

The following test is Continuing Education for:

UDC Inspectors, HVAC Inspectors, and Dwelling Contractor Qualifiers.

All answers are found in the Wisconsin Uniform Dwelling Code Book (Comm. 20, 21, and 22).

Please note that due to some recent code changes, the information in the code text of the State website may not be exactly the same as what is needed for this test. Therefore, please use an existing code book, or use the PDF's for Comm 20, Comm. 21, and Comm 22 found on the homepage of this website. Please call Brett at (920) 740-4348 with any questions or concerns you may have.

The answer sheet can be found at the end of the test. Take the following steps to complete the testing process:

- 1. Print the answer sheet and circle the correct answer.**
- 2. Complete and Mail the:**
 - a) Answer sheet**
 - b) Educational Course Attendance Verification Form (found after the answer sheet)**
 - c) Correct fees**

There is no reason to mail the whole test.

Remember: All questions have been extracted from the codebook. Therefore, the one correct answer will be as worded in the codes.

Begin test on the following page....

Construction Inspection/Qualifier Cont. Ed. Test 21

Comm 20 Subchapter III: Definitions

1. _____ means an enhancement, upgrading or substantial change or modification other than an addition or repair to a dwelling or to electrical, plumbing, heating, ventilating, air conditioning and other systems within a dwelling.
 - a. Modification
 - b. Revision
 - c. Alteration
 - d. Amendment

2. _____ means a space under the roof and above the ceiling of the topmost part of the dwelling.
 - a. Atrium
 - b. Alcove
 - c. Garrett
 - d. Attic

3. _____ means that portion of a dwelling below the first floor or groundfloor with its entire floor below grade.
 - a. Crawlspace
 - b. Groundfloor
 - c. Basement
 - d. Subcellar

4. _____ means an approval by the department or its authorized representative.
 - a. Permitted
 - b. Authorized
 - c. Sanctioned
 - d. Approved

5. _____ means practices, techniques or measures that the department determines to be effective means of preventing or reducing pollutants of surface water generated from construction sites.
 - a. Best environmental practices
 - b. Best management practices
 - c. Best practices
 - d. Quality assurance

6. _____ means a comprehensive plan designed to reduce the discharge of pollutants from storm water, after the site has undergone stabilization, following completion of the construction activity.
- Storm water program
 - Water quality control
 - Storm water management plan
 - Storm water management practices
7. _____ means any day other than Saturday, Sunday or a legal holiday.
- Work week
 - Net working day
 - Business day
 - Flex time
8. _____ means a structure used for storing motorized vehicles that is attached to a dwelling that has at least 2 sides completely unenclosed.
- Carport
 - Garage
 - RV covers
 - Attachment
9. _____ means the clear vertical distance from the finished floor to the finished ceiling.
- Wall height
 - Entrance height
 - Ceiling height
 - Basement height
10. _____ means a person certified by the department to engage in the administration and enforcement of this code.
- State inspector
 - Building inspector
 - Licensed inspector
 - Certified inspector
11. _____ means areas along the coast of Lake Michigan or Lake Superior below base flood elevation that is subject to wave runup or wave heights of 3 feet or more.
- Base floodplain
 - Coastal zone
 - Coastal construction
 - Coastal floodplain

12. _____ means chs Comm 20 to 25, the Wisconsin uniform dwelling code.

- a. Regulations
- b. Policies
- c. Rules
- d. Code

13. _____ means a material or device used to retard or prevent the spread of flame or hot gases through concealed spaces into adjacent rooms or areas.

- a. Fireproofing
- b. Fireblocking
- c. Fire resistance
- d. Firefighting

14. _____ means that part of the fireplace used as a combustion chamber.

- a. Firebox
- b. Firetube
- c. Boiler
- d. Firebrick

15. _____ means the total amount of air necessary for the complete combustion of a fuel.

- a. Combustion air
- b. Exothermic chemical reaction
- c. Internal combustion
- d. Turbulent combustion

16. _____ means one or more vertical, or nearly so, passageways or flues for the purpose of conveying flue gases to the atmosphere.

- a. Stack effect
- b. Chimney
- c. Smoke stack
- d. Vent pipe

17. _____ means the same as smoke pipe.

- a. Chimney
- b. Chimney connector
- c. Smoke stack
- d. Vent pipe

18. _____ means the detailed system documentation and methods of assuring that manufactured dwellings and dwelling components are manufactured, stored, transported, assembled, handled and installed in accordance with this code.
- Quality assurance program
 - Compliance assurance program
 - Enforcement program
 - Standards setting program
19. _____ means a method or device implemented to prevent or reduce erosion or the resulting deposition of soil or sediment.
- Environmental practice
 - Quality control practice
 - City ordinance
 - Control practice
20. _____ is the rate at which heat must be removed from the space to maintain a selected indoor air temperature during periods of design outdoor weather conditions.
- Supplemental load
 - Heat load
 - Cooling load
 - Evaporative cooling
21. _____ means the vertical load due to all permanent structural and nonstructural components of the building such as joists, rafters, sheathing, finishes and construction assemblies such as walls, partitions, floors, ceilings and roofs, and systems.
- Dead load
 - Allowable stress
 - Live load
 - Actual load
22. _____ means an unenclosed exterior structure, attached or adjacent to the exterior wall of a building, which has a floor, but no roof.
- Deck
 - Balcony
 - Landing
 - Veranda
23. _____ means the department of commerce.
- Department
 - Division
 - Branch
 - Local office

24. _____ means any building which is not physically connected to the dwelling.
- a. Accessory building
 - b. Renovation
 - c. Detached building
 - d. Addition
25. _____ means a device or seal approved by the department to certify compliance with this code.
- a. Wisconsin crest
 - b. Wisconsin insignia
 - c. Wisconsin stamp
 - d. Wisconsin qualified
26. _____ means air that is provided for the purpose of mixing with flue gases in a draft hood or draft regulator.
- a. Concentration air
 - b. Dilution air
 - c. Moisture-laden emission
 - d. Aeration
27. _____ means a gas-burning appliance that is constructed and installed so that all air for combustion is derived directly from the outside atmosphere and all flue gases are discharged to the outside atmosphere.
- a. Direct vent-appliance
 - b. Co-axial venting
 - c. Vertical venting
 - d. Field direct vent system
28. _____ means a method that collects, stores and converts by bacterial digestion nonliquid-carried human wastes or organic kitchen wastes, or both, into humus.
- a. Composting toilet system
 - b. Septic system
 - c. Organic toilet system
 - d. Arborloo
29. _____ means any building, the initial construction of which is commenced on or after the effective date of this code, which contains one or 2 dwelling units.
- a. Occupancy
 - b. Real estate
 - c. Dwelling
 - d. Property

30. _____ means any person, firm or corporation engaged in the business of performing erosion control or construction works such as framing, roofing, siding, insulating, masonry or window replacement work covered under this code and who takes out a building permit.

