2−family dwelling, each dwelling unit _____ provided with exits in compliance with this section.

a. shall be
b. can be
c. may be
d. could be

16. WINDOWS USED FOR EXITING (b) 1. The nominal size of the net clear window opening shall be _____ irrespective of height or width. Nominal dimensions shall be determined by rounding up fractions of inches if they are 1/2−inch or greater or rounding down fractions of inches if they are less than 1/2−inch.

a. not more than 20 inches by 24 inches
b. at least 22 inches by 24 inches
c. at least 20 inches by 24 inches
d. not more than 24 inches by 20 inches

17. EXITS ABOVE THE SECOND FLOOR (b) A second stairway or ramp exit is not required for habitable areas on a third floor that meet all of the following requirements:

1. The habitable area consists of a single room.

Note: Non−habitable areas, such as closets and bathrooms may be partitioned off.

2. The room is not used for sleeping.
3. The habitable area has a floor area of 400 square feet or less.
4. There is at least one egress window meeting the requirements of sub. (6) in the habitable area.

a. True
b. False

18. EXITS ABOVE THE SECOND FLOOR (c) A second stairway or ramp exit is required for habitable areas on a third floor that meet all of the following requirements:

1. The dwelling is fully sprinklered in accordance with NFPA 13R or NFPA 13D.
2. If a required exit includes an attached garage, the garage shall be sprinklered.

a. True
b. False

19. WINDOWS USED FOR EXITING (d) 1. For any window used for exiting, the lowest point of clear opening shall be no more than _____ above the floor.

a. 30 inches
b. 48 inches
c. 50 inches
d. 60 inches

20. EXITS ABOVE THE SECOND FLOOR. (a) Except as provided under pars. (b) and (c), each habitable floor above the second floor shall be provided with at least 2 exits that meet all of the following requirements:
1. The exits shall be _____ that lead to the second floor or discharge to grade.
2. The exits shall be located such that an exit is accessible to the second floor if another exit is blocked.

a. ramps
b. stairways
c. stairways or ramps
d. none of the above

21. BALCONIES: Balconies which are required for exit purposes shall also comply with all of the following requirements:
1. The balcony guardrail shall terminate no more than 46 inches above the floor level of the balcony.
2. The floor level of the balcony shall be no more than _____ above the grade below.
3. The floor of the balcony shall have minimum dimensions of 3 feet by 3 feet. The guard and its supports may infringe on the dimensions of the required area no more than 4.5 inches.

a. 10 feet
b. 15 feet
c. 18 feet
d. 20 feet

22. EXITS FROM LOFTS. At least one stairway exit shall be provided, to the floor below, for a loft exceeding _____ square feet in area. At least one stairway or ladder exit shall be provided to the floor below for a loft, 400 square feet or less, in area.

a. 300
b. 400
c. 450
d. 500

23. DOORS USED FOR EXITING. (a) Doors used for exiting from a dwelling shall meet the following dimensions:
1. At least one exit door shall be a swing-type door at least 80 inches high by _____ wide.
2. Except as allowed under subds. 3. And 4., other required exit doors shall be at least 76 inches high by 32 inches wide.
3. Where double doors are used as a required exit, each door leaf shall provide a clear opening at least 30 inches wide and be at least 76 inches high.
4. Where sliding doors are used as a required exit, the clear opening shall be at least 29 inches wide and be at least 76 inches high.

a. 29 inches
b. 32 inches
c. 34 inches
d. 36 inches

24. EXITS FROM BASEMENTS AND GROUND FLOORS. (a) *General.* Except as provided in par. (b), all basements and ground floors shall be provided with at least _____ of the following types:
1. A door to the exterior of the dwelling.
2. A stairway or ramp that leads to the floor above.

a. one exit
b. two exits
c. three exits
d. none of the above

25. WINDOWS USED FOR EXITING. 5. a. Ladders or other stairs used to comply with subd. 4. May infringe on the required area of the areaway by a maximum of 6 inches.
b. Ladder rungs shall have a minimum inside width of at least 12 inches and shall project at least 3 inches from the wall behind the ladder.
c. Ladder rungs shall be able to support a concentrated load of 200 pounds.
d. Ladder rungs shall have a maximum rise of 12 inches between rungs and shall extend to within 12 inches of exterior grade.

a. True
b. False

26. EXITS FROM THE SECOND FLOOR. (a) At least 2 exits shall be provided from the second floor. At least one of the exits shall be a stairway or ramp and lead to the first floor or discharge to grade. The second exit may be via a stairway or ramp that discharges to grade, or to a balcony which complies with sub. (8), or to a deck that complies with s. SPS 321.225 and that is _____ above the grade below.

a. no more than 12 feet
b. no more than 13 feet
c. no more than 14 feet
d. no more than 15 feet

27. KITCHENS. (a) There shall be at least 20 inches of clearance between a wall, a permanently− installed kitchen island, permanently−installed kitchen cabinets and the following kitchen appliances, if provided:
1. A range, cook top or oven.
2. A sink, refrigerator or freezer.

(b) Measurements shall be taken from the face of the wall, island, cabinet or appliance, ignoring knobs and handles.

a. True
b. False

28. DOORS AND OPENINGS. All doors and openings to the following areas shall be _____ 80 inches high and provide either a net clear opening width of 30 inches or be a 32−inch door:

(a)Except as provided under pars. (b) and (c), all entrances into common use areas.
(b)At least 50% of the bedrooms.
(c) 1. At least one full bathroom, including doors or openings to a sink, toilet and tub or shower. If this bathroom is accessible only through a bedroom, the bedroom door shall meet the minimum width requirements of this section.
2. If one or more full bathrooms are provided on the first floor, the bathroom meeting the requirements under this section shall be on the first floor.

Note: This section does not require a full bathroom on the first floor.

a. at least
b. no more than
c. a maximum of
d. none of the above

29. HALLWAYS. (a) Except as allowed under par. (b), the clear width of hallways shall be at least 36 inches.
(b) The following are allowed to infringe on the required clear width of a hallway:
1.Door hardware and finish trim.
2. Handrails may infringe into the minimum width of a hallway up to 41/2 inches on each side.
3. Heating registers may infringe into the minimum width of a hallway up to 41/2 inches and no part of the register may be more than 38 inches above the floor.
4. Ducts, pipes, light fixtures, structural features, and corner treatments that are within 84 inches of the floor may infringe into the minimum width of a hallway by a maximum of 41/2 inches on each side.
5. Unlimited infringements are allowed in a hallway more than 84 inches above the floor.

a. True
b. False

Questions 30 to 70 (Refer to Review Materials SPS 321.04 Stairways and Elevated Areas)

30. LANDINGS. (c) *Doors at landings.* Except as provided in subds. 1. to 3. and par. (d), level landings shall be provided on each side of any door located at the top or base of a stair, regardless of the direction of swing. In the following exceptions, a stairway between a dwelling and an attached garage, carport or porch is considered to be an interior stair:
1. A landing is not required between the door and the top of interior stairs if the door does not swing over the stairs.
2. A landing is not required between the door and the top of an interior stairs of 1 or 2 risers regardless of the direction of swing.
3. A landing is not required between a sliding glass door or an in−swinging glass door and the top of an exterior stairway of 3 or fewer risers.

a. True
b. False

31. LANDINGS. *Exterior landings.* The exterior landing, platform, or sidewalk at an exterior doorway shall be located a _____ below the interior floor elevation, be sloped away from the doorway at a minimal rate that ensures drainage, and have a length of at least 36 inches in the direction of travel out of the dwelling.

a. minimum of 4 inches
b. maximum of 4 inches
c. maximum of 8 inches
d. minimum of 8 inches

32. DETAILS. (a) *Width.* 1. Except for spiral staircases under subd. 2., stairways shall measure at least _____ in width.

a. 32 inches
b. 34 inches
c. 36 inches
d. 40 inches

33. SCOPE. (a) *General.* Except as provided under par. (b), the following stairways shall conform to the requirements of this section.
1. Every interior and exterior stairway attached to, or supported by any part of the structure covered under this code.
2. Tub access steps, unless they are an integral part of an approved plumbing product.
(b) *Exceptions.* The following stairways are not required to comply with the requirements of this section:
1. Stairways leading to non−habitable attics or crawl spaces.
2. Non−required stairways connecting the basement directly to the exterior of the structure without communicating with any other part of the structure.

a. True
b. False

34. DETAILS. (a) *Width.* Handrails and associated trim may project a maximum of _____ inches into the required width at each side of the stairway.

a. 2 inches
b. 3.5 inches
c. 4 inches
d. 4.5 inches

35. DETAILS. *Winder treads in series.* Two or more winder treads may be placed immediately adjacent to each other anywhere in a stairway provided both of the following conditions are met:
a. The winder treads shall have a minimum tread depth of _____measured at a point 12 inches from the narrow end of the tread.

a. 6 inches
b. 7 inches
c. 8 inches
d. 9 inches

36. DETAILS. (a) *Width.* (2) Spiral staircases shall be at least_____ inches wide measured from the outer edge of the supporting column to the inner edge of the handrail.

a. 26 inches
b. 30 inches
c. 32 inches
d. 36 inches

37. DETAILS. 4. *'Individual winder treads.'* a. An individual winder tread may be placed between rectangular treads or at the end of a flight of rectangular treads provided the tread depth, measured at a point 12 inches from the narrow end, is equal to the tread depth of the rectangular steps in the flight.
b. There may be more than one individual winder tread in a stairway or in a flight of stairs.
c. Winder treads may be used on a straight stairway.

a. True
b. False

38. DETAILS. (b) *Riser height.* Except for spiral staircases under subd. 2, risers may not exceed _____ in height measured vertically from tread to tread.

a. 7.5 inches
b. 8 inches
c. 8.5 inches
d. 9 inches

39. HANDRAILS AND GUARDS. (a) *General.* 5. Exterior _____ shall be constructed of metal, decay resistant or pressure−treated wood, or shall be protected from the weather.

a. handrails
b. guards
c. handrails and guards
d. none of the above

40. HANDRAILS AND GUARDS. *Handrails.* 1. 'Height.' Handrails shall be located at least 30 inches, but no more than _____ above the nosing of the treads, except as provided in subds. 1. b. to d. Measurement shall be taken from the hard-structural surface beneath any finish material to the top of the rail. Variations in uniformity are allowed only when a rail contacts a wall or newel post or where a turnout or volute is provided at the bottom tread.

a. 36 inches
b. 38 inches
c. 40 inches
d. 42 inches

41. DETAILS. (b) *Riser height.* At the _____ of a flight, measurement shall be taken from the top of the nosing to the finished floor surface unless the finished surface is carpeting, in which case measurement shall be made to the hard surface below the carpeting.

a. top
b. bottom
c. top and bottom
d. none of the above

42. DETAILS. (b) *Riser height.* Risers in spiral staircases may not exceed _____ in height measured vertically from tread to tread.

a. 7.5 inches
b. 8 inches
c. 9 inches
d. 9.5 inches

43. DETAILS. *Tread depth.* 1. 'Rectangular treads.' Rectangular treads shall have minimum tread depth of _____ measured horizontally from nosing to nosing.

a. 8.5 inches
b. 9 inches
c. 9.5 inches
d. 10 inches

44. LANDINGS. (a) *Intermediate landings.4.* Curved or irregular landings shall have a minimum straight line measurement of _____ between the nosing of the 2 connecting treads measured at a point 18 inches from the narrow end of the landing measured along the nosing of the 2 treads.

a. 20 inches
b. 24 inches
c. 26 inches
d. 28 inches

45. LANDINGS. (b) *Landings at the top and base of stairs.* A level landing shall be provided at the _____ of every stairs except as provided in par. (d). The landing shall be at least as wide as the treads and shall measure at least 3 feet in the direction of travel.

a. top
b. base
c. top and base
d. none of the above

46. DETAILS. *'Spiral staircase treads.'* Spiral staircase treads shall have a _____ from nosing to nosing measured at a point 12 inches from the outer edge of the center column.

a. minimum tread depth of 7 inches
b. maximum tread depth of 7 inches
c. minimum tread depth of 9 inches
d. maximum tread depth of 9 inches

47. DETAILS. (d) *Headroom.* Stairways shall be provided with a minimum headroom clearance of _____ measured vertically from a line parallel to the nosing of the treads to the ceiling, soffit or any overhead obstruction directly above that line.

a. 6 feet
b. 76 inches
c. 6.5 feet
d. 80 inches

48. DETAILS. (d) *Headroom.* The headroom clearance _____ maintained over an intermediate landing.

a. may be
b. can be
c. could be
d. shall be

49. HANDRAILS AND GUARDS (b) *Handrails* 5. 'Size and configuration.' Handrails shall be symmetrical about the vertical centerline to allow for equal wraparound of the thumb and fingers.

a. symmetrical
b. asymmetrical
c. unbalanced
d. none of the above

50. LANDINGS. (a) *Intermediate Landings.* 2. Intermediate landings that connect 2 or more straight flights of stairs, or 2 flights of stairs at a right angle, shall be at least as wide as the treads and shall measure at least _____ in the direction of travel.

a. 30 inches
b. 36 inches
c. 38 inches
d. 40 inches

51. LANDINGS. (a) *Intermediate Landings.* 3. Curved or irregular landing shall have a radius of at least _____.

a. 30 inches
b. 32 inches
c. 34 inches
d. 36 inches

52. DETAILS. (d) *Headroom*. 3.The headroom clearance shall be maintained over a landing that is at the top or bottom of a stairway for a_____ in the direction of travel of the stairway.

a. maximum distance of 36 inches
b. minimum distance of 36 inches
c. maximum distance of 40 inches
d. minimum distance of 40 inches

53. HANDRAILS AND GUARDS. *General.* 2. Guards shall be provided on all open sides of stairs consisting of more than 3 risers and on all open sides of areas that are elevated more than _____ above the floor or exterior grade.
Note: A handrail provided at 30 to 38 inches above the tread nosing meets the height requirement for a guard on a stairway.

a. 20 inches
b. 22 inches
c. 24 inches
d. 26 inches

54. HANDRAILS AND GUARDS. *General.* 3.a. Except as provided in subd. 3. b., guards shall be constructed to prevent the through−passage of a sphere with a diameter of _____, when applying a force of 4 pounds.
b. The triangular area formed by the tread, riser and bottom rail shall have an opening size that prevents the through−passage of a sphere with a diameter of 6 inches, when applying a force of 4 pounds.

a. 4 3/8 inches
b. 6 1/8 inches
c. 8 1/2 inches
d. 10 inches

55. LANDINGS. (a) *Intermediate landings.* A level intermediate landing shall be provided in any stairway with a height of _____.

a. 8 feet or more
b. 10 feet or more.
c. 12 feet or more.
d. 14 feet or more

56. DETAILS. (f) *Open risers*. Stairways with open risers shall be constructed to prevent the through passage of a sphere with a diameter of _____ or larger between any 2 adjacent treads.

a. 4 inches
b. 4.5 inches
c. 5 inches
d. 6 inches

57. HANDRAILS AND GUARDS (c) *Guards.* 1. 'Application.' a. All openings between floors, and open sides of landings, platforms, balconies or porches that are more than _____ above grade or a floor shall be protected with guards.

a. 16 inches
b. 20 inches
c. 24 inches
d. 30 inches

58. DETAILS. *Uniformity.* 1. Within a stairway flight, the greatest tread depth may not exceed the smallest tread depth by more than 3/8 inch and the greatest riser height may not exceed the smallest riser height by more than 3/8 inch.

a. True
b. False

59. DETAILS. *Uniformity*. 2. The allowed variation in uniformity under subd. 1. may not be used to exceed the maximum riser height under par. (b) or to decrease the minimum tread depth under par. (c).

a. True
b. False

60. HANDRAILS AND GUARDS. *Handrails. 6. Continuity.* Handrails shall be continuous for the entire length of the stairs except in any one of the following cases: _____

1. A handrail may be discontinuous at an intermediate landing.
2. A handrail may have newel posts.
3. A handrail may terminate at an intermediate wall provided the lower end of the upper rail is returned to the wall or provided with a flared end, the horizontal offset between the 2 rails is no more than 12 inches measured from the center of the rails, and both the upper and lower rails can be reached from the same tread without taking a step.

a. #1 only
b. #2 only
c. # 3 only
d. All the above…1, 2 and 3

61. HANDRAILS AND GUARDS. *General.* 1. A flight of stairs with more than _____ shall be provided with at least one handrail for the full length of the flight.

a. 2 risers
b. 3 risers
c. 4 risers
d. 6 risers

62. HANDRAILS AND GUARDS. *General. 4.a* Handrails shall be designed and constructed to withstand a _____ load applied in any direction.

a. 150 pound
b. 175 pound
c. 200 pound
d. 225 pound

63. HANDRAILS AND GUARDS. *Guards. 2. 'Height.'* Guards shall extend to at least _____ above the floor or to the underside of a stair handrail complying with s. SPS 321.04 (3) (b). Measurement shall be taken from the hard-structural surface beneath any finish material to the top of the guard.

a. 30 inches
b. 36 inches
c. 40 inches
d. 48 inches

64. HANDRAILS AND GUARDS. *Handrails.* 5.a. Handrails with a round or truncated round cross sectional gripping surface shall have a maximum whole diameter of _____.

a. 2 inches
b. 2.5 inches
c. 3 inches
d. 3.5 inches

65. HANDRAILS AND GUARDS. *Handrails. 2. Clearance* The clearance between a handrail and the wall surface shall be _____.

a. at least 1 inch.
b. at least 1.5 inches.
c. no more than 2 inches.
d. at least 2 inches.

66. HANDRAILS AND GUARDS. *General.* 3.c. _____ or similar materials used in guard infill shall be strung with maximum openings of 3 1/2 inches with vertical supports a maximum of 4 feet apart.

a. Rope
b. Cable
c. a. and b.
d. None of the above

67. HANDRAILS AND GUARDS. *Guards* 1.c. For exterior applications, the 12-inch vertical measurement shall be taken from the lowest point within 2 feet horizontally from the edge of the deck, landing, porch or similar structure.

a. True
b. False

68. HANDRAILS AND GUARDS. *Guards* 1.b. The requirements under subd. 1. a. apply where insect screens are the only means of enclosure or protection for a surface that is more than _____ above grade or a floor.

a. 18 inches
b. 20 inches
c. 22 inches
d. 24 inches

69. HANDRAILS AND GUARDS. *Doors and Landings* 3. A landing is required between a sliding glass door or an in−swinging glass door and the top of an exterior stairway of 5 or fewer risers.

a. True
b. False

70. SCOPE. (b) *Exceptions.* The following stairways are not required to comply with the requirements of this section:
1. Stairways leading to non−habitable attics or crawl spaces.
2. Non−required stairways connecting the basement directly to the exterior of the structure without communicating with any other part of the structure.

a. True
b. False

Questions 71 to 81 (Refer to Review Materials - SPS 321.042 Ladders)

71. The ladder shall have a minimum clearance of at least _____ on either side of the center of the tread.

a. 10 inches
b. 12 inches
c. 14 inches
d. 15 inches

72. Ladders shall be designed to withstand loads of at least _____.

a. 150 pounds
b. 175 pounds
c. 200 pounds
d. 250 pounds

73. Open handrails may be provided with intermediate rails or an ornamental pattern such that a sphere with a diameter of 9 inches or larger cannot pass through.

a. True
b. False

74. The edge of the tread nearest to the wall behind the ladder shall be separated from the wall by at least _____.

a. 3 inches
b. 5 inches
c. 7 inches
d. 9 inches

75. Minimum tread requirements shall be specified in Table 321.042. Treads less than 9 inches in width shall have open risers. All treads shall be _____in dimension.

a. varying
b. uniform
c. incompatible
d. inconsistent

76. Rungs may only be used for ladders with a pitch range of 75degree to 90 degrees. Rungs shall be at least _____ in diameter for metal ladders and 1.5 inches for wood ladders. All rungs shall be uniform in dimension.

a. 1 inch
b. 1.5 inches
c. 2 inches
d. 2.5 inches

77. Handrails shall be designed and constructed to withstand a _____load applied in any direction.

a. 150 pound
b. 175 pound
c. 200 pound
d. 250 pound

78. The width of the ladder shall be a minimum of 20 inches wide and a maximum of _____ wide.

a. 28 inches
b. 30 inches
c. 32 inches
d. 36 inches

79. Handrails shall be required for ladders with pitches less than_____.

a. 45 degrees
b. 55 degrees
c. 65 degrees
d. 75 degrees

80. Handrails shall be located so the top of the handrail is at least 30 inches, but not more than _____, above the nosing of the treads.

a. 34 inches
b. 38 inches
c. 42 inches
d 48 inches

81. For ladders with less than a 65° pitch the vertical clearance above any tread or rung to an overhead obstruction shall be at least 7 feet 4 inches measured from the leading edge of the tread or rung.

a. True
b. False

Questions 82 to 86 (Refer to Review Materials - SPS 321 .045 Ramps)

82. Ramps shall not have a gradient greater than 1 in 8 or one foot of rise in 8 feet of run. Walkways with gradients less than 1 in 20 or one foot of rise in 20 feet of run are _____ to be ramps.

a. not considered
b. considered
c. thought
d. treated

83. A level landing shall be provided at the top, at the foot and at any change in direction of the ramp. The landing shall be at least as wide as the ramp and shall measure at least _____ in the direction of travel.

a. 1 foot 6 inches
b. 2 feet
c. 2 feet 6 inches
d. 3 feet

84. Ramps shall have a slip resistant surface and shall have a _____ measured between handrails.

a. maximum width of 36 inches
b. minimum width of 36 inches
c. maximum width of 40 inches
d. minimum width of 40 inches

85. Handrails shall be provided on all sides of ramps. Every ramp that overcomes a change in elevation of more than 6 inches shall be provided with at least one handrail.

a. True
b. False

86. Open−sided ramps shall have the area below the handrail protected by intermediate rails or an ornamental pattern to prevent the passage of a sphere with a diameter of _____ when applying a force of 4 pounds, except as provided in subd. 2.

a. 4 3/8 inches
b. 4 6/8 inches
c. 7 2/3 inches
d. 8 3/8 inches

Questions 87 to 92 (Refer to Review Materials SPS 321.05 Natural Light and Natural Ventilation)

87. All exhaust ventilation shall terminate outside the building.

a. True
b. False

88. Natural ventilation shall be provided to each habitable room by means of openable doors, skylights or windows. The net area of the openable doors, skylights or windows shall be _____ of the net floor area of the room, except as provided in subd. 2.

a. at least 3.5%
b. at least 4.5 %
c. no more than 3.5%
d. no more than 4.5%

89. (am) Except as provided in par. (bm), glazing shall consist of safety glass meeting the requirements of either 16 CFR Part 1201 or ANSI Z97.1 when installed in any of the following locations:
1. In any sidelight or glazing adjacent to a door, that meets all of the following:
a. The nearest point of the glazing is within 2 feet of the door when the door is in the closed position.
b. The nearest point of the glazing is within 5 feet of the floor.
c. The plane of the glazing is within 30 degrees of the plane of the door when the door is in the closed position.

a. # 1 a.only
b. # 1 b. only
c. # 1 c. only
d. # 1 a., 1 b., and 1 c.

90. Except as provided in par. (bm), glazing shall consist of safety glass meeting the requirements of both 16 CFR Part 1201 or ANSI Z97.1 when installed in any of the following locations:
2. In any wall where the glazing is within 7 feet vertically of the lowest drain inlet and within 5 feet horizontally of the nearest part of the inner rim of a bathtub, hot tub, shower, spa or whirlpool appliance.

a. True
b. False

91. Each habitable room shall be provided with natural light by means of glazed openings. The area of the glazed openings shall be _____ of the net floor area, except under the following circumstances:
(a) *Exception.* Habitable rooms, other than bedrooms, located in basements, ground floors or above garages do not require natural light.
(b) *Exception.* Natural light may be obtained from adjoining areas through glazed openings, louvers or other approved methods. Door openings into adjoining areas may not be used to satisfy this requirement.

a. not more than 6%
b. at least 6%
c. at least 8%
d. not more than 8%

92. (a) *Natural Ventilation*. Balanced mechanical ventilation may be provided in lieu of openable exterior doors, skylights or windows provided the system is capable of providing _____ per hour of fresh outside air while the room is occupied. Infiltration may not be considered as make-up air for balancing purposes.

a. at least one air change
b. at least two air changes
c. not more than one air change
d. not more than two air changes

Questions 93 to 106 (Refer to Review Materials SPS 321.06 Ceiling Height; SPS 321.07 Attic and Crawl Space Access; SPS 321.08 Fire Separation and Dwelling Unit Separation)

93. CEILING HEIGHT. All habitable rooms, kitchens, hallways, bathrooms and corridors shall have a ceiling height of at least_____.

a. 6 feet
b. 7 feet
c. 8 feet
d. 9 feet

94. CEILING HEIGHT. (1) (a) Rooms may have ceiling heights of less than 7 feet provided _____ of the room's floor area has a ceiling height of at least 7 feet. Any area with a ceiling height of less than 5 feet may be ignored in this calculation.

a. at least 50%
b. at least 60%
c. at least 70%
d. at least 80%

95.CRAWL SPACES. Crawl spaces with _____of clearance or more between the crawl space floor and the underside of the house floor joist framing shall be provided with an access opening of at least 14 by 24 inches.

a. 12 inches
b. 16 inches
c. 18 inches
d. 24 inches

96. ATTIC. Attics with 150 or more square feet of area and 30 or more inches of clear height between the top of the ceiling framing and the bottom of the rafter or top truss chord framing shall be provided with an access opening of _____, accessible from inside the structure.

a. at least 10 X 24 inches
b. at least 12 X 24 inches
c. at least 14 X 24 inches
d. at least 16 X 24 inches

97. FIRE SEPARATION. *Attached garages*. _____ separations between an attached garage and a dwelling shall extend from the top of a concrete or masonry foundation to the underside of the roof sheathing or fire-resistive ceiling construction.

a. Level
b. Vertical
c. Horizontal
d. Parallel

98. FIRE SEPARATION. Dwelling units shall be separated from garage spaces, accessory buildings, property lines and other dwelling units in accordance with Table 321.08 and the following requirements:

TABLE 321.08

Between Dwelling And:	Distance Between Objects[1]	Fire Rated Construction[2, 5]
Detached garage or accessory building on same property	Less than 5 feet	¾ - hour wall[3] 1/3 hour door or window[3]
Another dwelling on same property	Less than 5 feet	¾ - hour wall[4] 1/3 hour door or window[4]
Detached garage, accessory building or other dwelling on same property	5 to 10 feet	¾ - hour wall[3] 1/3 hour door or window[3]
Detached garage, accessory building, or other dwelling on same property	More than 10 feet	No requirements
Property Lines	Less than 3 feet	¾ -hour wall 1/3- hour door or window
Property Lines	3 feet or more	No requirements
Zero Lot Line	None	Follow sub. (2) (d) requirements

[1]Distance shall be measured perpendicular from wall to wall or property line, ignoring overhangs.

2 Fire rated construction shall protect the dwelling from an exterior fire source.

3 Fire rated construction may be in either facing wall.

4 Fire rated construction shall be in both facing walls.

5 The methods for garage separation in par. (a) 1. are examples of ¾ hour wall construction.

a. True
b. False

99. FIRE SEPARATION. *Attached garages.* 1. The walls and ceiling between an attached garage and any portion of the dwelling, including attic or soffit areas, shall be 3/4−hour fire−resistive construction or shall be constructed as specified in any of the following:

a. One layer of 5/8−inch Type X gypsum drywall _____ be used on the garage side of the separation wall or ceiling.

b. One layer of 1/2−inch gypsum drywall _____ be used on each side of the separation wall or ceiling.

c. Two layers of 1/2−inch gypsum drywall _____ be used on the garage side of the separation wall or ceiling.

a. must/ can/ shall
b. can/ should/ shall
c. should/ shall/ must
d. shall/ shall/ shall

100. FIRE SEPARATION. *Doors.* 1. The door and frame assembly between the dwelling unit and an attached garage can be labeled by an independent testing agency as having a minimum fire−resistive rating of 20 minutes. The test to determine the 20−minute rating is required to include the hose stream portion of the test.

Note: Acceptable tests for fire rating of door assemblies include ASTM E−152, UL 10B, and NFPA 252.

a. True
b. False

101. FIRE SEPARATION. *Attached garages*. 2. For all methods listed under subd. 1., drywall joints shall comply with one of the following:

a. Joints shall be taped or sealed.

b. Joints shall be fitted so that the gap is no more than 1/20−inch with joints backed by either solid wood or another layer of drywall such that the joints are staggered.

Note: 1/20−inch is approximately the thickness of a U.S. dime.

a. True
b. False

102. FIRE SEPARATION. *Other openings.* 1. Access openings in fire separation walls or ceilings shall be protected in one of the following ways:

a. The opening is protected with a material that has a finish rating of at least 20 minutes.

b. The opening is protected in the same way as the wall or ceiling where the opening is located.

a. True
b. False

103. DWELLING UNIT SEPARATION. *Attic separation.* Dwelling units with attic space that extends over one of the units shall be separated in accordance with one of the following:

1. 'Complete separation.' The units shall be provided with wall construction under par. (d) that cannot extend all the way to the underside of the roof deck.

2. 'Vertical and horizontal separation.'

a. The units shall be provided with wall construction under par. (d) that extends to the dwelling unit ceiling and ceiling construction under par. (e).

b. Dwelling units using this method of separation shall not provide attic draft stopping under par. (f) that extends all the way to the underside of the roof deck above and in line with the separation wall.

a. True
b. False

104. DWELLING UNIT SEPARATION. (c) *Doors*. Any door installed in the dwelling unit separation shall have the door and frame assembly labeled by an independent testing agency as having a minimum fire resistive rating of _____. The test to determine the _____ rating is not required to include the hose stream portion of the test.

a. 20 minutes / 20 minute
b. 30 minutes / 25 minute
c. 25 minutes / 30 minute
d. 30 minutes / 30 minute

105. DWELLING UNIT SEPARATION. *Walls.* Walls in the dwelling unit separation shall be protected by not less than one layer of 5/8−inch Type X gypsum wallboard or 2 layers of 1/2−inch gypsum wallboard or equivalent on each side of the wall with joints in compliance with sub. (1) (a) 2.

a. True
b. False

106. DWELLING UNIT SEPARATION. *Draft stopping for concealed roof spaces and attics.*

1._____ shall be draft stopped above and in line with the separation wall.