- a. Qualifier certification
- b. Eligible contractor
- c. Construction contractor
- d. Dwelling contractor

31. _____ means a vertical flue or passageway to vent fuel-burning appliances.

- a. Volcano
- b. Vent
- c. Flue
- d. Duct

32. _____ is a connector between a fuel-burning appliance and the chimney or vent.

- a. Duct
- b. Flue
- c. Vent
- d. Vent connector

33. Dwelling contractor does not include the owner of an existing dwelling, an owner who will reside in a new dwelling or a person, firm or corporation engaging exclusively in electrical, plumbing, heating, ventilating and air conditioning work.

- a. True
- b. False

34. _____ means the detachment and movement of soil, sediment or rock fragments by water, wind, ice, or gravity.

- a. Weathering
- b. Erosion
- c. Sedimentation
- d. Soil compaction

35. _____ means a direct, continuous, unobstructed means of egress from inside the dwelling to the exterior of the dwelling.

- a. Entrance
- b. Outlet
- c. Foyer
- d. Exit

36. _____ means any structure, or that part of a structure, which is used or intended to be used as a home, residence or sleeping place by one person or by 2 or more persons maintaining a common household, to the exclusion of all others.

- a. Accessory dwelling unit
- b. Dwelling unit
- c. Residential unit
- d. Structural unit

37. _____ means a detached building, not used as a dwelling unit but is incidental to that of the main building and which is located on the same lot. _____ does not mean farm building.

- a. Accessory structure
- b. Secondary building
- c. Habitable building
- d. Accessory building

38. _____ is defined to be the area which is planted and cultivated.

- a. Premises
- b. Farm premises
- c. Farm
- d. Acreage

39. _____ are defined as agricultural, horticultural and arboricultural crops.

- a. Farming
- b. Farm production
- c. Farm products
- d. Free range products

40. _____ means the operation of a farm premises owned or rented by the operator.

- a. Agriculture
- b. Horticulture
- c. Arboriculture
- d. Farming

41. _____ means the first floor level above any groundfloor or basement or, in the absence of a groundfloor or basement, means the lowest floor level in the dwelling.

- a. First floor
- b. Ground floor
- c. Grade
- d. Basement

42. _____ means a dwelling erected prior to the effective date of this code, one for which a valid building permit exists, or one for which lawful construction has commenced prior to the effective date of this code.

- a. Accessory dwelling unit
- b. Existing dwelling
- c. Existing building
- d. Pre-existing dwelling

43. _____ is the planting and cultivating of the soil and growing of farm products substantially all of which been planted or produced on the farm premises.

- a. Organic farming
- b. Farm operation
- c. Gardening
- d. Agriculture

44. _____ means land which is subject to flooding which is at or below base flood elevation.

- a. Floodway
- b. Floodplain
- c. Flood fringe
- d. Flood meadow

45. _____ means the channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the flood discharge.

- a. Floodplain
- b. Flood fringe
- c. Floodway
- d. Flood district

46. _____ means the area of a room that has a ceiling height of at least 7 feet.

- a. Floor area
- b. Floor space index
- c. Square footage
- d. Floor design

47. _____ means a structure used for storing motorized vehicles that has any more than 2 sides completely enclosed.

- a. Carport
- b. Garage
- c. Pole barn
- d. Attachment

48. _____ means any room used for sleeping, living or dining purposes, excluding such enclosed places as kitchens, closets, pantries, bath or toilet rooms, hallways, laundries, storage spaces, utility rooms, and similar spaces.

- a. Future room
- b. Habitable room
- c. Conditional occupancy
- d. Recreation room

49. _____ means a continuous series of steps with no intermediate landings.

- a. Flight
- b. Stairway
- c. Stairs
- d. Stairwell

50. _____ means that portion of the floodplain outside of the floodway that is at or below base flood elevation.

- a. Flood hazard area
- b. Future flood zone
- c. Floodfringe district
- d. Floodfringe area

51. _____ means the floor area within the fire chamber of a fireplace.

- a. Firepit
- b. Hearth extension
- c. Hearth
- d. Inglenook

52. The _____ of a fireplace is the slot-like opening above the firebox through which flames, smoke and other products of combustion pass into the smoke chamber.

- a. Ash pit
- b. Throat
- c. Damper
- d. Lintel

53. _____ means the surfacing applied to the floor area extending in front of and at the sides of the fireplace opening.

- a. Firepit
- b. Inglenook
- c. Hearth
- d. Hearth extension

54. _____ is the estimated heat loss of each room or space to be heated, based on maintaining a selected indoor air temperature during periods of design outdoor weather conditions.

- a. Cooling load
- b. Supplemental load
- c. Evaporative load
- d. Heating load

55. _____ means a masonry unit which has a net cross-sectional area parallel to the bearing face which is less than 75% of the gross cross-sectional area.

- a. Grouted unit
- b. Ungrooved unit
- c. Solid unit
- d. Hollow unit

56. _____ means a self-contained device for the treatment of nonliquid carried wastes that deposits the wastes directly into a combustion chamber, reduces the solid portion to ash and evaporates the liquid portion.

- a. Portable toilet
- b. Alternative toilet
- c. Incinerating toilet
- d. Composting toilet

57. _____ means any person, firm, association, partnership or corporation certified by the department to perform certified inspections under this code.

- a. Independent inspection agency
- b. Certified building inspector
- c. Licensed inspection agency
- d. State approved inspection agency

58. _____ means a glazed opening in an exterior wall, including glazed portions of doors, within a conditioned space.

- a. Casement
- b. Skylight
- c. Porthole
- d. Window

59. _____ means a permit issued by a municipality that does not conduct inspections or plan reviews under this code.

- a. Wisconsin Procedural Permit
- b. Wisconsin Executive Permit
- c. Wisconsin Governmental Permit
- d. Wisconsin Administrative Permit

60. _____ means the date of issuance of the Wisconsin uniform building permit.

- a. Construction permit
- b. Initial construction
- c. Pre-construction period
- d. Start-up construction

61. _____ means any device that uses gas as a fuel or raw material to produce light, heat, power, refrigeration or air conditioning.

- a. Motor driven appliance
- b. Reconditioned appliance
- c. Free standing appliance
- d. Gas appliance

62. _____ means that level of a dwelling, below the first floor, located on a site with a sloping or multilevel grade and which has a portion of its floor line at grade.