2. Acceptable draft stopping materials include:

a. 3/8−inch wood structural panel.

b. 1/2 -inch gypsum board.

a. Attic areas
b. Mansards and overhangs
c. Other concealed roof spaces
d. All of the above

Questions 107 to 113 (Refer to Review Materials SPS 321.085 Fireblocking; SPS 321.09 Smoke Detectors and SPS 321.095 Automatic Fire Sprinklers)

107. FIREBLOCKING LOCATIONS. Fireblocking shall be provided in all of the following locations:
(a) In concealed spaces of walls and partitions, including furred spaces, at the ceiling and floor levels.
(b) At all interconnections between concealed vertical and horizontal spaces including the attachment between a carport and a dwelling.
(c) In concealed spaces between stair stringers at the top and bottom of the run and at any intervening floor level.
(d) At all openings around wires, cables, vents, pipes, ducts, chimneys and fireplaces at ceiling and floor level.

a. (b) and (d)
b. (a), (b), (c) and (d)
c. (a), (b) and (d)
d. (a), (b), and (c)

108. AUTOMATIC FIRE SPRINKLERS. (1) Except as provided in subs. (2) and (3), the design, installation, testing and maintenance of automatic fire sprinklers shall conform to NFPA 13D.
(2) (a) The requirements of NFPA 13D sections 6.3 (4), 8.1.3 and 8.6 are not included as part of this code.
(b) Fire department connections are prohibited in multipurpose piping systems.
(3) (a) Limited area automatic fire sprinkler systems are allowed in dwellings.
(b) 1. A limited area automatic fire sprinkler system shall add the following wording to the warning sign required in 6.3(5) of NFPA 13D: “The number and location of sprinklers in this system does not conform to NFPA 13D.”

a. True
b. False

109. FIREBLOCKING MATERIALS. Fireblocking shall consist of one of the following:
(a) 2-inch nominal lumber.
(b) Two layers of one-inch nominal lumber.
(c) One thickness of 3/4−inch nominal plywood or wood structural panel with any joints backed with the same material.
(d) One thickness of 1/2−inch gypsum wallboard, face nailed or face screwed to solid wood, with any joints backed with the same material.
(e) Fiberglass or mineral wool batt insulation may be used if both of the following conditions are met:
1. The least dimension of the opening may not exceed 4 inches.
2. The batt shall be installed to fill the entire thickness of the opening or stud cavity.
(f) For wires, cables, pipes and vents only, non-shrinking caulk, putty mortar, or similar material may be used provided no dimension of the opening exceeds 1/2 inch around the penetrating object.
(g) For chimneys, fireplaces and metal vents, fireblocking shall be metal, cement board or other noncombustible material.

a. (a), (c) and (e)
b. (b), (d) and (f)
c. (a), (b), (c), (d), (e), (f) and (g)
d. (a), (b), (c), (f) and (g)

110. SMOKE DETECTORS. A listed and labeled multiple−station smoke alarm with battery backup shall be installed in all of the following locations:
a. An alarm shall be installed inside each sleeping room.
b. On floor levels that contain one or more sleeping areas, an alarm shall be installed inside of the sleeping rooms, within 15 feet of the centerline of the door opening and in an exit path from any sleeping room.
c. On floor levels that do not contain a sleeping area, an alarm shall be installed in a common area on each floor level.

a. True
b. False

111. SMOKE DETECTORS. (2) (a) Except for dwellings with no electrical service, smoke detectors required by this section shall be continuously powered by the house electrical service, and shall be interconnected so that activation of one detector will cause activation of all detectors.
Note: Wireless interconnectivity is permitted under this paragraph.
(b) Dwellings with no electrical service shall be provided with battery−powered smoke detectors in the locations under sub. (1). Interconnection and battery−backup are not required in these dwellings.

a. True
b. False

112. SMOKE DETECTORS. (5) For envelope dwellings, at least _____ smoke alarms shall be placed in the air passageways. The alarms shall be placed as far apart as possible.

a. one
b. two
c. three
d. four

113. SMOKE DETECTORS. (4) Smoke alarms and detectors shall be maintained in accordance with _____.

a. the manufacturer's specifications
b. Municipal ordinances
c. County ordinances
d. Federal ordinances

Questions 114 to 121 (Refer to Review Materials SPS 321.097 Carbon Monoxide Alarms SPS 321.10 Protection Against Decay and Termites; SPS 321.11 Foam Plastics, SPS 321.115 Installation of Elevators or Dumbwaiters)

114. FOAM PLASTIC. (c) The following applications of foam plastic do not require a thermal barrier: _____
1. On overhead garage doors.
2. In the box sill of the basement or ground floor, above the bottom of the floor joists.

a. #1
b. #2
c. #1 and #2
d. None of the above.

115. FOAM PLASTIC. (2) Insulation that does not meet the requirements of this section may be approved by the department in accordance with s. SPS 320.18. Approval will be based on tests that evaluate materials or products representative of actual end−use applications.
Note: See s. SPS 322.21 (3) for requirements for protecting foam plastic on the exterior of a dwelling.

a. True
b. False

116. FOAM PLASTIC. (1) Foam plastic insulation shall have a flame spread rating of _____ and a smoke developed rating of 450 or less when tested in accordance with ASTM E−84.

a. 50 or more
b. 75 or less
c. 100 or more
d. 125 or less

117. PROTECTION AGAINST DECAY AND TERMITES. (1) Wood used in any of the applications under this section shall meet all of the following requirements:
a. The wood shall be labeled and pressure treated with preservative in accordance with an AWPA standard or shall be naturally durable and decay−resistant or shall be engineered to be decay resistant.
b. The wood shall be pressure treated with preservative or shall be naturally termite−resistant unless additional steps are taken to make the wood termite−resistant.

a. True
b. False

118. PROTECTION AGAINST DECAY AND TERMITES. (5) (a) Fasteners for pressure−preservative treated wood and fire−retardant−treated wood shall meet all of the following requirements:
1. The fastener is a steel bolt with a diameter of 0.5 inch or greater.
2. The fastener is not made with stainless steel.
3. The fastener is made of hot−dipped, zinc−galvanized steel with the coating weight and thickness labeled as complying with ASTM A 153.
4. The fastener is made of steel with a mechanically−deposited zinc coating labeled as complying with ASTM B 695, Class 55 or greater.
5. The fastener has coating types and weights in accordance with the fastener manufacturer's recommendations. In the absence of the manufacturer's recommendations subd. 1., 2., 3., or 4. shall apply.
Note: "Zinc plated," "zinc coated," "chrome plated," etc., fasteners do comply with all of these standards.

a. True
b. False

119. CARBON MONOXIDE ALARMS (2) *NEW CONSTRUCTION*. (a) *General.* Except as provided in sub. (4), listed and labeled carbon monoxide alarms can be installed and maintained in accordance with s. 101.647 (2) to (6), Stats., in one and 2−family dwellings, for which building permit applications were made or construction commenced on or before February 1, 2019.

a. True
b. False

120. CARBON MONOXIDE ALARMS *Electrical service and interconnection.* 1. Except as provided in subd. 2., carbon monoxide alarms _____ continuously powered by the house electrical service, _____ a backup power supply and shall be interconnected so that activation of one alarm will cause activation of all alarms.

a. can be/ can have
b. shall be/ shall have
c. may be / may have
d. shall be / can have

121. PROTECTION AGAINST DECAY AND TERMITES. (4) All pressure−treated wood and plywood shall be identified by a quality mark or certificate of inspection of an approved inspection agency which maintains continued supervision, testing and inspection over the quality of the product.
Note: Heartwood of redwood, cypress, black walnut, catalpa, chestnut, sage orange, red mulberry, white oak, or cedar lumber are considered by the department to be naturally decay−resistant._____ are considered by the department to be naturally termite resistant.

a. Heartwood of bald cypress and redwood
b. Redwood and eastern red cedar
c. Heartwood of bald cypress, redwood and eastern red cedar
d. None of the above

Questions 122 to 136 (Refer to Review Materials SPS 321.12 Drainage; SPS 321.125 Erosion Control and Sediment Control; SPS 321.13 Excavations Adjacent To Adjoining Property; SPS 321.14 Excavations for Footings and Foundations)

122. EXCAVATIONS ADJACENT TO ADJOINING PROPERTY. (1*) Notice*. The 15-day time limit for written notification may be waived if such waiver is signed by the owner(s) or tenant(s) of the adjoining properties.

a. True
b. False

123. EXCAVATIONS ADJACENT TO ADJOINING PROPERTY. (a) *Excavations less than _____ in depth.* If the excavation is made to a depth of _____ or less below grade, the person making or causing the excavation shall not be responsible for any necessary underpinning or extension of the foundations of any adjoining buildings.

a. 12 feet
b. 10 feet
c. 16 feet
d. 14 feet

124. EXCAVATIONS ADJACENT TO ADJOINING PROPERTY. (1) *Notice.* Any person making or causing an excavation which may affect the lateral soil support of adjoining property or buildings shall provide at least _____written notice to all owners of adjoining buildings of the intention to excavate. The notice shall state that adjoining buildings may require permanent protection.

a. 10 days
b. 15 days
c. 20 days
d. 30 days

125. EXCAVATIONS FOR FOOTINGS AND FOUNDATIONS. (1) *Excavations Below Footings and Foundations.* No excavation _____ be made below the footing and foundation unless provisions are taken to prevent the collapse of the footing or foundation.

a. shall
b. should
c. may
d. can

126. DRAINAGE. (3) *Obstructions.* Where lot lines, walls, slopes, or other barriers prevent having the _____ in sub. (2), swales or other means shall be provided to ensure equivalent drainage away from the dwelling.

a. 10-foot distance
b. 11-foot distance
c. 12-foot distance
d. 13-foot distance

127. DRAINAGE. (1) *Grade*. The finished grade of the soil shall slope away from the dwelling at a rate of at least ½ inch per foot for at least _____, except as provided in subs. (2) and (3).

a. 5 feet
b. 10 feet
c. 20 feet
d. 30 feet

128. EROSION CONTROL AND SEDIMENT CONTROL. *Monitoring*. The owner or owner's agent shall check the erosion and sediment control practices for maintenance needs which of the following intervals until the site is stabilized:
1. At least weekly.
2. Within 24 hours after a rainfall event of 0.5 inches or greater. A rainfall event shall be considered to be the total amount of rainfall recorded in any continuous 24-hour period.
3. At all intervals cited on the erosion and sediment control plan.

a. #1
b. #2 and #3
c. #1, #2 and #3
d. #1 and #3

129. EROSION CONTROL AND SEDIMENT CONTROL. *Maintenance*. A municipality shall not enact more stringent requirements regarding cleanup of soil or sediment deposition onto public ways.

a. True
b. False

130. EROSION CONTROL AND SEDIMENT CONTROL. *Soil loss analysis*. Potential soil loss shall be determined using an engineer analytical modeling acceptable to the department.
Note: The Revised Universal Soil Loss Equation II is an example of an acceptable model to determine soil loss.

a. True
b. False

131. EROSION CONTROL AND SEDIMENT CONTROL. *Monitoring*. The owner or owner's agent shall maintain a monitoring record when the land disturbing construction activity involves one or more acres.

a. True
b. False

132. EROSION CONTROL AND SEDIMENT CONTROL. *Maintenance.* When the failure of erosion or sediment control practices results in an immediate threat of sediment entering public sewers or the waters of the state, procedures might be implemented immediately to repair or replace the practices.
Note: See ch. SPS 325 Appendix A for further explanatory material.

a. True
b. False

133. EROSION CONTROL AND SEDIMENT CONTROL. *General*. Land disturbing construction activities, except those activities necessary to implement erosion or sediment control practices, may not begin until the sediment control practices are in place for each area to be disturbed in accordance with the approved plan.

a. True
b. False

134. EROSION CONTROL AND SEDIMENT CONTROL. *General*. Where land disturbing construction activity is to occur, erosion and sediment control practices shall be employed, as necessary, and maintained to prevent or reduce the potential deposition of soil or sediment to which of the following:
1. The waters of the state.
2. Adjacent properties

a. #1
b. #2
c. #1 and #2
d. None of the above

135. EROSION CONTROL AND SEDIMENT CONTROL. *Mandated Practices*. Specific practices at each site where land disturbing construction activity is to occur shall be utilized to prevent or reduce _____:
(a) The deposition of soil from being tracked onto streets by vehicles.
(b) The discharge of sediment from disturbed areas into on− site storm water inlets.
(c) The discharge of sediment from disturbed areas into abutting waters of the state.
(d) The discharge of sediment from drainage ways that flow off the site.
(e) The discharge of sediment by dewatering activities.
(f) The discharge of sediment eroding from soil stockpiles existing for more than 7 days.

a. one of the following
b. all of the following
c. none of the following

136. EROSION CONTROL AND SEDIMENT CONTROL. *Control Standards*. Including the practices under sub. (2), additional erosion and sediment control practices shall be employed, as necessary, to accomplish one of the following:
(a) A potential annual cumulative soil loss rate of not more than one of the following:
1. Five tons per acre per year where sand, loamy sand, sandy loam, loam, sandy clay loam, clay loam, sandy clay, silty clay or clay textures are exposed.
2. Seven and a half tons per acre per [year] where silt, silty clay loam or silt loam textures are exposed.
(c) A reduction of at least _____ of the potential sediment load in storm water runoff from the site on an average annual basis as compared with no sediment or erosion controls for the site where less than one acre of land disturbing construction activity is to occur.
Note: See ch. SPS 325 Appendix A for further explanatory material regarding compliance solutions for 80 and 40% reductions.

a. 25%
b. 30%
c. 35%
d. 40%

Questions 137 to 144 (Refer to Review Materials SPS 321.15 Footings; SPS 321.16 Frost Protection; SPS 321.17 Drain Tiles)

137. FOOTINGS. *Size and Type*. Unless designed by structural analysis, unreinforced concrete footings shall comply with the following requirements:

(a) Continuous footings. The minimum width of the footing on each side of the foundation wall shall measure at least _____ wider than the wall. The footing depth shall be at least 8 inches nominal. Footing placed in unstable soil shall be formed. Lintels may be used in place of continuous footings when there is a change in footing elevation. Note: Unstable soil includes soils that are unable to support themselves at a 90 degree angle for the full depth of the footing.

a. 2 inches
b. 4 inches
c. 6 inches
d. 8 inches

138. FOOTINGS. *Size and Type*. Unless designed by structural analysis, unreinforced concrete footings shall comply with the following requirement:

(b) Column or pier footing. 1. The minimum width and length of column or pier footings shall measure at least 2 feet by 2 feet.

2. The minimum depth of column or pier footings shall measure at least _____ nominal.

a. 8 inches
b. 10 inches
c. 12 inches
d. 16 inches

139. FOOTINGS. *General*. (a) The dwelling and attached structures, such as decks and garages, shall be supported on a structural system designed to transmit and safely distribute the loads to the soil.

(b)The loads for determining the footing size shall include the weight of the live load, roof, walls, floors, pier or column, plus the weight of the structural system and the soil over the footing.

(c) Footings shall be sized to not exceed the allowable material stresses.

(d)The bearing area shall be at least equal to the area required to transfer the loads to the supporting soil without exceeding the bearing capacity of the soil.

(e) 1. Structures supported on floating slabs or similar shallow foundations may not be physically attached to structures that are supported by footings that extend below the frost line unless an isolation joint is used between the structures, except as provided in subd. 2. This isolation shall extend for the full height of the structure.

a. True
b. False

140. FOOTINGS. *Size and Type.* Footing for chimneys or fireplaces shall extend at least _____ on each side of the chimney or fireplace. The minimum depth shall measure at least 12 inches nominal.

a. 2 inches
b. 3 inches
c. 4 inches
d. None of the above

141. FOOTINGS. *Soil–Bearing Capacity*. No footing or foundation shall be placed on soil with a bearing capacity of less than 1,500 pounds per square foot unless the footing or foundation has been designed through structural analysis. The soil–bearing values of common soils may be determined through soil identification.

a. True
b. False

142. FROST PROTECTION. *Exceptions.* (a) Frost protected shallow foundations shall be designed in accordance with ASCE–32 as adopted in Table SPS 320.24–5.

(b) Portions of footings or foundations located directly under window areaways do not require frost protection provided the rest of the foundation is protected in accordance with this section.

(c) Footings and foundations may bear directly on bedrock less than 40 inches below adjacent grade provided all of the following conditions are met.

1.The rock shall be cleaned of all earth prior to placement.

2. All clay in crevices of the rock shall be removed to the level of frost penetration or to 4 times the width of the rock crevice, whichever is less.

3. Provisions shall be taken to prevent water from collecting anywhere along the foundation.

a. True
b. False

143. DRAIN TILE. *Optional systems.* (a) *New construction.* 1. For new dwelling construction, a municipality or registered UDC inspection agency may determine the soil types and natural or seasonal groundwater levels for which a complete drain tile or pipe system is required.

2. For new dwelling construction, a municipality may not enact requirements for other than complete drain tile or pipe systems.

a. True
b. False

144. DRAIN TILE. *Material and Installation requirements for Required Systems.* (d) Drain tile or pipe installation. Drain tile or pipe used for foundation drainage shall comply with the following requirements:

1. a. Except as allowed under subd. 1. b., the top of the tile or pipe shall be at or below the top of the footing.

b. Where the top of the footing is more than _____ below the bottom of the floor slab, tile or pipe is required on the interior of the foundation only and it shall be placed directly under the floor.

Note: This situation will commonly occur with a walk–out basement.

a. 2 inches
b. 4 inches
c. 6 inches
d. 8 inches

Questions 145 to 151 (Refer to Review Materials SPS 321.18 Foundations)

145. GENERAL. *Anchor bolts.* Structural steel anchor bolts, at least ½ inch in diameter, embedded at least _____ into the concrete or grouted masonry with a maximum spacing of 72 inches and located within 18 inches of wall corners.

a. 4 inches
b. 5 inches
c. 7 inches
d. 9 inches

146. GENERAL. *Lateral support at base.* Lateral support such as floor slabs or framing shall be provided at the base of foundation walls.

a. True
b. False

147. GENERAL. *Floor Framing.* 1. Floor framing shall be fastened to the sill plate by ____ of the following methods:
a. Mechanical fasteners used in accordance with the manufacturer's testing and listing.
b. In accordance with structural analysis.
c. In accordance with the fastener table printed in ch. SPS 325 Appendix A.
Note: Per s. SPS 321.22 (1), sill plates are not required on foundation walls of poured concrete or on masonry walls with mortar– or grout–filled cores or on masonry walls with a solid block top course.

a. one
b. all
c. none

148. GENERAL. *Floor Framing*. 2. a. Where the floor framing is parallel to the foundation wall, solid blocking or bridging shall be installed in at least the first adjacent joist space at a spacing of no more than _____ on center.
b. Blocking and bridging shall be the same depth as the joist.
c. Fastening of the blocking or bridging shall be in accordance with structural analysis or the fastener schedule in Table 321.02-2.

a. 16 inches
b. 32 inches
c. 48 inches
d. 64 inches

149. WOOD FOUNDATIONS. Wood foundations can be designed and constructed in accordance with the standard adopted in Table 320.24–2.
Note: The department shall not accept Permanent Wood Foundations Design and Construction Guide published by the Southern Forest Products Association through the Southern Pine Council, as complying with this standard. The Design and Construction Guide requires a 5-inch-thick floor slab if a poured concrete floor slab is used.

a. True
b. False

150. MASONRY FOUNDATION WALLS. (a) *Dampproofing.* 1. Except as allowed under subd. 3., masonry block foundation walls shall be coated with a layer of minimum $^{3}/8$–inch thick type M or S portland cement mortar parging on the exterior of the wall from footing to finished grade.
2. Masonry foundation walls shall be damp–proofed by applying to the exterior surface of the portland cement parging from footing to finished grade, a continuous coating of (which of the following) _____:
(a) A bituminous coating applied in accordance with the manufacturer's instructions.
(b) Acrylic–modified cement applied at a minimum rate of 3 pounds per square yard.
(c) A layer of minimum $^{1}/8$–inch thick structural surface bonding material labeled as complying with ASTM C887.
Note: The ASTM C887 standard is entitled, "Standard Specification for Packaged, Dry, Combined Materials for Surface Bonding Mortar."
(d) A waterproofing treatment applied in accordance with the manufacturer's instructions.

a. (a) and (b)
b. (b), (c) and (d)
c. (a), (b) and (d)
d. All of the above - (a), (b), (c) and (d)

151. MASONRY FOUNDATION WALLS. (a) *Dampproofing.* 3. a. Parging of masonry block foundation walls is not required where a dampproofing material is sufficiently flexible to be listed or designed for direct application to masonry block.
b. Parging of masonry block foundation walls is not required where a layer of minimum 1/4−inch thick structural surface bonding material labeled as complying with ASTM C887 is used for dampproofing.

a. True
b. False

Questions 152 to 167 (Refer to Review Materials SPS 321.19 Floor Design; SPS 321.20 Concrete Floors; SPS 321.203 Garage Floors; SPS 321.205 Wood Floors in Contact with the Ground; SPS 321.21 Precast concrete floors; SPS 321.22 Wood Frame Floors; SPS 321.225 Decks)

152. CONCRETE FLOORS. When concrete floors are provided, the thickness of the concrete shall measure at least_____.

a. 2 inches
b. 3 inches
c. 4 inches
d. 5 inches

153. GARAGE FLOORS. The floor shall be sloped such that water is removed in accordance with _____:
(a) Water drains toward the overhead door or to exterior grade such that no damage will be caused to any structural member or wall covering of the garage or the dwelling.
(b) Water drains into an interior floor drain that complies with the requirements of ch. SPS 382.

a. None of the above
b. Only (a)
c. Only (b)
d. Both (a) and (b)

154. GARAGE FLOORS. Garage floors shall be constructed of concrete or other noncombustible materials which are impermeable to petroleum products. Slab−on−grade concrete garage floors shall be at least _____ thick and placed over at least _____ of granular fill.

a. 3 inches / 4 inches
b. 4 inches / 4 inches
c. 5 inches / 3 inches
d. 6 inches / 5 inches

155. WOOD FLOORS IN CONTACT WITH THE GROUND. Wood floors in contact with the ground shall comply with the requirements under s. SPS 321.18 (4).

a. True
b. False

156. PRECAST CONCRETE FLOORS. Precast concrete floors _____ be designed through structural analysis, or load tables furnished by the precast product fabricator may be used, provided the load tables were developed using structural analysis or load testing.

a. shall
b. should
c. can
d. may

157. WOOD FRAME FLOORS. Unless designed through structural analysis, wood frame floors shall comply with the following requirements:
(1) FLOOR JOISTS. (a) *General.* 1. Floor joists shall comply with the structural requirements and dead load determination under s. SPS 321.02.

a. True
b. False

158. WOOD FRAME FLOORS. *Floor Trusses*. Metal plate connected wood floor trusses shall be designed in accordance with the Design Specifications for Metal Plate Connected Parallel Chord Wood Trusses and the National Design Specification for Wood Construction. Truss members shall not be_____.

a. cut
b. notched
c. bored
d. All of the above

159. WOOD FRAME FLOORS. *Girders and beams*. (d) Lateral restraint for all wood beams shall be provided at all columns using a saddle or other approved connection where the beam meets one of the following conditions:
1. The beam is not restrained at both ends.
2. The beam is more than 11.25 inches deep using actual measurement.
Note: A saddle supports the beam on the bottom and allows for the through−connection of fasteners into the side of the beam.

a. True
b. False

160. WOOD FRAME FLOORS. *Bearing and End Configuration. (*a) Sawn lumber. 1. 'Joist.' Wood joists made of sawn lumber shall meet the following bearing requirements:
a. Wood joist supported on wood or metal shall have a bearing surface of at least _____ measured from the end of the joist.

a. 1 ½ inches
b. 2 inches
c. 2 ½ inches
d. 3 inches

161. WOOD FRAME FLOORS. *Bearing and End Configuration.* (d) Wood floor joists with ends that intersect over a beam shall have the ends overlap at least _____ and be securely fastened together with at least two 12d common nails or the ends shall be butt−jointed or face−jointed and fastened with ties, straps, plates or solid blocking.

a. 3 inches
b. 4 inches
c. 6 inches
d. 8 inches

162. WOOD FRAME FLOORS. *Notching and Boring.* Notching and boring of beams or girders is _____.

a. permissible
b. prohibited
c. prohibited unless determined through structural analysis.
d. allowed provided it is less than a 2-inch notch or bore hole.

163. WOOD FRAME FLOORS. *Boring of Floor Joists*. A hole may not be bored in a floor joist within _____of a notch or another hole. In no case shall the distance between adjacent holes be less than the diameter of the larger hole.

a. 2 inches
b. 4 inches
c. 6 inches
d. 12 inches

164. WOOD FRAME FLOORS. *Other Holes*. Holes bored in floor joists that are not within 2 inches of the top or bottom of the joist shall have their diameter limited to_____.

a. ¼ the depth of the joist
b. 1/3 the depth of the joist
c. ½ the depth of the joist
d. 2/3 the depth of the joist

165. WOOD FRAME FLOORS. *Overhanging of Floors*. *Joist overhangs parallel to the main floor framing system*. Joist overhangs that are extensions of, and parallel to, the main floor framing system may extend beyond the depth of the joist without structural analysis provided they meet _____ of the following conditions:
1. The overhang is cantilevered no more than 2 feet beyond the outer edge of the supporting wall below it.
2. a. The overhang supports a uniform load limited to the weight of the bearing wall and the tributary roof area above it.
b. The tributary length of the roof area, excluding the eave overhang, is no more than 2 feet greater than the actual length of the joist directly below.
c. The eave overhang is no more than 2 feet.
3. The joist overhang does not support any concentrated loads. For the purposes of this subsection, a framed opening in the wall with a rough opening of 4 feet or less shall be considered uniform loading.
4. a. The cantilevered joist is doubled at the supporting wall.
b. The doubled joist length extends inward beyond the inner edge of the supporting wall by the same distance as the cantilever.
c. The added joist member is secured to the main joist as stated in the nailing schedule in ch. SPS 325 Appendix A, under the heading for “floor framing, built−up girder and beams, top loaded”.

a. all
b. one
c. two
d. three

166. WOOD FRAME FLOORS. *Floor Openings*. _____ shall be doubled when the span of the header exceeds 4 feet. Headers which span more than 6 feet shall have the ends supported by joist hangers or framing anchors, unless the ends are supported on a partition or beam. Tail joists (joists which frame into headers) more than 8 feet long shall be supported on metal framing anchors or on ledger strips of at least 2 inches by 2 inches nominal.

a. Trimmers
b. Headers
c. Trimmers and headers
d. none of the above

167. (1) Decks attached to dwellings and any detached decks that serve an exit shall comply with the applicable provisions of sub chs. II to X of ch. SPS 321, including _____
(a) Excavation requirements under s. SPS 321.14;
(b) Footing requirements under s. SPS 321.15 (2) (f);
(c) Frost penetration requirements under s. SPS 321.16;
(d) Load requirements under s. SPS 321.02;
(e) Stair, handrail and guard requirements of s. SPS 321.04.
(f) Decay protection requirements of s. SPS 321.10.

a. (a), (c) and (e)
b. (b), (d) and (f)
c. (a), (b), (c), (d), (e) and (f)
d. (a), (c), (d) and (f)

Questions 168 to 213 (Refer to Review Materials SPS 321.23 Wall Design; SPS 321.24 Exterior covering; SPS 321.25 Wood Frame Walls)

168. WALL DESIGN. Walls shall be designed to withstand a horizontal wind pressure of at least 20 pounds per square foot applied to the vertical projection of that portion of the dwelling above grade. _____ wind load reduction shall be permitted for the shielding effect of other buildings.

a. No
b. A
c. A 10%
d. None of the above

169. EXTERIOR COVERING. *During construction.* During construction, wall cavity insulation_____ be installed until a water–resistant covering is in place over the wall cavity and windows, doors and a roof with at least underlayment are installed.
Note: An example of acceptable water–resistant covering for a wall is foam sheathing with permanently taped joints.

a. may
b. can
c. may not
d. should

170. EXTERIOR COVERING. *Flashing*. Corrosion−resistant flashing may be installed in the interior walls to prevent water from entering the wall cavity or coming in contact with the structural framing components.

a. True
b. False

171. EXTERIOR COVERING. *Flashing*. (c) 1. Any joints between 2 pieces of flashing that form a vertical joint shall be lapped a minimum of 6 inches and sealed.
2. Any joints between 2 pieces of flashing that form a horizontal joint shall be lapped a minimum of 2 inches and sealed unless otherwise specified by the flashing manufacturer.
3. Sealants used for flashing _____ grade and shall be compatible with the materials being sealed.

a. shall be exterior
b. can be exterior
c. can be any
d. none of the above

172. EXTERIOR COVERING. *Water-resistive barrier requirements.* (a) *General.*
1. Exterior walls of wood or metal frame construction shall be provided with a water−resistive barrier from the highest point to the bottom of the permanent weather−resistant covering.
Note: Acceptable water−resistive barrier materials include polymeric−based house wraps and spray−applied water−resistive barriers installed per the manufacturer's instructions, #15 or greater asphalt−saturated felts that comply with ASTM D 226 for type I felt and extruded foam sheathing with permanently taped joints. Duct tape or similar will not result in a permanently taped joint.
2. Structural products with an integral water−resistive barrier may be approved by the department as a complete assembly.
(b) *Material compatibility.* The water−resistive barrier material shall be compatible with the other materials in the wall with which it will come into contact.
Note: Spray−applied water−resistive barriers may not be compatible with foam plastic insulation.

a. True
b. False

173. EXTERIOR COVERING. (c) *Performance requirements.* 1. Polymer−based house wraps shall meet one of the following requirements:
a. A water vapor permeability rating of 4 perms or higher when tested in accordance with ASTM E96.
b. An acceptable water−resistance rating determined in accordance with ASTM D779, AATCC 127 or CCMC 07112.
Note: Asphalt−saturated felt or "tar paper" is not a polymeric−based house wrap.
Note: For more information on the water−resistance tests and their results, see the International Code Council Evaluation Services Acceptance Criteria AC 38.
2. Spray−applied water−resistive barriers shall be approved under the International Code Council Evaluation Services.
Note: For approval criteria, see ICC−ES acceptance criteria AC 212 or successor document.

a. True
b. False

174. EXTERIOR COVERING. (d) *Application.*
1. Horizontal seams in sheet or strip material shall be overlapped such that the upper layer extends over the lower layer at least 2 inches.
2. Vertical seams in sheet or strip materials shall be overlapped at least 6 inches.
3. Any rips, tears or voids shall be patched in accordance with subds. 1. and 2.

a. True
b. False

175. EXTERIOR COVERING. (e) *Penetrations.* 1. Penetrations caused by fasteners of the water−resistive barrier or the weather−resistant exterior covering do require sealing.
2. Penetrations of 3 square inches or less with an annular space of no more than 1/2 inch shall be sealed with caulk or similar material.
3. Penetrations of greater than 5 square inches shall be flashed in accordance with sub. (3).