- a. Basement
- b. Groundfloor
- c. Sublevel
- d. Cellar

63. _____ means the assembly of a manufactured building on site and the process of affixing a manufactured building to land, a foundation, footing or an existing building.

- a. Constructing
- b. Assembling
- c. Installation
- d. Fabricating

64. _____ means areas used, or designed to be used, for the preparation of food.

- a. Kitchen
- b. Island
- c. Breakfast nook
- d. Dining room

65. _____ means the level portion of a stairs located between flights of stairs or located at the top and foot of stairs.

- a. Stairway
- b. Staircase
- c. Landing
- d. Stairwell

66. _____ means equipment or building components which are tested by an independent testing agency and accepted by the department.

- a. Building investigation and testing
- b. Listed and listing
- c. Construction approved
- d. State endorsed

67. _____ means the weight superimposed on the floors, roof and structural and nonstructural components of the dwelling through use and by snow, ice or rain.

- a. Heat load
- b. Active load
- c. Live load
- d. Cooling load

68. _____ means an upper room or floor which has at least 50% of the common wall open to the floor below.

- a. Rigging loft
- b. Upper story
- c. Attic
- d. Loft

69. _____ means any man-made alteration of the land surface resulting in a change in the topography or existing vegetative or non-vegetative soil cover, that may result in storm water runoff and lead to an increase in soil erosion and movement of sediment.

- a. Integrated waste management
- b. Land disturbing construction activity
- c. Nonpoint source pollution
- d. Polluted runoff

70. Land disturbing construction activity includes clearing and grubbing, demolition, excavating, pit or trench dewatering, filling and grading activities.

- a. True
- b. False

71. _____ means the process of making, fabricating, constructing, forming or assembling a product from raw, unfinished, semifinished or finished materials.

- a. Industrial design
- b. Industrial revolution
- c. Industrial process
- d. Manufacture

72. _____ means new construction performed on a dwelling which increases the outside dimensions of the dwelling.

- a. Building component
- b. Alteration
- c. Addition
- d. Building system

73. _____ means the specified maximum permissible stress of a material expressed in load per unit area.

- a. Dead load
- b. Allowable stress
- c. Allowable strength design
- d. Allowable strength value

74. Manufactured dwelling means any structure or component thereof which is intended for use as a dwelling and:

- a. Is of closed construction and fabricated or assembled on site or off site in manufacturing facilities away from the building site for installation, connection, or assembly and installation at the building site.
- b. Is a building of open construction which is made or assembled in manufacturing facilities away from the building site for installation, connection, or assembly and installation on the building site and for which certification is sought by the manufacturer.
- c. a OR b
- d. None of the above

75. _____ means a structure that is designed to be used as a dwelling with or without a permanent foundation and that is certified by the federal department of housing and urban development as complying with the standards established under 42 USC 5401 to 5425.

- a. Manufactured home
- b. Mobile home
- c. Modular home
- d. Prefabricated home

76. _____ means any subsystem, subassembly or other system designed for use in or as part of a structure which may include structural, electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety.

- a. Truss
- b. Framing
- c. Remanufactured
- d. Building component

77. _____ means plans, specifications, and documentation for a system of manufactured building of for a type or a system of building components, which may include structural, electrical, mechanical, plumbing and variations which are submitted as part of the building system.

- a. Prefabricated building system
- b. Building system network
- c. Building system
- d. Building management system

78. _____ means a venting system for a gas burning appliance that is designed to remove flue or vent gases by mechanical means, such as a fan, which may consist of an induced draft portion under non-positive static pressure or a force draft portion under positive static pressure.

- a. Mechanical draft venting system
- b. Double venting system
- c. Automatic venting system
- d. Downdraft venting system

79. _____ is a branch of the physical sciences which uses the principles of mechanics in analyzing the impact of loads and forces and their effect on the physical properties of materials in the form of internal stress and strain.

- a. Continuum mechanics
- b. Structural load
- c. Disambiguation
- d. Structural analysis

80. _____ means an assembly that incorporates the smoke detector, the control equipment and the alarm-sounding device in one unit that is capable of being interconnected with one or more additional alarms so that the actuation of one alarm causes the operation of all interconnected alarms.

- a. Single station smoke alarm
- b. Interconnect modular system
- c. Multiple station smoke alarm
- d. Station alarm device

81. _____ means any city, village, town or county in this state.

- a. Municipality
- b. Political unit
- c. Governing body
- d. Providence

82. _____ means an appliance with a venting system designed to remove flue or vent gases under non-positive static vent pressure entirely by natural draft.

- a. Vent free appliance
- b. Naturally vented appliance
- c. Gas appliance
- d. Direct vent appliance

83. _____ means any building, building component, assembly or system manufactured in such a manner that it cannot be inspected before installation at the building site without disassembly, damage, or destruction.

- a. Closed construction
- b. Open construction
- c. Manufactured construction
- d. Initial construction

84. _____ means granular material, such as gravel or crushed stone, that is predominately retained on a sieve with square openings of 4.75 mm or .18 inch.

- a. Asphalt
- b. Construction aggregate
- c. Coarse aggregate
- d. Fine aggregate

85. _____ means any building, building component, assembly or system manufactured in such a manner that it can be readily inspected at the building site without disassembly, damage or destruction.

- a. Manufactured construction
- b. Closed construction
- c. Open construction
- d. Modern construction

86. The higher the perm rating of a material is, the more difficult it is for water vapor to pass through it.

- a. True
- b. False

87. _____ is a projection of masonry or a filled cell area of masonry for the purpose of bearing concentrated loads or to stiffen the wall against lateral forces.

- a. Column
- b. Pilaster
- c. Entablature
- d. Buttress

88. _____ is a masonry wall composed of 2 or more wythes of masonry units tied or bonded together.

- a. Load bearing wall
- b. Single-wythe wall
- c. Multi-wythe wall
- d. Composite wall

89. _____ means an unenclosed exterior structure at or near grade attached or adjacent to the exterior wall of any building, and having a roof and floor.

- a. Porch
- b. Balcony
- c. Deck
- d. Garage

90. _____ means the act or process of restoring to original soundness, including redecorating, refinishing, nonstructural repairs or maintenance, or the replacement of existing fixtures, systems or equipment with equivalent fixture, system or equipment.

- a. Restore
- b. Repair
- c. Reupholster
- d. Refurbish

91. _____ means a shingle with a second layer of asphalt and mat laminated to the first layer, usually in a design pattern to simulate the dimensional appearance of natural slate or wood shakes.