a. True
b. False

176. WOOD FRAME WALLS. *Top plates.* (a) *General.* Except as allowed under subd. 3., top plates shall be provided and configured as follows:
1. Studs at bearing walls shall not be capped with double top plates.
2. End joints in double top plates shall be offset at least 3 stud spaces.
3. Double top plates shall be overlapped at the corners and at intersections of partitions.
4. The plate immediately above the stud may have a joint only when directly over the stud.

a. True
b. False

177. WOOD FRAME WALLS. *Notching and boring.* 1. When piping or ductwork is placed in an exterior wall or an interior load−bearing wall, such that at least half of the top plate is removed, the plate shall be reinforced with a steel angle at least _____ by 20 gauge thick.
Note: 20 gauge is approximately 0.036 inch.

a. 2 inches by 2 inches
b. 3 inches by 3 inches
c. 4 inches by 4 inches
d. None of the above

178. WOOD FRAME WALLS. (4) *NOTCHING.* Notching and boring of columns or posts is prohibited unless designed through structural analysis. Studs shall be cut or bored at least 1/2 the depth of the stud, unless the stud is reinforced.

a. True
b. False

179. WOOD FRAME WALLS. *Exceptions.* 1. A single top plate may be used in place of a double top plate provided a rafter is located directly over the studs and the plate is securely tied at the end joints, corners and intersecting walls. Joints may occur in single top plates only when directly over a stud.
2. A continuous header, consisting of two 2−inch members set on edge, may be used in lieu of a double plate if tied to the adjacent wall.

a. True
b. False

180. WOOD FRAME WALLS. *Stud Configuration*. Wood studs shall comply with the size and spacing requirements indicated in Table 321.25−A. Studs in the exterior walls shall be placed with the wide faces perpendicular to the plane of the wall.
Note: See ch. SPS 325 Appendix A for acceptable nailing schedule.
Note: See s. SPS 321.10 for requirements on treating wood for decay and termite resistance.

a. True
b. False

181. WOOD FRAME WALLS. *(5) PARTITIONS.* Load−bearing partitions shall be placed over beams, girders, or other load−bearing partitions. Load−bearing partitions running at _____ angles to the joists shall not be offset from the main girder or walls more than the depth of the joist unless the joists are designed to carry the load.

a. right
b. left
c. any

182. WOOD FRAME WALLS. *(3) WALL OPENINGS. (am)Headers.* Where doors and windows occur, headers can be used to carry the load across the opening.
(bm) *Header size.* The size of headers shall be determined in accordance with the spans and loading conditions listed in Tables 321.25−B, 321.25−C and 321.25−D. Headers for longer spans can be designed by an engineering method under s. SPS 321.02.

a. True
b. False

183. WOOD FRAME WALLS. (3) WALL OPENINGS. (cm) *Header support.* Headers in bearing walls shall be supported in accordance with subd. 1. or 2. or 3.
1. Headers _____ or less in length shall be directly supported on each end by either:
a. The single common stud and a shoulder stud; or
b. The single common stud with a framing anchor attached.
2. Headers greater than _____ but less than or equal to 6 feet in length shall be directly supported on each end by the single common stud and a shoulder stud.
3. Headers greater than 6 feet in length shall be directly supported on each end by the single common stud and 2 shoulder studs.

a. 2 feet
b. 3 feet
c. 4 feet
d. 5 feet

184. WOOD FRAME WALLS. *Posts and Columns.* 4. All columns shall be positively attached to the beams they support using clips, straps or saddles.

a. True
b. False

185. WOOD FRAME WALLS. *Foundation Cripple Walls.*
(a) Foundation cripple walls shall be framed with studs at least as large as the studs above.
(b) When more than 4 feet in height, cripple walls shall be framed with studs needed for an additional floor level.
(c) Cripple walls with a stud height of less than 14 inches shall be sheathed on at least one side for its entire length with a wood structural panel that is fastened to both the top and bottom plates or the cripple walls shall be constructed of solid blocking.
(d) Cripple walls with a stud height of 14 inches or greater shall be braced in accordance with sub. (8).
(e) Cripple walls shall be fully supported by a continuous foundation.

a. (a) and (c)
b. (b), (c) and (d)
c. (a), (c), (d) and (e)
d. (a), (b), (c), (d) and (e)

186. WOOD FRAME WALLS. *WALL BRACING.* (a) *General.* Dwellings using wood− framed walls shall be braced in accordance with this section. Where a building, or a portion thereof, does comply with all of the bracing requirements in this section, those portions can be designed and constructed in accordance with accepted engineering practice.

a. True
b. False

187. WOOD FRAME WALLS. *Bracing Materials and Methods.* Wall bracing shall consist of the materials and methods listed in Table 321.25–G or approved alternatives capable of providing the required wind load resistance as determined in accordance with s. SPS 321.02 (1) (c).

a. True
b. False

Refer to Table 321-25-A Size, Height and Spacing of Wood Studs-A (*for questions 188 through 194)*

188. Using a Nominal Size 2X4, what is the maximum spacing allowed when supporting a roof and ceiling (only)?

a. 14”
b. 24”
c. 16”
d. 10”

189. Using a Nominal Size 2X4, what is the maximum spacing allowed when supporting one floor, roof and ceiling?

a. 14”
b. 24”
c. 16”
d. 10”

190. Using a Nominal Size 2X4, what is the maximum spacing allowed when supporting two floors, roof and ceiling?

a. 14”
b. 24”
c. 16”
d. None of the above, it is not allowed

191. Using a Nominal Size 2X6, what is the maximum spacing allowed when supporting two floors, roof and ceiling?

a. 14”
b. 24”
c. 16”
d. 10”

192. Using a Nominal Size 2X6, what is the maximum spacing allowed when supporting one floor, roof and ceiling?

a. 14”
b. 24”
c. 16”
d. 10”

193. Using a Nominal Size 2X5, what is the maximum spacing allowed when supporting one floor, roof and ceiling?

a. 14”
b. 16”
c. 24”
d. 10”

194. What is the maximum Laterally Unsupported Stud Height in feet for a bearing exterior wall for a nominal sized 2X4?

a. 14’
b. 24’
c. 16’
d. 10’

195. WOOD FRAME WALLS. *Braced wall panel support.* Braced wall panels shall be supported on floor framing or foundations as follows:
1. Where joists are perpendicular to braced wall lines above or below, blocking shall be provided between the joists at braced wall panel locations to permit fastening of wall plates in accordance with the fastener table in the ch. SPS 325 Appendix A.
2. Where joists are parallel to braced wall lines above or below, a rim joist or other parallel framing member shall be provided at the wall to permit fastening of wall plates in accordance with the fastener table in the ch. SPS 325 Appendix A.
3. Braced wall panels shall be permitted to be supported on cantilevered floor joists meeting the cantilever limits of s. SPS 321.22 (6) provided joists are blocked at the nearest bearing wall location, except such blocking is not required for cantilevers not exceeding 24 inches where a full height rim joist is provided.

a. True
b. False

Refer to Table 321.25-B Allowable Spans for Headers Supporting Roof/Ceiling Assemblies
(for questions 196 through 201)

196. What is the maximum width allowed for header members on a house 26’ in width; using two 2X6’s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 2’
b. 3’
c. 4’
d. 5’

197. What is the maximum width allowed for header members on a house 28’ in width; using two 2X6’s; in zone 1? (Refer to SPS 321.02 for the counties in each zone)

a. 2’
b. 3’
c. 4’
d. 5’

198. What is the maximum width allowed for header members on a house 28’ in width; using two 2X12’s; in zone 1? (Refer to SPS 321.02 for the counties in each zone)

a. 5’
b. 6’
c. 7’
d. 8’

199. What is the maximum width allowed for header members on a house 26’ in width; using two 2X10’s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 5’
b. 6’
c. 7’
d. 8’

200. What is the maximum width allowed for header members on a house 24’ in width; using two 2X12’s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 5’
b. 6’
c. 7’
d. 9’

201. What is the maximum width allowed for header members on a house 32’ in width; using two 2X12’s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 5’
b. 6’
c. 7’
d. 9’

Refer to Table 321.25-D Allowable Spans for Headers Supporting One Floor and Roof/Ceiling Assembly (*for questions 202 through 207)*

202. What is the maximum width allowed for header members on a house 26’ in width; using two 2X10’s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 2.5’
b. 3’
c. 4’
d. 5’

203. What is the maximum width allowed for header members on a house 32’ in width; using two 2X12’s; in zone 1? (Refer to SPS 321.02 for the counties in each zone)

a. 2.5’
b. 3’
c. 4’
d. 5’

204. What is the maximum width allowed for header members on a house 32’ in width; using two 2X8’s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 2.5’
b. 3’
c. 4’
d. 5’

205. What is the maximum width allowed for header members on a house 32’ in width; using two 2X6’s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 2.5’
b. 3’
c. 4’
d. 5’

206. What is the maximum width allowed for header members on a house 28’ in width; using two 2X8’s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 2.5’
b. 3’
c. 4’
d. 5’

207. What is the maximum width allowed for header members on a house 30’ in width; using two 2X12s; in zone 2? (Refer to SPS 321.02 for the counties in each zone)

a. 2.5’
b. 3’
c. 4’
d. 5’

208. WOOD FRAME WALLS. *Wall Bracing.* (c) *Bracing amount.* Bracing methods and materials complying with Table 321.25–G shall be applied to walls in accordance with the following requirement:
6. Balloon−frame walls may be no longer than 21 feet and shall have a maximum height of two floors unless constructed in accordance with an approved design. Wall framing shall be continuous from the lowest floor to the wall top plate at the roof. All edges of sheathing shall be supported on and fastened to blocking or framing. Braced wall panels may not be required on the balloon− frame wall portion provided the bracing amount and brace spacing requirement are satisfied for the building side. Where brace panels are located on the balloon−frame wall portion, they shall have a height−to−width ratio of not more than 2.5:1.

a. True
b. False

209. WOOD FRAME WALLS. *Wall Bracing.* (c) *Bracing amount.* Bracing methods and materials complying with Table 321.25–G shall be applied to walls in accordance with the following requirement:
7. For a gable end wall, if the brace−panel height does not exceed _____ at the highest portion and if the 12½−foot and 21−foot spacing requirements in Figure 321.25–C are met, the wall is adequately braced. Where a brace panel exceeds _____ in height, it shall have a height−to−width ratio of not more than 2.5:1, and comply with Figure 21.25–C.

a. 12 feet / 10 feet
b. 10 feet / 12 feet
c. 12 feet / 12 feet
d. 12 feet / 14 feet

210. Refer to Table 321.25-G Bracing Methods
An approved metal brace installed per the manufacturers instruction may be used as Let-in Bracing in a nominal wall height of 10'.

a. True
b. False

211. Refer to Table 321.25-G Bracing Methods
Diagonal wood boards (¾" for a maximum of 24" O.C. stud spacing) may be used for a nominal wall height of 12'.

a. True
b. False

212. WOOD FRAME WALLS. *Wall Bracing.* (c) *Bracing amount.* Bracing methods and materials complying with Table 321.25–G shall be applied to walls in accordance with the following requirement:
2. In no case may the amount of bracing be _____ braced wall panels on walls parallel to each rectangle side for each floor level of the building.

a. determined by
b. less than one
c. less than two
d. none of the above

213. WOOD FRAME WALLS. *Wall Bracing.* (c) *Bracing amount.* Bracing methods and materials complying with Table 321.25–G shall be applied to walls in accordance with all of the following requirements:
3. Where used, the number of intermittent brace panels applied to walls parallel to each rectangle side shall comply with Table 321.25–I.
4. Where used, the total length of continuous sheathed brace panels applied to walls parallel to each building side shall comply with Table 321.25–J.
5. The location of brace panels applied to walls parallel to each building side shall comply with Figure 321.25–C.

a. True
b. False

Questions 214 to 222 (Refer to Review Document SPS 321.26 Masonry Walls)

214. MASONRY WALLS. *Cold Weather Work*. When ambient air temperature is below _____, the cold weather construction procedures under ACI 530.1 shall be followed.

Note: The requirements for cold weather work are in sections 1.8 and 1 .8C of the 2005 edition of the ACI standard.

a. 40 degrees
b. 35 degrees
c. 30 degrees
d. 25 degrees

215. MASONRY WALLS. *Masonry Units*. (a) *Unused concrete units.* Previously unused concrete masonry units shall conform to the ASTM C 90 standard.

(b) *Unused clay or shale units.* Previously unused clay or shale masonry units shall conform to the appropriate ASTM standard: C 62; C 216; or C 652. Units which will be exposed to weathering or frost action shall be Grade SW as specified in these standards.

(c) *Used masonry units.* All previously used masonry units shall be free from physical defects which interfere with the installation or impair the structural properties of the unit.

a. True
b. False

216. MASONRY WALLS. *Cavity Wall.* (a) *Corbels.* Corbels shall be constructed in accordance with ACI 530.

(b) *Projections.* The projection of a wall beyond the edge of a supporting member other than masonry, such as a shelf angle or edge of a beam, shall not exceed _____, unless at least $^{2}/3$ the mass of the wythe of masonry involved is located directly over the load−carrying member.

a. 1 inch
b. 1 ¼ inches
c. 1 ½ inches
d. 1 ¾ inches

217. MASONRY WALLS. *Types of Mortar*. (a) *Mortar specifications.* The type of mortar shall be determined from Table 321.26−A. The mortar shall conform to the requirements of ASTM C−270.