- a. Organic asphalt shingle
- b. Laminated shingle
- c. Fiberglass asphalt shingle
- d. Strip shingle

92. _____ means a shingle with an internal mat composed of organic fibers, such as cellulose, that is saturated and coated with asphalt.

- a. Organic asphalt shingle
- b. Laminated shingle
- c. Fiberglass asphalt shingle
- d. Strip shingle

93. _____ means a rectangle shingle that relies either on a sealant or on a combination of weight and stiffness to resist wind uplift, rather than using interlocking tabs.

- a. Organic asphalt shingle
- b. Laminated shingle
- c. Fiberglass asphalt shingle
- d. Strip shingle

94. _____ means a unit of roof covering material that has been manufactured to specific dimensions and is applied in overlapping fashion.
- a. Laminated shingle
 - b. Strip shingle
 - c. Roofing material
 - d. Shingle
95. _____ means a type of shingle with an internal mat composed of nonwoven, resin-bonded glass fibers, that is impregnated and coated with asphalt.
- a. Organic asphalt shingle
 - b. Laminated shingle
 - c. Fiberglass asphalt shingle
 - d. Strip shingle
96. _____ is a masonry wall consisting of one unit of thickness.
- a. Load bearing wall
 - b. Multi-wythe wall
 - c. Double-wythe wall
 - d. Single-wythe wall
97. _____ is that part of a fireplace which acts as a funnel to compress the smoke and gases from the fire so that they will enter the chimney above.
- a. Conventional fireplace firebox
 - b. Flue lining
 - c. Hearth extension
 - d. Smoke chamber
98. _____ is a landing or porch projecting from the wall of a building.
- a. Balcony
 - b. Deck
 - c. Platform
 - d. Porch
99. _____ means the depth or peak elevation of flooding, including wave height, which has a one percent or greater chance of occurring in any given year.
- a. Coastal flood elevation
 - b. Base flood elevation
 - c. Velocity hazard
 - d. Floodplain management

100. _____ means the condition where vegetation is established or other practices are in place on exposed soil surfaces so as to reduce erosion.

- a. Balanced
- b. Stabilized
- c. Morphology
- d. Structural runoff control

101. _____ means an enclosed nonportable toilet into which nonwater-carried human wastes are deposited to a subsurface storage chamber.

- a. Non- flush portable toilet
- b. Portable toilet
- c. Privy
- d. Composting toilet

102. _____ means a person, business or entity that is registered with the department for the purpose of facilitating plan review, issuance of Wisconsin uniform building permits, and inspection of one-and 2-family dwellings in municipalities where the department has jurisdiction pursuant to s. 1011.651 (3) (b), Stats.

- a. Certified UDC inspection agency
- b. Registered UDC inspection agency
- c. Authorized UDC inspection agency
- d. Qualified UDC inspection agency

103 _____ is one or more flights of steps, and the necessary platforms or landings connecting them, to form a continuous passage from one elevation to another.

- a. Stairway
- b. Flight
- c. Stairwell
- d. Steps

104. _____ means that portion of a building located above the basement, between the floor and ceiling.

- a. Attic
- b. Loft
- c. Story
- d. Upper story

105. _____ is a nonportable solid-fuel-burning, vented, nonducted heat-producing appliance located in the space that it is intended to heat.

- a. Stovepipe
- b. Smokepipe
- c. Stove
- d. Range

106. _____ means any person having a legal or equitable interest in the dwelling.
- a. Vendor
 - b. Proprietor
 - c. Operator
 - d. Owner
107. _____ means a unit of permeance which is measured in grains per (hour)(square foot) (inch of mercury vapor pressure difference).
- a. Water vapor transmission
 - b. Perm
 - c. Metric perm
 - d. Standard vapor pressure
108. The definition of “stove” does NOT include cooking appliances.
- a. True
 - b. False
109. _____ means the same as smoke pipe.
- a. Stovepipe
 - b. Pipe
 - c. Duct
 - d. Smoke chamber
110. _____ means a change in the physical shape of a material caused by stress.
- a. Tension
 - b. Structural analysis
 - c. Strain
 - d. Movement
111. _____ means internal resistance to an external force expressed in load per unit area; stresses acting perpendicular to the surface, or bending stresses which cause curving.
- a. Strain
 - b. Tension
 - c. Stress
 - d. Structural analysis

112. _____ means chs Comm 20 to 25, the Wisconsin uniform dwelling code.

- a. UDC
- b. Administrative code
- c. Statewide code
- d. Local code

113. _____ is a connector between the solid or liquid fuel-burning appliance and the chimney.

- a. Flue
- b. Smoke chamber
- c. Smoke pipe
- d. Shaft

114. _____ means a masonry unit which has a net cross-sectional area parallel to the bearing face which is 75% or more of the gross cross-sectional area.

- a. Solid unit
- b. Hollow unit
- c. Portable unit
- d. Wall unit

115. _____ includes those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems, and other surface waters or groundwaters, natural or artificial public or private, within the state or jurisdiction.

- a. Waters of the state
- b. Qualified waters
- c. Protected waters
- d. Surface waters

Comm 20.08 Wisconsin uniform building permit.

Comm 20.08(1)

116. Excavation may begin prior to obtaining any type of permit.

- a. True
- b. False

117. A person who obtains a Wisconsin uniform building permit from a registered UDC inspection agency shall retain the same agency to conduct the inspections for the project under s. Comm 20.10

- a. True
- b. False

118. A notice of intent shall be filed by the owner or owner's agent when land disturbing construction activity involves two or more acres.

- a. True
- b. False

119. For the purposes of par. (a), the application for the UDC permit and the submission of plans under s. Comm 20.09 shall constitute the notice of intent process.

- a. True
- b. False

120. The submittal of a notice of intent to the department for a construction site with one or more acres of land disturbing construction activity constitutes an application for coverage under a storm water construction site general permit issued by the Department of Natural Resources pursuant to s. 283.33, Stats., and ch. NR 216, which contains erosion control standards established by the Department of Commerce pursuant to s. 101.653, Stats.

- a. True
- b. False

121. The owner or owner's agent shall submit a notice of termination in a format prescribed by the department for a site where a notice of intent is required under this section.

- a. True
- b. False

122. Application for a Wisconsin uniform building permit shall be on the forms made by the contractor, the municipality or an authorized registered UDC inspection agency administering and enforcing this code. No application shall be accepted that does not contain all the information requested on the form.

- a. True
- b. False

123. The Wisconsin uniform building permit application shall be filed with the county or a registered IBC inspection agency administering and enforcing this code.