(b) *Surface bond mortars.* Surface bond mortars for masonry walls shall be mixed in accordance with the proportions specified on the bag.

a. True
b. False

218. MASONRY WALLS. *Openings and Lintels*. (a) *Openings.* The masonry above openings shall be supported. The bearing length of structural elements which support the masonry above the opening shall be not less than _____.

a. 4 inches
b. 5 inches
c. 6 inches
d. None of the above

219. MASONRY WALLS. *Mortar Components*. Mortar components shall comply with the following requirements:
(b) *Admixtures or mortar colors.* Admixtures or mortar colors shall not be added to the mortar unless the resulting mortar conforms to the mortar specifications. Only mineral oxide may be used as mortar color and shall not exceed _____ by weight of the cement.

a. 5 %
b. 8%
c. 10%
d. 12%

220. MASONRY WALLS. *Mortar Components*. *Mixing.* Mortar shall be mixed for at least 5 minutes after all ingredients have been added with the maximum amount of water to produce a workable consistency. Mortars that have stiffened due to water evaporation shall be retempered by adding water as frequently as needed to restore the required consistency. Mortars shall be used and placed in final position within 1 hour after mixing.

a. True
b. False

221. MASONRY WALLS. *Masonry Veneers. 6.* _____ behind masonry veneer shall be covered with material used to construct the water−resistive barrier as required under s. SPS 321.24 (4).
Note: Acceptable water−resistive barrier materials include polymeric−based house wraps and #15 or greater asphalt−saturated felts that comply with ASTM D 226 for type I felt.

a. Studs
b. Sheathing
c. Studs and sheathing
d. None of the above

222. MASONRY WALLS. *Flashing*. *(b) Location.* 1. 'Lintels and chimneys.' In exterior hollow masonry walls, flashing shall be installed at the backsides of chimneys and at the bottom of the cavity formed by openings such as lintels over doors and windows.

a. True
b. False

Questions 223 to 240 (Refer to Review Materials SPS 321.27 Roof Design and Framing; SPS 321.28 Weather Protection for Roofs; SPS 321.29 Masonry Fireplaces; SPS 321.30 Masonry Chimneys; SPS 321.32 Factory-built Fireplaces; SPS 321.33 Construction in Floodplains and SPS 321.40 Installation of Manufactured Homes/Installation Standards)

223. ROOF DESIGN AND FRAMING. *Uplift and Suction Forces. Anchorage.* 1. Roof framing members spanning more than 8 feet measured from the outermost edge of the roof shall be permanently fastened to the top plate of load bearing walls using engineered clips, straps or hangers.
2. Roof framing members spanning 4 feet or less measured from the outermost edge of the roof shall be permanently fastened to the top plate of load bearing walls using toe−nailing or engineered clips, straps or hangers.

a. True
b. False

224. ROOF DESIGN AND FRAMING. *Structural Design. Applicability of tables.* The joist and rafter tables in the ch.SPS 325 Appendix A are valid for roofs with a minimum slope of 3 in 12. Lesser slopes require engineering analysis or shall be provided with a ridge beam.

a. True
b. False

225. ROOF DESIGN AND FRAMING. *Notching and Boring*. (b) Notches located in the top or bottom of ceiling joists and rafters are prohibited from all of the following:
1. Having a depth exceeding 1/6 the depth of the member.
2. Having a length exceeding 1/3 the depth of the member.
3. Being located in the middle 1/3 of the span of the member.

a. #1 and 3
b. #1, 2 and 3
c. #2 and 3
d. none of the above

226. WEATHER PROTECTION FOR ROOFS. *Ice Dam protection*. Shingled or shake roofs that extend over a heated area of a dwelling or attached garage and that have a slope of _____ shall be provided with ice dam protection in the form of sheet metal or a product labeled as meeting the requirements of ASTM D 1970.

a. 4:12 or less
b. 4:12 or more
c. 5:12 or less
d. 5:12 or more

227. WEATHER PROTECTION FOR ROOFS. *Reroofing.* New roof coverings may be installed over existing roof coverings where all of the following conditions exist:
(a) The existing roof or roof covering is water−soaked or has deteriorated such that it is inadequate as a base for additional roofing.
(b) The existing roof is wood shake, slate, clay, cement or asbestos−cement tile.
(c) The existing roof has 2 or more applications of any type of permanent roof covering.

a. True
b. False

228. WEATHER PROTECTION FOR ROOFS. *Asphalt Shingles*.
Shingles shall have at least_____ fasteners per strip shingle or 2 fasteners per interlocking shingle, unless the manufacturer has other specifications.

a. 2
b. 3
c. 4
d. 5

229. WEATHER PROTECTION FOR ROOFS. *Chimney flashing*.
1. Chimneys shall be flashed and counter−flashed to a height of at least 6 inches.
2. Chimney crickets or saddles shall be installed where the upper side of a chimney is more than _____ wide on a sloping roof.
3. The intersection of the cricket and the chimney shall be flashed and counter−flashed to a height of at least 6 inches.

a. 20 inches
b. 25 inches
c. 30 inches
d. 35 inches

230. MASONRY FIREPLACES. *Termination of chimneys.* Masonry fireplace chimneys shall extend at least 3 feet above the highest point where the chimney passes through the roof and at least 2 feet higher than any portion of the dwelling within _____of the chimney.

a. 8 feet
b. 10 feet
c. 12 feet
d. 14 feet

231. MASONRY FIREPLACES. *Flue Liners*. Flue liners shall start at the top of the fireplace throat and extend to a point at least_____ above the top of the chimney cap.

a. 4 inches
b. 6 inches
c. 7 inches
d. 8 inches

232. MASONRY CHIMNEYS. *Corbeling*. Unless designed through structural analysis, masonry chimneys shall not be corbeled from a wall more than 6 inches nor shall a masonry chimney be corbeled from a wall less than _____ in nominal thickness unless it projects equally on each side of the wall. The corbeling shall not exceed one−inch projection for each brick course.

a. 6 inches
b. 8 inches
c. 10 inches
d. 12 inches

233. FACTORY-BUILT FIREPLACES. Factory built fireplaces consisting of a _____ and other parts shall be tested and listed by a nationally recognized testing laboratory.
1. fire chamber assembly
2. one or more chimney sections
3. a roof assembly

a. #1 and 3
b. # 1and 2
c. # 1, 2 and 3
d. #2 and 3

234. CONSTRUCTION IN FLOODPLAINS. *Protection of Electrical and Mechanical Systems.* Electrical and mechanical equipment shall be placed _____ the base flood elevation or shall be designed to prevent water contact with the equipment in case of a flood up to the base flood elevation.

a. at
b. below
c. above
d. None of the above.

235. INSTALLATION OF MANUFACTURED HOMES. INSTALLATION STANDARDS. *Compliance.* A manufactured home produced on or after April 1, 2007 shall be installed in accordance with 24 CFR Part 3285 except as otherwise provided by this subsection.

a. True
b. False

236. INSTALLATION OF MANUFACTURED HOMES. INSTALLATION STANDARDS. *Produced Before April 1, 2007.* (a) Except as provided in par. (b), the installation of a manufactured home produced before April 1, 2007 shall be installed in conformance with the requirements in effect at the time the manufactured home was produced.

a. True
b. False

237. INSTALLATION OF MANUFACTURED HOMES. INSTALLATION STANDARDS. *Produced Before April 1, 2007.* Piers shall be placed under the main frame of the chassis at intervals of not more than _____ and no more than 3 feet from the exterior side of each end wall. The 7–foot spacing requirement may be varied as permitted by footing, spacing and soil capacity tables provided by the home manufacturer.

a. 5 feet on-center
b. 6 feet on-center
c. 7 feet on-center
d. 8 feet on-center

238. INSTALLATION OF MANUFACTURED HOMES. INSTALLATION STANDARDS. *Produced Before April 1, 2007.* The home site may be graded to permit water to drain from under the home and away from the home for a minimum of 3 feet from the home.

a. True
b. False

239. INSTALLATION OF MANUFACTURED HOMES. INSTALLATION STANDARDS. *Produced Before April 1, 2007.* Wood caps and shims shall be at least equal to No. 2 spruce pine fir having a minimum fiber bending stress rating of 1400 psi. All wood caps shall be the same species of wood, and all shims shall be the same species of wood.

a. True
b. False

240. INSTALLATION OF MANUFACTURED HOMES. INSTALLATION STANDARDS. *Produced Before April 1, 2007.* 5. Each footing shall consist of one of the following: c. An 18–inch diameter hole bored to below the frost line or to unfractured bedrock and filled with poured concrete.

a. True
b. False

HOME IMPROVEMENT PRACTICES ATCP 110

Questions 241 to 247 (Refer to Review Document - ATCP 110.01 Definitions)

241. _____ means either of the following persons who is a party or prospective party to a home improvement contract:

1. The owner of residential or noncommercial property to which the home improvement contract pertains.
2. The tenant or lessee of residential or noncommercial property to which the home improvement contract pertains if the tenant or lessee is or will be obligated to make a payment under the home improvement contract.

a. Seller
b. Contractor
c. Buyer
d. Consumer

242. _____ or non−commercial property" means a structure used, in whole or in part, as a home or place of residence by any natural person, whether or not a single or multi−unit structure, and that part of the lot or site on which it is situated and which is devoted to the residential use of the structure, and includes all appurtenant structures. The term extends to all other existing non− commercial structures and the immediate premises on which they are situated even though they are not used for residential purposes.

a. Residential
b. Business
c. Industrial
d. Trade

243. _____ means the remodeling, altering, repairing, painting, or modernizing of residential or non−commercial property, or the making of additions thereto, and includes, but is not limited to, the construction, installation, replacement, improvement or repair of driveways, sidewalks, swimming pools, terraces, patios, landscaping, fences, porches, garages, basements and basement waterproofing, fire protection devices, heating and air conditioning equipment, water softeners, heaters and purifiers, wall−to−wall carpeting or attached or inlaid floor coverings, and other changes, repairs or improvements made in or on, attached to or forming a part of the residential or non−commercial property. The term extends to the conversion of existing commercial structures into residential or non−commercial property. "Home Improvement" does not include the construction of a new residence or the major renovation of an existing structure.

a. Residential improvement
b. Dwelling improvement
c. Home improvement
d. Domicile improvement

244. _____ means any warranty or guarantee made with respect to labor, services, products or materials provided under a home improvement contract. _____ includes a seller's warranty and a manufacturer's product warranty.

a. Service contract
b. Warranty
c. Assurance
d. Contract

245. _____ means an oral or written agreement between a seller and an owner or a seller and a tenant or lessee of residential or non−commercial property, or a seller and a tenant or lessee if the tenant or lessee is to be obligated for the payment of home improvements made in, to, or upon such property, and includes all agreements under which the seller is to perform labor or render services for home improvements, or furnish materials in connection therewith.

a. Owner improvement contract
b. Tenant improvement contract
c. Seller improvement contract
d. Home improvement contract

246. _____ means a person engaged in the business of making or selling home improvements and includes corporations, partnerships, associations and any other form of business organization or entity, and their officers, representatives, agents and employees.

a. Merchant
b. Seller
c. Broker
d. Supplier

247. _____ means a renovation or reconstruction contract where the total price of the contract is more than the assessed value of the existing structure at the time the contract is initiated.

a. Minor renovation
b. Reconstruction
c. Major renovation of an existing structure
d. Minor renovation of a basement

Questions 248 to 284 (Refer to Review Document - ATCP 110.02 Prohibited Trade Practices)

248. MODEL HOME REPRESENTATIONS. Misrepresent or falsely state to a prospective buyer that the buyer's residential or non−commercial property is to serve as a "model" or "advertising job", or use any other prospective buyer lure to mislead the buyer into believing that a _____ or other compensation will be received by reason of such representations.

a. price reduction
b. rebate
c. price increase
d. reimbursement

249. BAIT SELLING. Fail to have available a quantity of the advertised product sufficient to meet _____.

a. reasonable anticipated demands
b. substitute product demand
c. customer demand
d. retailer demands

250. BAIT SELLING. Offer or represent specific products or materials as being for sale, where the purpose or effect of the offer or representation is not to sell as represented but to bait or entice the buyer into the purchase of other or _____ priced substitute products or materials.

a. higher
b. lower
c. concern
d. inferior

251. BAIT SELLING. Misrepresent that certain products or materials are unavailable or that there will be a long delay in their_____ or installation in order to induce a buyer to purchase other or higher priced substitute products or materials from the seller.

a. manufacture
b. delivery
c. service
d. All the above

252. BAIT SELLING Disparage, degrade or otherwise discourage the purchase of products or materials offered or represented by the seller as being for sale, by statements or representations in conflict with other claims or representations made with respect to such products and materials, to induce the buyer to purchase other or higher priced substitute products or materials.

a. True
b. False

253. PRODUCTION AND MATERIAL REPRESENTATIONS. Misrepresent directly or by implication that products or materials to be used in the home improvement:
Are approved or recommended by any governmental agency, person, form or organization, or that they are the users of such products or materials.

a. True
b. False

254. PRODUCTION AND MATERIAL REPRESENTATIONS. Misrepresent directly or by implication that products or materials to be used in the home improvement:
May be serviced or repaired within the _____ immediate trade area, or be maintained with replacement and repair parts which are readily available.

a. seller's
b. buyer's
c. company's
d. business's

255. PRODUCTION AND MATERIAL REPRESENTATIONS. Misrepresent directly or by implication that products or materials to be used in the home improvement:
Are of a specific _____ or quality, or possess any other distinguishing characteristics or features.

a. size
b. weight
c. grade
d. All the above

256. PRODUCTION AND MATERIAL REPRESENTATIONS. Misrepresent directly or by implication that products or materials to be used in the home improvement:
Meet or exceed _____ or other applicable standards or requirements.

a. federal
b. state
c. municipal
d. All the above

257. IDENTITY OF SELLER. Misrepresent that the seller is licensed, bonded or insured. If the seller represents that the seller is licensed, bonded or insured, the seller shall provide the buyer with a _____ statement specifically describing the type of license, bond or insurance that the seller possesses.

a. verbal
b. spoken
c. oral
d. written

258. IDENTITY OF SELLER. Deceptively gain entry into the prospective buyer's home or onto the buyer's property under the guise of any governmental or public utility inspection, or otherwise misrepresent that the seller has any official right, duty, authority to conduct an inspection.

a. True
b. False

259. IDENTITY OF SELLER. Misrepresent that the seller is an _____ of a manufacturer, importer or any other person, firm or organization, or that such person, firm or organization will assume some obligation in fulfilling the terms of the contract.

a. employee, officer, representative
b. officer and employee
c. representative and officer
d. employee and representative

260. GIFT OFFERS. Offer or advertise any _____ without fully disclosing the terms or conditions of the offer, including expiration date of the offer and when the gift, free item or bonus will be given, or fail to comply with the terms of such offer.

a. gift or bonus
b. free item, gift or bonus
c. bonus or free item
d. gift or bonus

261. PRICE AND FINANCING. Misrepresent that any person, firm or organization, whether or not connected with the seller, is especially _____ in seeing that the prospective buyer gets a bargain, special price, discount or any other benefit or concession.

a. unconcerned
b. indifferent
c. interested
d. apathetic

262. PRICE AND FINANCING. Represent to a prospective seller that an introductory, confidential, close−out, going out of business, factory, wholesale, or any other special price or discount is being given, or that any other concession is made because of materials left over from another job, a market survey or test, or any other reason.

a. True
b. False

263. PRICE AND FINANCING. Request the buyer to sign a completion slip or certificate, or _____ on the contract before the home improvement is completed in accordance with the terms of the contract.

a. waive the final payment
b. make final payment
c. delay the final payment
d. postpone the final payment

264. PRICE AND FINANCING. _____ or induce the buyer to inflate the value of the buyer's property or assets, or to misrepresent or falsify the buyer's true financial position in order to obtain credit.

a. Advise
b. Discourage
c. Dissuade
d. Deter

265. PRICE AND FINANCING. Misrepresent that the _____ is the only person who can provide financing for the home improvement contract.

a. buyer
b. seller
c. manufacturer
d. bank

266. PRICE AND FINANCING. Where the buyer requests lien waivers under s. ATCP 110.025 (2), fail to _____ to the buyer lien waivers in writing from all contractors, subcontractors, and material suppliers at or prior to the time final payment is made on the home improvement contract.

a. give
b. furnish
c. Both a. and b.
d. Neither a. or b.

267. PRICE AND FINANCING. Fail to disclose that the _____ improvement contract, promissory note or other evidence of indebtedness may be assigned or sold to a financial institution or any other third party.

a. business
b. home
c. tenant
d. industrial

268. PRICE AND FINANCING. Misrepresent or fail to disclose to a buyer, _____ the buyer enters into a home improvement contract, the existence or amount of any financing charges, interest service charges, credit investigation costs, building or installation permit fees, or other costs or charges to be paid by the buyer.

a. after
b. before
c. once
d. subsequent to

269. PRICE AND FINANCE. Fail to provide notice to a _____ as required under s. ATCP 110.025 (1), before the _____ enters into a home improvement contract, that the buyer is entitled to receive written lien waivers.

a. buyer / seller
b. buyer / buyer
c. seller / buyer
d. seller / seller

270. PRICE AND FINANCING. Fail to disclose that the offered or contract price does not include delivery or installation, or that other requirements must be fulfilled by the buyer as a condition to the performance of _____ or the furnishing of products or materials at the offered or contract price.