- a. True
- b. False

124. The municipality or the registered UDC inspection agency shall forward a copy of all applications for new dwelling construction to the department within 90 business days after permit issuance.

- a. True
- b. False

125. When required by local ordinance, permit applications for additions, alterations and repairs shall be filed with municipalities and counties in accordance with their adopted ordinances.

- a. True
- b. False

126. Building permits for _____, alterations and repairs are not required in municipalities where the department has jurisdiction under s. 101.651 (3) (b), Stats.

- a. dwellings
- b. additions
- c. commercial
- d. duplex's

127. The municipality shall, by ordinance, determine fees to cover _____.

- a. examination,
- b. expenses of plan examination
- c. issuance of permit
- d. all of the above

128. The municipality shall purchase a Wisconsin uniform building permit _____ from the department for each new dwelling in accordance with s. Comm 2.34.

- a. application
- b. seal
- c. stamp
- d. review

129. Inspection agency _____ shall be determined by contract between the municipality and the agency or between the department and the agency, where the agency has been authorized to conduct inspections on behalf of the department.

- a. fees
- b. personnel
- c. credibility
- d. location

130. A registered UDC inspection agency shall purchase a Wisconsin uniform building permit seal from the department for each _____ in accordance with s. Comm 2.34.

- a. addition
- b. new dwelling
- c. renovation
- d. fence

131. At least _____ sets of plans for all one- and 2-family dwellings shall be submitted to the municipality or the registered UDC inspection agency administering and enforcing this code, for examination and approval at the time the Wisconsin uniform building permit application is filed.

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

132. The required building plans shall be legible and drawn _____ or dimensioned and shall include...

- a. in ink
- b. in lead
- c. to scale
- d. none of the above

133. A site plan shall include _____.

- a. location of the dwelling
- b. location of all erosion and sediment control
- c. direction of runoff flow
- d. all of the above.

134. Floor plans _____ be provided for each floor.

- a. need not
- b. shall
- c. may
- d. can

135. The size and location of all rooms, doors, windows, _____, exit passageways and stairs shall be indicated.

- a. closets
- b. carpets
- c. phones
- d. structural features

136 A storm water management plan shall be prepared for a site where _____ or more acres of land disturbing construction activity is to occur.

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

137. _____ required plans submitted for approval be accompanied by sufficient data, calculations and information to determine if the dwelling will meet the requirements of this code.

- a. All
- b. Some
- c. Many
- d. Most

138. The data and information for determining compliance with the _____ standards shall be submitted on forms provided by the department or other approved forms.

- a. structural
- b. clean water
- c. erosion control
- d. energy conservation

139. Except as required under s. Comm 21.33, a municipality exercising jurisdiction may not require plans or calculations to be stamped by an _____.

- a. engineer
- b. architect
- c. both a and b
- d. none of the above

140. Where a dwelling is intended to be identically and repetitively constructed at different _____, a master plan may be submitted for approval.

- a. states
- b. elevations
- c. cities
- d. locations

141. If the municipality or the registered UDC inspection agency administering and enforcing this code determines that the plans submitted for a one- or 2-family dwelling _____ to the provisions of this code and other legal requirements an approval shall be issued.

- a. somewhat conforms
- b. substantially conforms
- c. does not conform
- d. may conform

142. The plans shall be stamped " _____ " by a certified inspector who holds the respective credential for the plans reviewed.

- a. not approved
- b. confidential
- c. copy
- d. conditionally approved

143. One copy shall be returned to the _____ and one copy shall be retained by the municipality or the registered UDC inspection agency administering and enforcing this code.

- a. department
- b. applicant
- c. contractor
- d. owner

144. The conditions of approval shall be indicated by a _____ or on the permit application.

- a. letter
- b. e-mail
- c. text message
- d. newspaper add

145. All conditions of the approval shall be met during _____.

- a. plan review
- b. construction
- c. bidding
- d. pre construction

146. A Wisconsin uniform building permit shall be issued if the requirements for filing and fees are satisfied and the plans have been _____.

- a. conditionally approved
- b. submitted
- c. drawn
- d. reviewed

147. A Wisconsin uniform building permit shall expire _____ months after issuance if the dwelling exterior has not been completed.

- a. 12.
- b. 18
- c. 24
- d. 36

148. Pursuant to s. 101.63 (7), Stats., the name and _____ of the Wisconsin master plumber responsible for the installation of plumbing shall be entered on the Wisconsin uniform building permit by the issuing entity at the time of issuance.

- a. license number
- b. address
- c. phone number
- d. weight

149. Construction may begin on _____ prior to the issuance of the Wisconsin uniform building permit where a permit to start construction is obtained.

- a. plumbing
- b. roof
- c. framing
- d. footings and foundations

150. Upon submittal of the application for a permit to start construction, a site plan, complete footing and foundation information including exterior grading, and a fee, the municipality or a registered UDC inspection agency enforcing this code _____ issue a permit to start construction of the footings and foundation.

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

151. Pursuant to s. 145.195, Stats., if the proposed construction requires connection to a _____, a Wisconsin uniform building permit may not be issued unless conformance with s. Comm 83.25 (2) has first been determined.

- a. public sewer
- b. well
- c. private interceptor main sewer
- d. private onsite wastewater treatment system

152. The Wisconsin uniform building permit shall be posted in a _____ place at the dwelling site.

- a. hidden
- b. conspicuous
- c. protected
- d. accessible

153. The Wisconsin uniform building permit seal shall be affixed either to the posted permit or to the Wisconsin uniform building permit application. The permit seal number shall appear on _____ documents.

- a. either
- b. neither
- c. both
- d. none of the above

154. A copy of the "denied" application, accompanied by a written statement specifying the reasons for denial, shall be sent to the _____ as specified on the Wisconsin uniform building permit application.

- a. applicant
- b. owner
- c. both a and b
- d. none of the above

155. Plans which do not substantially conform to the provisions of this code shall be stamped " _____ " One copy shall be returned to the person applying for the Wisconsin uniform building permit and one copy shall be retained by the municipality or the registered UDC inspection agency administering and enforcing this code.

- a. insufficient
- b. copy
- c. not approved
- d. needs work

156. The applicant may _____ a denial of the application in accordance with the procedure outlined in s. Comm 20.21.

- a. appeal
- b. dislike
- c. discuss
- d. none of the above

157. Action to approve or deny a uniform building permit application shall be completed within _____ business days of receipt of all forms, fees, plans and documents required to process the application, and completion of other local prerequisite permitting requirements.

- a. 5
- b. 10
- c. 15
- d. 20

Comm 21.01: Loads and Materials

158. Every dwelling shall be designed and constructed to support the actual dead load, live loads and wind loads acting upon it without _____ the allowable stresses of the material.

- a. Shifting
- b. Varying
- c. Changing
- d. Exceeding

159. The construction of buildings and structures shall result in a system that provides a complete _____ capable of transferring all loads from point of origin through the load-resisting elements to the foundation.

- a. Short path
- b. Load path
- c. Non-load path
- d. Non-continuous load path

160. Every dwelling shall be designed and constructed to support the _____ weight of all components and materials.

- a. Anticipated
- b. Actual
- c. Expected
- d. Probable

161. Earth-sheltered dwellings shall be designed and constructed to support the actual weight of all _____ loads.

- a. Soil
- b. Hydrostatic
- c. Building
- d. Live

162. Dwellings shall be designed and constructed to withstand a horizontal and uplift pressure of _____ pounds per square foot acting over the surface area.

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

163. Roof framing members spanning more than 6 feet measured from the outermost edge of the roof shall be _____ fastened to the top plate of load bearing walls using engineered clips, straps or hangers.

- a. Firmly
- b. Securely
- c. Temporarily
- d. Permanently

164. All dwellings shall be designed by the method of _____ or the method of accepted practice specified in each part of this code.

- a. Elasticity theory approach
- b. Mechanics of materials approach
- c. Finite element approach
- d. Structural analysis

165. The cumulative effects of _____ loads, such as snow, shall be considered in determining duration of load.

- a. Short-time
- b. Long-time
- c. Live
- d. Active

166. Reused lumber shall be considered to have a _____ of load factor of 0.90.

- a. Sum
- b. Amount
- c. Interval
- d. Duration

Comm 21.03: Exits, doors and hallways

167. Exits from the first floor. Except as allowed under par. (h), every dwelling unit shall be provided with _____ exit door (s) accessible from the first floor.

- a. At least one
- b. At least two
- c. Several
- d. Swing

168. At least one of the exits shall discharge to grade.

- a. True
- b. False

169. A(n)_____ exit may discharge into an attached garage provided the garage has an exit door that discharges to grade.

- a. Additional
- b. Emergency
- c. Street
- d. None of the above

170. For exiting through an attached garage, the _____ distance shall be measured using the door connecting the garage and the dwelling.

- a. Safety
- b. Total
- c. Separation
- d. None of the above

171. Dwellings consisting of no more than a first floor with a maximum floor area of 400 square feet and a loft area not exceeding (a) _____ of the first floor area, shall be provided with at least one exit door leading directly to the exterior and at least one egress window that complies with sub. (6).

- a. Half
- b. Quarter
- c. Third
- d. Two-thirds

172. Windows which are installed for exit purposes shall comply with the requirements of this subsection. The window shall be openable from the inside without the use of tools or the removal of a _____.

- a. Mullion
- b. Grille kit
- c. Hinge
- d. Sash

173. The nominal size of the net clear window opening shall be at least _____ irrespective of height or width.

- a. 20 inches by 24 inches
- b. 36 inches by 36 inches
- c. 30 inches by 30 inches
- d. 22 inches by 26 inches

174. No portion of the window, including stops, stools, meeting rails and operator arms, shall infringe on the required opening.

- a. True
- b. False

175. Hallways shall be at least _____ feet in width except that door hardware, finish trim and heating registers may infringe upon this dimension.

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

176. Balconies shall be made of concrete, metal or wood which is treated, protected or _____ decay-resistive in accordance with s. Comm 21.10.

- a. Artificially
- b. Unusually
- c. Synthetically
- d. Naturally

Comm 21.04: Stairways and elevated areas.

177. Within a stairway flight, tread depths and riser heights may vary by a _____ of 3/16 inch.

- a. Fraction
- b. Total
- c. Minimum
- d. Maximum

178. Stairways with open risers shall be constructed to prevent the through-passage of a sphere with a diameter of 4 inches or larger between any 2 _____ treads.

- a. Contiguous
- b. Parallel
- c. Reinforced
- d. Adjacent

179. Handrails and guardrails shall be constructed to withstand a _____ pound load applied in any direction.

- a. 50
- b. 75
- c. 100
- d. 200

180. A landing is not required between the door and the top of the interior stairs if the door does not _____ the stairs.

- a. Affect
- b. Infringe on
- c. Rest on
- d. Swing over

Comm 21.042: Ladders

181. Rungs may only be used for ladders with a pitch range of 75 degrees to _____ degrees.

- a. 80
- b. 85
- c. 95
- d. 90

182. Rungs shall be at least 1 inch in diameter for metal ladders and _____ inch for wood ladders.

- a. 1.5
- b. 1
- c. 2
- d. 2.5

183. The ladder shall have a _____ clearance of at least 15 inches on either side of the center of the tread.

- a. Maximum
- b. Minimum
- c. Total
- d. Overall

Comm 21.045 Ramps

184. A level landing shall be provided at the top, at the foot and at any change in _____ of the ramp.

- a. Width
- b. Height
- c. Elevation
- d. Direction

Comm 21.05: Light and ventilation

185. All habitable rooms shall be provided with natural light by means of _____ openings.

- a. Energy efficient
- b. Thermalized
- c. Glazed
- d. Operative

186. Habitable rooms, other than bedrooms, located in basements or ground floors do require natural light.

- a. True
- b. False

187. All decayable organic material, including topsoil, shall be removed from crawl space floors prior to placing the vapor retarder.

- a. True
- b. False

Comm 21.06: Ceiling height

188. All habitable rooms, kitchens, hallways, bathrooms and corridors shall have a ceiling height of at least _____ feet.

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

Comm 21.08: Fire separation and dwelling unit separation

189. Vertical separations between an attached garage and a dwelling shall extend from the top of a concrete or masonry foundation to the underside of the _____ or fire-resistive ceiling construction.

- a. Built-up roofing
- b. Roof sheathing
- c. Gable ends
- d. Trusses

190. The cover or door of the access opening shall be permanently installed with hardware that will maintain it in the _____ position when not in use.

- a. Closed
- b. Open
- c. Secured
- d. Correct

191. Penetrations of a required separation by electrical and plumbing components shall be firmly packed with noncombustible material or shall be protected with a listed through-penetration firestop system with a rating of at least _____ hour(s).

- a. Two
- b. One-quarter
- c. One-half
- d. One

Comm 21.085: Fireblocking

192. Fireblocking shall consist of one of the following EXCEPT:

- a. 1-inch nominal lumber
- b. Two layers of one-inch nominal lumber
- c. One thickness of $\frac{3}{4}$ inch nominal plywood or wood structural panel with any joints backed with the same material.
- d. One thickness of $\frac{1}{2}$ inch gypsum wallboard, faced nailed or faced screwed to solid wood, with any joints backed with the same material.