1. labor
2. services

a. #1 only
b. #2 only
c. both #1 and #2
d. neither #1 or #2

271. PRICE AND FINANCE. Itemize the contract price, or induce the buyer by any means to read the itemized contract price or value of the home improvement for financing purposes or to obtain additional credit.

a. True
b. False

272. PRICE AND FINANCE. Misrepresent or mislead the prospective buyer into believing that insurance or some other form of protection will be furnished to relieve the buyer from obligations under the contract if the buyer becomes _____.

a. ill
b. unable to make payments
c. dies, ill, or is unable to make payments
d. none of the above

273. PRICE AND FINANCE. Where partial payments are required at various stages in the performance of the contract, and the buyer requests lien waivers under s. ATCP 110.025 (2), fail to give or furnish to the buyer lien waivers _____ from all contractors, subcontractors, and material suppliers for the proportionate value of all labor, services, and products or materials furnished or delivered as of the time partial payment is made.

a. verbally
b. by handshake
c. in writing
d. orally

274. PRICE AND FINANCE. _____ the buyer into believing that no obligation will be incurred because of the signing of any document, or that the buyer will be _____ of some or all obligations under the contract by the signing of any document.

a. misrepresent / mislead
b. mislead / relieved
c. relieved / misrepresent
d. misrepresent or mislead / relieved

275. PRICE AND FINANCE. Misrepresent that the down payment or any other sum constitutes the full amount the _____ will be obligated to pay.

a. tenant
b. seller
c. buyer
d. manufacturer

276. PERFORMANCE. _____, or use any other tactic to pressure the buyer into a home improvement contract, or make any claim or assertion that a binding contract has been agreed upon where no final agreement or understanding exists.

1. Begin work
2. Deliver materials
3. Arrange financing

a. #1 only
b. # 1 and 2
c. # 1 and 3
d. #1, 2 and 3

277. INTERFERENCE WITH COMPETITORS. Use or imitate the trade−marks, trade names, labels or other distinctive marks of a _____.

a. competitor
b. business
c. vendor
d. colleague

278. PERFORMANCE. Solicit or accept any payment for home improvement materials or services which the seller does not intend to provide according to the terms of the home improvement contract, or which the seller has reason to believe _____ be provided according to the terms of the contract.

a. may
b. may not
c. will
d. will not

279. INTERFERENCE WITH COMPETITORS. Misrepresent that the work of a _____ was performed by the seller.

a. buyer
b. competitor
c. seller
d. business

280. SALES REPRESENTATIONS. Misrepresent that the _____ present equipment, material, product, home or a part thereof is dangerous or defective, or in need of repair or replacement.

a. seller's
b. customer's
c. manufacturer's
d. vendor's

281. SALES REPRESENTATIONS. Fail to make any statement of fact, qualification, or explanation if the omission of such statement, qualification, or explanation causes an advertisement, announcement, statement, or representation to be false, deceptive, or misleading.

a. True
b. False

282. SALES REPRESENTATIONS. Misrepresent or mislead the buyer into believing that a purchase will aid or help some public, charitable, religious, welfare, or veteran's organization, or any other person, group, or organization, or misrepresent the extent of such aid or assistance.

a. True
b. False

283. MISREPRESENTATION OF BUYER'S PREPAYMENTS. Use _____ home improvement contract payment, received from a buyer prior to the completion of a home improvement, for any purpose other than to provide materials or services for the home improvement.

a. no more than 10% of a
b. no more than 15% of a
c. any
d. not more than 30% of a

284. MISREPRESENTATIONS; GENERAL. Make any _____ representation in order to induce any person to enter into a home improvement contract, to obtain or keep any payment under a home improvement contract, or to delay performance under a home improvement contract.

a. false or deceptive
b. deceptive or misleading
c. misleading, deceptive or false
d. misleading or false

Questions 285 to 287 (Refer to Review Document - ATCP 110.023 Substituting Products or Materials; altering the written contract)

285. No seller may substitute products or materials for those specified in the home improvement contract, or for those which the seller represented would be used in the home improvement, without the prior consent of the buyer. Except as provided in sub. (2), if a written home improvement contract is required under s. ATCP 110.05 (1) or the buyer signs a written contract, the buyer's consent under this paragraph _____ in writing.

a. can also be
b. should also be
c. may also be
d. shall also be

286. (d) The seller must report any alterations documented pursuant to par. (c) to the buyer _____ final payment is accepted.
History: CR 13−066: cr. Register March 2014 No. 699, eff. 6−1−14; corrections in (2) (c) 1. and (d) made under s. 13.92 (4) (b) 7., Stats., correction in (1) made under s. 35.17, Stats., Register March 2014 No. 699.

a. once
b. after
c. before
d. subsequent to

287. VERBAL AUTHORIZATION. The seller may act on alterations to the contract that are verbally authorized by the buyer, if all the following conditions are met:
(a) The alteration does not represent any additional cost to the buyer.
(b) The alteration does not represent a decrease in the value of the materials used or the services provided.
(c) The seller maintains documentation of the following:
1. The manner in which the buyer communicated the authorization for the alteration. In this subdivision, "manner" means face−to−face discussion, phone call, or some other method of communicating.
2. The name of the buyer who authorized the alteration.
3. The date and time that the buyer authorized the alteration.
4. A description of the alteration.
(d) The seller must report any alterations documented pursuant to par. (c) to the buyer before final payment is accepted.

a. (a), (b) and (c) only
b. (c) and (d) only
c. (a), (b), (c) and (d)
d. (a) and (b) only

Questions 288 to 291 (Refer to Review Document - ATCP 110.025 Lien Waivers and ATCP 110.027 Delay in Contract Performance)

288. DELAY IN CONTRACT PERFORMANCE: Notwithstanding sub. (1), a seller shall not be responsible for delays in contract performance if the seller can demonstrate any of the following:
(a) The delay was caused by actions or inactions of the buyer.
(b) The delay was caused by a destructive act of nature such as tornado, flood, or fire.
(c) The delay was caused by disruptive civil disorder such as a strike, hostile action, or war.
History: CR 13−066: cr. Register March 2014 No. 699, eff. 6−1−14.

a. True
b. False

289. LIEN WAIVERS: A seller may provide notice to buyer that buyer shall request written lien waivers from all contractors, subcontractors, and material suppliers at, or prior to, the time any payment is made on the home improvement contract. Notice may be provided before the buyer and seller enter into a home improvement contract.

a. True
b. False

290. LIEN WAIVERS: (b) The notice may be provided as a separate document, written in a clear and conspicuous font, in a format that the buyer should retain.

a. True
b. False

291. DELAY IN CONTRACT PERFORMANCE: A _____ must give the buyer timely notice of any impending delay in the home improvement contract performance if performance will be delayed beyond a deadline specified in the home improvement contract. The notice shall specify any reasons for the delay and shall specify new proposed deadlines by which the _____ will begin and complete the work. If a written home improvement contract is required under s. ATCP 110.05 (1) or the buyer signs a written contract, no change in performance deadlines is effective unless the buyer agrees in writing to the change.

a. buyer/seller
b. tenant/seller
c. seller/seller
d. subcontractor/buyer

Questions 292 to 295 (Refer to Review Document - ATCP 110.03 Building Permits)

292. Where midpoint or final inspections are required under state laws or local ordinances, copies of inspection certificates _____ furnished to the buyer when construction is completed and before final payment is due or the signing of a completion slip is requested of the buyer.

a. shall be
b. should be
c. can be
d. may be

293. Pursuant to sub. (2), if the state or local inspector who completed the inspection issues an inspection document, the seller may provide a summary of the inspection to the buyer.
The summary can include the inspector's name, the date of the inspection, and inspection number or some other way to identify the inspection in the state or local building inspection database.

a. True
b. False

294. Before a buyer enters into a home improvement contract, the seller shall inform the buyer of all building or construction permits that are required for the home improvement. Except as provided in sub. (4), no seller may start work under a home improvement contract until all required state and local permits have been issued.

a. True
b. False

295. Notwithstanding sub. (1), if the home improvement contract includes subprojects, no seller _____ of a home improvement contract that requires state or local permits until all permits required for that subproject have been issued.
History: Cr. Register, May, 1974, No. 221, eff. 6−1−74; am. (1), Register, September, 1993, No. 453, eff. 10−1−93; CR 13−066: am. (1), cr. (3), (4) Register March 2014 No. 699, eff. 6−1−14.

a. shall start work on any subproject
b. may start work on any subproject
c. can start work on any subproject
d. should start work on any subproject

Questions 296 to 299 (Refer to Review Document - ATCP 110.04 Warranties)

296. A seller shall give a buyer a copy of every written warranty made with respect to labor, services, products, or materials furnished in connection with a home improvement.

a. True
b. False

297. The seller shall provide all warranty documents to the buyer at the time the buyer enters into a home improvement contract, except that a manufacturer's product warranty may be provided at any of the following times:
(a) At the time the buyer enters into a home improvement contract.
(b) At the time the product is installed.
(c) At the conclusion of the project, if specified in the contract.

a. (a) and (b)
b. (a), (b) and (c)
c. (b) and (c)
d. (a) and (c)

298. No seller may give any warranty which the seller does not intend to honor in full, or which the _____ has reason to believe will not be honored in full.

a. buyer
b. subcontractor
c. seller
d. tenant

299. If a seller warrants any labor, service, product, or material furnished in connection with a home improvement, the warranty shall be clear and specific and shall clearly specify all of the following:
(a) Any warranty conditions or exclusions.
(b) Any limitations on the scope or duration of the warranty.
(c) The time period within which the seller will perform the seller's warranty obligations after the buyer makes a valid warranty claim.

a. True
b. False

Questions 300 to 312 (Refer to Review Document - ATCP 110.05 Home Improvement Contract Requirements)

300. The following home improvement contracts and all changes in the terms and conditions thereof, shall be in writing:
Contracts which are initiated by the _____ through face−to−face solicitation away from the regular place of business of the seller, mail or telephone solicitation away from the regular place of business of the seller, mail or telephone solicitation, or handbills or circulars delivered or left at places of residence.

a. seller
b. buyer
c. tenant
d. contractor

301. If sub. (1) requires a written home improvement contract or the buyer signs a written contract, the written contract shall be signed by _____ and shall clearly, accurately and legibly set forth all material terms and conditions of the contract.

a. the buyer
b. the seller
c. the tenant
d. all parties

302. Before the seller begins work or receives any payment under a written home improvement contract, the seller shall provide the buyer with a copy of the contract.

a. True
b. False

303. Where a representation is made that insurance or some other form of protection will be provided, the contract _____ clearly state the terms, conditions and limitations thereof, as well as the name and address of the insurer or the person who is to furnish such protection, if different from the seller.

a. shall
b. should
c. may
d. can

304. A copy of the insuring or protection agreement, declarations page, or some other document that shows evidence of insurance or other protection shall be furnished to the buyer before final payment is due under the contract.

a. True
b. False

305. If a buyer is to act as the general contractor or assume responsibility for performance of the contract, the name and address of the buyer shall be disclosed in the oral or written contract, except as otherwise agreed, and the contract shall not be sold or assigned without the written consent of the seller.

a. True
b. False

306. After a buyer enters into a written home improvement contract prepared or offered by the seller, the seller shall determine if the buyer is able to read and understand the contract.

a. True
b. False

307. If a language other than English is primarily used in contract negotiations, the written contract shall be in English.

a. True
b. False

308. If the buyer is blind or unable to read the contract, the written contract shall be read and explained to the buyer by a third party designated by the buyer and having no connection with the seller.

a. True
b. False

309. Liquidated damages for breach of contract by the buyer if made a part of the contract shall not exceed _____ of the contract price.

a. 5% of contract price
b. 7% of contract price
c. 8% of contract price
d.10% of contract price

310. A description of the work to be done and the principal products and materials to be used or installed in performance of the contract. The description shall include, where applicable, the _____, model, and model year of principal products or fixtures to be installed, and the type, grade, quality, size, or quantity of principal building or construction materials to be used. Where specific representations are made that certain types of products or materials will be used, or the buyer has specified that certain types of products or materials are to be used, a description of such products or materials shall be clearly set forth in the contract.

a. name or make
b. size or capacity
c. both a. and b.
d. none of the above

311. The total price or other consideration to be paid by the buyer, including all finance charges. If the contract is one for time and materials the total cost for labor and materials and all other terms and conditions of the contract affecting price shall be clearly stated.

a. True
b. False

312. If the buyer is required to sign a note, the amount and terms of the note should correspond exactly with those stated in the initial agreement.

a. True
b. False

Questions 313 to 317 (Refer to Review Document - ATCP 110.06 Preservation of Buyer's Claims and Defenses)

313. No seller shall use any promissory note or instrument, other than a check, in connection to a home improvement contract unless it bears the following statement in contrasting bold−face type: "This is a home improvement instrument and is non−negotiable. Every holder takes subject to claims and defenses of the maker or obligor."

a. True
b. False

314. No seller shall enter into any home improvement contract wherein the _____ or any assignee any claim or defense the buyer may have against the seller under the contract.

a. seller waives the right to assert against the buyer
b. financier waives the right to assert against the seller
c. assignee waives the right to assert against the buyer
d. buyer waives the right to assert against the seller

315. Every assignee of a home improvement contract takes subject to all claims and defenses of the _____ or successors in interest.

a. seller
b. vendor
c. buyer
d. retailer

316. Claims and defenses of any buyer against a _____ under the contract shall be limited to the total amount for which the buyer was obligated at the time of entering into the contract.

a. assignee
b. assignee or transferee
c. transferee
d. tenant

317. Every holder or transferee of a negotiable instrument executed in violation of this section, _____ at the time the document was acquired that it was made to evidence an obligation for home improvements, or _____ that the payee or transferor was engaged in the home improvement business, takes subject to all claims and defenses of the maker or obligor.

a. who knew
b. should have known
c. who knew or should have known
d. none of the above

Questions 318 to 332 (Refer to Review Document - ATCP 110.07 Contract Cancellation: Return of Payments and ATCP 110.08 Contract Compliance)

318. CONDITIONS WARRANTING EXERCISE OF BUYER'S REMEDIES. If, under a home improvement contract, a buyer pays a seller for any home improvement materials or services before the seller provides those materials or services to the buyer, the buyer may proceed under sub. (2) if any of the following occurs:
(a). The seller fails to provide the materials or services by a deadline specified in the home improvement contract.
(b). The seller fails to give buyer notice of an impending delay as required under s. ATCP 110.02 (7) (c), or fails to obtain the buyer's agreement to a new performance deadline.
(c). The buyer believes that the seller has failed to provide the materials or services in a timely manner, and the home improvement contract specifies no deadline for the seller to provide the materials or services.

a. (a) and (b)
b. (a) and (c)
c. (a), (b) and (c)
d. (b) and (c)

319. BUYER'S REMEDIES. If the conditions under sub. (1) are met, the buyer may do all of the following:
(a) Cancel the contract.
(b) Demand return of all payments which the seller has not yet expended on the home improvement.
(c) If the seller has used any of the buyer's payments to purchase materials for the home improvement, demand delivery to the home improvement site of those materials which have not yet been used for the home improvement or delivered to the site.
(d) Demand a written accounting for all payments that the buyer made to the seller. The written accounting shall detail how all payments were used by the seller.

a. (a) and (b)
b. (a) and (c)
c. (a), (b) and (d)
d. (a), (b), (c) and (d)

320. BUYER'S REMEDIES. Request a written accounting for all payments that are made under the contract. The written accounting shall detail how all payments were used by the seller.

a. True
b. False

321. CONDITIONS WARRANTING EXERCISE OF BUYER'S REMEDIES. (b) The seller fails to give buyer notice of an impending delay as required under s. ATCP 110.02 (7) (c), or fails to obtain the buyer's agreement to a new performance deadline.
Note: Section ATCP 110.02 (7) (c) specified that it was a prohibited unfair trade practice for a seller to fail to give the buyer timely notice of any _____ in contract performance, if performance will be delayed beyond the deadline specified in the contract. Effective May 1, 2014, s. ATCP 110.02 (7) (c) is repealed and s. ATCP110.027 (1) is created. Section ATCP 110.027 (1) requires sellers to give buyers timely notice of any impending delay in the home improvement contract performance if performance will be delayed beyond a specified deadline.

a. changes
b. impending delay
c. additions
d. both a. and c.