Comm 21.09: Smoke detectors

193. Smoke detectors required in this section shall be _____ powered by the house electrical service, and shall be interconnected so that activation of one detector will cause activation of all detectors.

- a. Intermittently
- b. Additionally
- c. Continuously
- d. Automatically

194. Where there is a(n) _____ door between one level and the adjacent lower level, smoke detectors shall be installed on each level.

- a. Intervening
- b. Pocket
- c. Hinged
- d. Swing

195. For envelope dwellings, at least _____ smoke alarm(s) shall be placed in the air passageways.

- a. 4
- b. 1
- c. 2
- d. 3

Comm 21.125: Erosion control and sediment control

196. Land disturbing construction activities, except those activities _____ 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. Established
- b. Permitted
- c. Mandated
- d. Necessary

197. A disturbed area shall be considered stabilized by vegetation when a perennial cover has been established with a density of at least _____.

- a. 55%
- b. 60%
- c. 65%
- d. 70%.

198. The owner or owner's agent shall check the erosion and sediment control practices for maintenance needs at all EXCEPT the following intervals until the site is stabilized:

- a. Within 24 hours after a rainfall event of .5 inches or greater.
- b. At all intervals cited on the erosion and sediment control plan.
- c. Bi-monthly
- d. None of the above

199. When the failure of erosion or sediment control practices results in an immediate threat of sediment entering _____ or the waters of the state, procedures shall be implemented immediately to repair or replace the practices.

- a. Sanitary sewers
- b. Public sewers
- c. Storm sewers
- d. City sewers

Comm 21.13: Excavations adjacent to adjoining property

200. Any person making or causing an excavation which may affect the lateral soil support of adjoining property or buildings shall provide at least 15 days written notice to all owners of adjoining buildings of the intention to excavate.

- a. True
- b. False

201. If the excavation is made to a depth of 12 feet 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. True
- b. False

Comm 21.14: Excavations for footings and foundations

202. No excavation shall be made below the footing and foundation unless provisions are taken to prevent the _____ of the footing or foundation.

- a. Collapse
- b. Failure
- c. Modification
- d. Alteration

203. All footings shall be located on undisturbed or compacted soil, free of organic material, unless the footings are _____ to bridge poor soil conditions.

- a. Continuous
- b. Embedded
- c. Reinforced
- d. Supported

Comm 21.15: Footings

204. The dwelling shall be supported on a structural system designed to transmit and safely _____ the loads to the soil.

- a. Shift
- b. Distribute
- c. Transfer
- d. Move

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

- a. Plus
- b. Minus
- c. Less
- d. None of the above

206. The bearing area shall be at least equal to the area required to transfer the loads to the supporting soil without _____ the bearing values of the soil.

- a. Lowering
- b. Changing
- c. Affecting
- d. Exceeding

207. _____ may be used in place of continuous footings where there is a change in footing elevation.

- a. Lintels
- b. Posts
- c. Beams
- d. Headers

208. No footing or foundation shall be placed on soil with a bearing capacity of less than _____ pounds per square foot unless the footing or foundation has been designed through structural analysis.

- a. 1600
- b. 2000
- c. 1000
- d. 1500

209. The soil-bearing values of common soils may be determined through _____.

- a. Soil stability
- b. Soil identification
- c. Soil management
- d. All of the above

210. If the soil located directly under a footing or foundation overlies a layer of soil having a smaller allowable bearing value, the _____ soil-bearing value shall be used.

- a. Larger
- b. Smaller
- c. Mean
- d. Median

211. No footing or foundation shall be placed upon _____ fill material, organic soil, alluvial soil or mud unless the load will be supported.

- a. Unprepared
- b. Prepared
- c. Unsuitable
- d. Incompatible

Comm 21.17: Drain tiles

212. Excepted as provided under sub. (2), a complete drain tile or pipe system shall be installed around the foundation of dwellings under _____ where groundwater occurs above the bottom of the footing.

- a. Contract
- b. Destruction
- c. Erection
- d. Construction

213. For the purposes of this section, a complete drain tile or pipe system includes the drain tile or pipe installed inside and outside the foundation at the footing level, bleeders connecting the inside tile or pipe to the outside tile or pipe, the sump pit, the discharge piping, and a pump or means of _____ water to natural grade.

- a. Releasing
- b. Discharging
- c. Circulating
- d. Moving

214. For new dwelling construction, a municipality may enact requirements for other than complete drain tile or pipe systems.

- a. True
- b. False

215. For an alteration to an existing dwelling covered by this code, a municipality may not require a complete drain tile or pipe system.

- a. True
- b. False

216. Municipalities may not allow partial drain tile or pipe systems for new dwellings under construction or existing dwellings.

- a. True
- b. False

217. The basement slab shall be placed on at least _____ inch (es) of clean graded sand, gravel or crushed stone.

- a. 1
- b. 2
- c. 3
- d. 4

Comm 21.203: Garage Floors

218. Garage floors shall be constructed of concrete or other noncombustible materials which are _____ to petroleum products.

- a. Permeable
- b. Impermeable
- c. Resistant
- d. Impervious

Comm 21.22: Wood frame floors

219. Notching and boring of beams or girders is prohibited unless determined through structural analysis.

- a. True
- b. False

220. A hole may not be bored in a floor within 2 inches of a notch or another hole.

- a. True
- b. False

221. Trimmers and headers shall be _____ when the span of the header exceeds 4 feet.

- a. Reinforced
- b. Modified
- c. Extended
- d. Doubled

Comm 21.24: Exterior covering

222. The exterior walls shall be covered with a _____ weather resistant finish.

- a. Durable
- b. Permanent
- c. Approved
- d. Shatterproof

223. During construction, wall cavity _____ may not be installed until a water-resistant exterior covering is in place over the wall cavity.

- a. Material
- b. Insulation
- c. Blockwork
- d. Panels

224. Corrosion-resistant flashing shall be installed in the _____ wall to prevent water from entering the wall cavity or coming in contact with the structural framing components.

- a. Opposing
- b. Adjacent
- c. Interior
- d. Exterior

225. The flashing shall extend to the surface of the exterior wall finish and prevent water from _____ the exterior wall.

- a. Reentering
- b. Damaging
- c. Entering
- d. Saturating

Comm 21.26: Masonry walls

226. In cold weather, provisions shall be taken to prevent masonry from being _____ by freezing.

- a. Affected
- b. Altered
- c. Damaged
- d. None of the above

227. All previously used masonry units shall be free from _____ defects which interfere with the installation or impair the structural properties of the unit.