322. BUYER'S EXERCISE OF REMEDIES; PROCEDURES. In order to exercise any remedy under sub. (2), the buyer shall _____ to the seller, or to the seller's officer, director or agent.

a. give verbal notice
b. deliver written notice
c. deliver written and verbal notice
d. no notice is required

323. BUYER'S EXERCISE OF REMEDIES; PROCEDURES. If notice is mailed to the buyer, the date on which the post office receives the notice for delivery is considered the date of service.

a. True
b. False

324. BUYER'S REMEDIES. If the conditions under sub. (1) are met, the buyer may do all of the following:
(a) Cancel the contract.
(b) Demand return of all payments which the seller has not yet expended on the home improvement.

a. True
b. False

325. COMPLIANCE BY SELLER. If the buyer demands the return of payments to which the buyer is entitled under sub. (2) (c), the seller shall return those payments to the buyer within _____ after the buyer's demand is served on the seller under sub. (3).

a. 10 business days
b. 10 calendar days
c. 15 business days
d. 15 calendar days

326. COMPLIANCE BY SELLER. If the buyer demands an accounting to which the buyer is entitled under sub. (2) (d), the seller shall provide the buyer with the written accounting within _____ after the buyer's demand is served on the seller under sub. (3).

a. 10 calendar days
b. 20 calendar days
c. 30 calendar days
d. 45 calendar days

327. COMPLIANCE BY SELLER. If the buyer demands delivery of materials to which the buyer is entitled under sub. (2) (c), the seller shall deliver those materials to the home improvement site within 15 calendar days after the buyer's demand is served on the seller under sub. (3), or within _____ days after the seller receives the materials from the seller's supplier, whichever occurs later.

a. 5 business days
b. 5 calendar days
c. 15 business days
d. 15 calendar days

328. BUYER'S REMEDIES. If the conditions under sub. (1) are met, the buyer _____ of the following:
If the seller has used any of the buyer's payments to purchase materials for the home improvement, demand delivery to the home improvement site of those materials which have not yet been used for the home improvement or delivered to the site.

a. should do all
b. can do all
c. may do all
d. shall do all

329. BUYER'S EXERCISE OF REMEDIES; PROCEDURES. Notice shall be delivered in person, by certified mail to the seller's last known address, or by regular mail with evidence of mailing to the seller's last known address.

a. True
b. False

330. CONDITIONS WARRANTING EXERCISE OF BUYER'S REMEDIES. If, under a home improvement contract, a buyer pays a seller for any home improvement materials or services before the seller provides those materials or services to the buyer, the buyer may proceed under sub. (2) if any of the following occurs:
(a). The seller fails to provide the materials or services by a deadline specified in the home improvement contract.
(b). The seller fails to give buyer notice of an impending delay as required under s. ATCP 110.02 (7) (c), or fails to obtain the buyer's agreement to a new performance deadline.
(c). The _____ believes that the seller has failed to provide the materials or services in a timely manner, and the home improvement contract specifies no deadline for the _____ to provide the materials or services.

a. seller/ seller
b. buyer/ buyer
c. seller/ buyer
d. buyer/seller

331. REMEDIES NOT EXCLUSIVE. A buyer's remedies under this section are a prerequisite to the exercise of any other remedies and they limit any other remedies available to the buyer.

a. True
b. False

332. CONTRACT COMPLIANCE. A home improvement contract which constitutes a "consumer approval transaction" as defined in s. 423.201, Stats., may comply with ch. 423, Stats.
History: Cr. Register, September, 1993, No. 453, eff. 10−1−93.

a. True
b. False

Questions 333 to 360 (Refer to Review Document - Chapter ATCP 110.09 Basement Waterproofing Practices)

333. DECLARATION OF POLICY. Basement water problems and particularly those arising from poor drainage or high-water tables are often difficult to correct without a thorough analysis of causative factors and the performance of extensive and costly waterproofing services. The effectiveness of such services, unlike many other services, cannot readily be determined until heavy rains or other conditions responsible for basement water problems occur. In the performance of basement waterproofing services certain methods or processes have been used at substantial cost to the consumer which are _____ for the correction of basement water problems. Guarantees, if given, may often be vague, ambiguous, or unenforceable against the seller, or otherwise made without reasonable expectancy of performance on the part of the seller to the detriment of the buyer. These and other abuses in the sale of basement waterproofing services are contrary to the public interest and are unfair trade practices and unfair methods of competition prohibited under s. 100.20, Stats.

a. ineffective,
b. inadequate
c. ineffective, inadequate or unsuitable
d. none of the above

334. DEFINITIONS. "Guarantee" means any promise, made by or on behalf of the seller in connection with the sale of basement waterproofing services, which provides that the seller's _____ are defect free or will meet a specified level of performance over a specified period of time, or which provides that the seller will correct, repair, service, replace, make refunds for, or otherwise remedy any systems, problems, defects, or malfunctions that relate to or arise out of basement waterproofing services. The term includes service contracts or agreements made by or on behalf of the seller in connection with a basement waterproofing contract under which the seller provides or agrees to perform, over a fixed or extended period of time, basement waterproofing inspection, maintenance, or repair services, whether or not a separate or additional charge is made for such services.

a. services
b. materials
c. workmanship
d. all of the above

335. GUARANTEES. Basement dampness needs to be excluded from the guarantee if agreed to by the buyer in writing and the guarantee or contract contains the following statement in bold face type: "THE GUARANTEE PROVIDED HEREIN DOES NOT COVER DAMPNESS ON THE BASEMENT WALLS—IT DOES COVER ANY WATER LEAKAGE OR FLOW."

a. True
b. False

336. GUARANTEES. All guarantees _____ be furnished to the buyer in writing prior to the final execution of any contract and include the name and address of the seller or person responsible for performance under the guarantee. Guarantees _____ be considered part of the basement waterproofing contract and any breach in the terms or conditions thereof _____ entitle the buyer to a full refund of money paid under the contract, less the value of benefits actually derived from the performed services. The burden of establishing any benefit to the buyer ____ be on the seller.

a. shall/ may/ can/ shall
b. will/ may/ shall/ shall
c. can/ shall/ may/ will
d. shall/ shall/ shall/ shall

337. DEFINITIONS. _____ means a written report from a professional engineer registered in the state of Wisconsin containing an analysis of soil conditions, water tables or pressure, and other factors or conditions affecting the existence and correction of basement water problems, and an opinion as to the probability that the process and the particular substances or materials which are to be used in the performance of basement waterproofing services will or will not cure the basement water problem or have a significant waterproofing effect.

a. Professional report
b. State inspector analysis
c. Engineer's analysis
d. Both a. and c.

338. DECLARATION OF POLICY. These and other abuses in the sale of basement waterproofing services are contrary to the public interest and are unfair trade practices and unfair methods of competition prohibited under s. 100.20, Stats.

a. True
b. False

339. PROHIBITED PRACTICES. Advertise basement waterproofing services using the pressure pumping process without disclosing in the advertisement that an engineer's analysis recommending this process is required as a condition to the use thereof, and must be furnished to the buyer before a contract is signed.

a. True
b. False

340. PROHIBITED PRACTICES. No seller of basement waterproofing services, products, or materials shall engage in the following unfair trade practices or unfair methods of competition: Advertise basement waterproofing services in a manner which explicitly states or otherwise suggests or implies that such services _____, unless they are in fact guaranteed and a copy of the guarantee is furnished to the buyer in connection with any basement waterproofing contract.

a. will be guaranteed
b. need to be performed
c. are offered and warranted
d. will not be guaranteed

341. DECLARATION OF POLICY. In the performance of basement waterproofing services certain methods or processes have been used at substantial cost to the consumer which are ineffective, inadequate, or unsuitable for the correction of basement water problems. Guarantees, if given, may often be vague, ambiguous, or unenforceable against the seller, or otherwise made without reasonable expectancy of performance on the part of the seller to the detriment of the buyer.

a. True
b. False

342. PROHIBITED PRACTICES. No seller of basement waterproofing services, products, or materials shall engage in the following unfair trade practices or unfair methods of competition: Fail to provide, in all instances where the seller's basement waterproofing services are not guaranteed, the following disclaimer, which shall be set forth on the face of the contract, separate and apart from all other contract provisions, and in bold face type: "THE BASEMENT WATERPROOFING SERVICES PROVIDED BY THIS CONTRACT ARE NOT GUARANTEED."

a. True
b. False

343. PROHIBITED PRACTICES. No seller of basement waterproofing services, products, or materials shall engage in the following unfair trade practices or unfair methods of competition: Make any guarantee the seller knows or reasonably ought to know cannot be performed or which _____ the seller or other persons obligated under the guarantee may be able to honor or perform under the guarantee.

a. limits the period of time
b. maximizes the period of time
c. exceeds the period of time
d. minimizes the period of time

344. PROHIBITED PRACTICES. No seller of basement waterproofing services, products, or materials shall engage in the following unfair trade practices or unfair methods of competition: Enter into a basement waterproofing contract which provides, in whole or in part, for the performance of services which the seller knows or reasonably ought to know are unnecessary or will not materially serve to correct the buyer's basement water problem, unless such unnecessary or noncorrective services are _____ identified and enumerated in the seller's analysis, or an amendment thereto, provided to the buyer prior to execution of a basement waterproofing contract.

a. separately
b. distinctly
c. separately and distinctly
d. none of the above

345. GUARANTEES. Guarantees shall be considered part of the basement waterproofing contract and any breach in the terms or conditions thereof shall entitle the buyer to a full refund of money paid under the contract, less the value of benefits actually derived from the performed services. The burden of establishing any benefit to the seller is on the buyer.

a. True
b. False

346. PROHIBITED PRACTICES. No seller of basement waterproofing services, products, or materials shall engage in the following unfair trade practices or unfair methods of competition: Sell basement waterproofing services using the pressure pumping method unless the need or effectiveness of such method is established in a seller's analysis verified by the manufacturer of the pressure pumping system furnished to the buyer prior to the sale, and the work is guaranteed as provided under sub. (4).

a. True
b. False

347. GUARANTEES. All guarantees shall be set forth in clear and explicit terms and shall fully guarantee that the work or services to be performed will effectively prevent or control the basement water problem they were designed or intended to prevent or control for the period of time specified in the guarantee. Basement dampness may be excluded from the guarantee if agreed to by the buyer in writing and the guarantee or contract contains the following statement in bold face type: "THE GUARANTEE PROVIDED HEREIN DOES NOT COVER DAMPNESS ON THE BASEMENT WALLS—IT DOES COVER ANY WATER LEAKAGE OR FLOW."

a. True
b. False

348. GUARANTEES. All guarantees shall contain a provision that any remedial work or services to be performed under the guarantee shall begin within _____ and be completed within _____ after notice by the buyer to the seller of any failure of the waterproofing services under the contract. Notice of any claim by the buyer under the guarantee shall be deemed actual notice if mailed by certified mail to the seller's address as set forth in the guarantee.

a. 30 days, 3 months
b. 45 days, 6 months
c. 45 days, 3 months
d. 30 days, 6 months

349. SELLERS ANALYSIS. Sellers of basement waterproofing services _____ and furnish to the buyer a signed copy of the seller's analysis prior to the final execution of any basement waterproofing contract.

a. should prepare
b. may prepare
c. can prepare
d. shall prepare

350. DECLARATION OF POLICY. Basement water problems and particularly those arising from poor drainage or high water tables are often difficult to correct without a thorough analysis of causative factors and the performance of extensive and costly waterproofing services. The effectiveness of such services, unlike many other services, cannot readily be determined until heavy rains or other conditions responsible for basement water problems occur.

a. True
b. False

351. PROHIBITED PRACTICES. Sellers of basement waterproofing services, products, or materials can engage in the following unfair trade practices or unfair methods of competition: Make or offer to make any guarantee with respect to basement waterproofing services unless the guarantee meets the requirements of sub. (4), and is furnished to the buyer in writing with a seller's analysis prior to final execution of any contract.

a. True
b. False

352. PROHIBITED PRACTICES. No seller of basement waterproofing services, products, or materials shall engage in the following unfair trade practices or unfair methods of competition: Enter into any contract for basement waterproofing services which does not contain all _____ made with respect to such services, and which is not in writing and signed by the buyer and seller.

a. agreements or promises
b. agreements or representations
c. agreements, promises or representations
d. None of the above

353. GUARANTEES. (a) All guarantees _____ furnished to the buyer in writing prior to the final execution of any contract and include the name and address of the seller or person responsible for performance under the guarantee.

a. can be
b. may be
c. should be
d. shall be

354. PROHIBITED PRACTICES. No seller of basement waterproofing services, products, or materials shall engage in the following unfair trade practices or unfair methods of competition: _____ that basement waterproofing services of the seller are or will be effective unless the seller is experienced in and uses basement waterproofing methods generally recognized as being effective for the prevention or control of basement water problems in the basement waterproofing industry.

a. Advertise
b. Analyze
c. Guarantee
d. Promise

355. PROHIBITED PRACTICES. No seller of basement waterproofing services, products, or materials shall engage in the following unfair trade practices or unfair methods of competition: Submit a buyer's analysis to the tenant which the seller knows or reasonably ought to know is founded on incorrect facts or conclusions.

a. True
b. False

356. DEFINITIONS. The term includes service contracts or agreements made by or on behalf of the _____ in connection with a basement waterproofing contract under which the seller provides or agrees to perform, over a fixed or extended period of time, basement waterproofing inspection, maintenance, or repair services, whether or not a separate or additional charge is made for such services.

a. buyer
b. tenant
c. seller
d. merchant

357. DEFINITIONS. _____ means a basement waterproofing process by which a substance is injected into the ground adjacent to the basement walls or beneath the basement foundation or floor by pipes or other conduits for the purpose of protecting or sealing the basement walls, foundation or floors against water penetration.

a. Pressure pumping
b. Waterproofing
c. Insertion
d. Injection coating

358. DEFINITIONS. _____ means the use or application of materials or processes for the prevention or control of water leakage or flow through the basement walls or flooring into the interior portion of a basement.

a. Cellar waterproofing
b. Basement waterproofing
c. Injection waterproofing
d. Insertion waterproofing

359. DEFINITIONS. _____ is a written statement by the seller of the causes and conditions responsible for the buyer's basement water problem and the specific processes and materials to be used in correcting the problem.

a. Buyer's analysis
b. Seller's analysis
c. Engineering study
d. Engineering analysis

360. DEFINITIONS. _____ means any promise, made by or on behalf of the seller in connection with the sale of basement waterproofing services, which provides that the seller's services, materials, or workman-ship are defect free or will meet a specified level of performance over a specified period of time, or which provides that the seller will correct, repair, service, replace, make refunds for, or otherwise remedy any systems, problems, defects, or malfunctions that relate to or arise out of basement waterproofing services.

a. Guarantee
b. Assurance
c. Warranty
d. Agreement