- a. Physical
- b. Major
- c. Significant
- d. Minor

228. Only _____ may be used as an accelerant and shall be limited to 2% by weight of the cement used.

- a. Mineral oxide
- b. Sodium chloride
- c. Calcium chloride
- d. Chlorocalcite

229. Only _____ may be used as mortar color and shall not exceed 10% by weight of the cement used.

- a. Red iron oxide
- b. Sodium chloride
- c. Calcium chloride
- d. Mineral oxide

230. Mortar shall be mixed for at least _____ minutes after all ingredients have been added with the maximum amount of water to produce workable consistency.

- a. 4
- b. 3
- c. 5
- d. 10

231. Mortars shall be used and placed in final position within _____ hours after mixing.

- a. 1 ½
- b. 2
- c. 2 ½
- d. 3

232. Masonry veneers may be corbeled over the foundation wall, but the corbelling shall not exceed one inch.

- a. True
- b. False

233. Weep holes shall be provided at the bottom masonry course at _____ intervals of 2 feet.

- a. Accepted
- b. Regular
- c. Minimum
- d. Maximum

234. All veneers, supports and attachments shall be _____ or adhesively anchored.

- a. Automatically
- b. Routinely
- c. Mechanically
- d. Physically

Comm 21.27: Roof and ceilings

235. Roofs shall withstand a pressure of at least _____ pounds per square foot acting upward normal to the roof surface.

- a. 10
- b. 20
- c. 30
- d. 35

Comm 21.28: Roof and ceiling wood framing

236. In _____ ceilings, the upper end of the rafters shall be supported by a ridge beam or bearing wall, or thrust restraint shall be provided per s. Comm 21.02.

- a. Cathedral
- b. Suspended
- c. Conventional
- d. Flat

237. Ceiling joists shall be _____ to exterior walls and to the ends of rafters.

- a. Fastened
- b. Joined
- c. Nailed
- d. Attached

238. Roof planks shall be tongue and groove or _____ and at least 2 inches, nominal, in thickness.

- a. Double-sided
- b. Splined
- c. Single-sided
- d. Reinforced

Comm 21.29: Masonry fireplaces

239. Masonry fireplace chimneys shall extend at least 3 feet above the _____ point where the chimney passes through the roof and at least 2 feet higher than any portion of the dwelling within 10 feet of the chimney.

- a. Highest
- b. Lowest
- c. Median
- d. Central

240. _____ circulating ducts shall be constructed of masonry or metal.

- a. Warm-air
- b. Cold-air
- c. Return-air
- d. Air

241. Return air grilles shall not be located in bathrooms, kitchens, garages, utility spaces or in a confined spaced defined under s. comm. 23.06 in which a draft diverter or _____ is located.

- a. Gas regulator
- b. Barometric damper
- c. Draft regulator
- d. Switch

242. Dampers shall be made of cast iron or at least _____ gauge sheet metal.

- a. No. 10
- b. No. 19
- c. No. 12
- d. None of the above

243. The area of the damper opening shall be at least 90% of the _____ flue area when in the open position.

- a. Total
- b. Required
- c. Overall
- d. Entire

244. Metal hoods, used in lieu of a masonry smoke chamber, shall be constructed of at least No. 19 gauge corrosion-resistant metal with all seams and connections of _____ construction.

- a. Waterproof
- b. Fire resistant
- c. Fireproof
- d. Smokeproof

245. Metal hoods shall be kept a minimum of 18 inches from the combustible materials unless _____ for reduced clearances.

- a. Permitted
- b. Measured
- c. Approved
- d. Intended

246. Firebrick may be used in the _____ of the fireplace as an inlet to the flue liner.

- a. Lintel
- b. Throat
- c. Flue
- d. Ash pit

247. Fireplaces with _____ shall be provided with cleanout openings at the base.

- a. Butt walls
- b. Smoke shelves
- c. Ash pits
- d. Ash dumps

Comm 21.30: Masonry chimneys

248. No masonry chimney shall rest upon _____.

- a. Porous material
- b. Wood
- c. Lime-based mortar
- d. Base flashing

249. Chimney flues for appliances shall be at least equal to that of the area of the connector from the _____.

- a. Wall
- b. Ceiling
- c. Appliance
- d. Chimney

250. Inlets to masonry chimneys shall enter the side and be provided with _____.

- a. Caps
- b. Covers
- c. Thimbles
- d. Crowns

Comm 21.34: Construction in coastal floodplains

251. Enclosures below the base flood elevation in a coastal floodplain may not be used for human occupancy and shall be free of all obstructions, except for _____ walls and partitions.

- a. Freestanding
- b. Commercial
- c. Loadbearing
- d. Non-loadbearing

252. Non-loadbearing walls and partitions below base floor elevation shall be constructed to _____ without causing structural damage to the elevated portion of the dwelling or foundation system due to the effect of wind loads and water loads acting simultaneously.

- a. Hold
- b. Rest
- c. Set
- d. Break away

253. All dwellings located in a coastal floodplain shall be supported and _____ on pilings or columns.

- a. Embedded
- b. Anchored
- c. Installed
- d. Positioned

254. The piling or column shall have _____ soil penetration to resist combined water and wind loads at the base flood elevation.

- a. Sufficient
- b. Adequate
- c. Elevated
- d. Simultaneous

255. Piling or column design shall consider the effect of _____ of soil strata.

- a. Depth
- b. Erosion
- c. Scour
- d. None of the above

256. Mat or _____ foundations to support columns may not be used where soil under the mat or raft is subject to scour or other erosion from wave flow conditions.

- a. Shallow
- b. Isolated
- c. Pile-raft
- d. Raft

Comm 22.03: Materials, equipment and systems installation.

257. When information specified under sub. (1) is not available, or when a different value is claimed, foam plastic insulation that uses a gas other than air as the insulating medium shall use laboratory or field tests conducted on representative samples that have been aged for the equivalent of _____ years or until the R-value has stabilized.

- a. 3
- b. 4
- c. 5
- d. 6

258. The tests shall be conducted by a(n)_____ third party using the standards listed under par. (a) and shall be submitted for department review and approval in accordance with s. Comm 20.18.

- a. Independent
- b. Approved
- c. Authorized
- d. Contracted

259. Materials, equipment and systems shall be _____ in a manner that will allow a determination of their compliance with the applicable provisions of this chapter.

- a. Recognized
- b. Identified
- c. Evaluated
- d. Assessed

260. All insulation materials, caulking and weatherstripping, _____, mechanical equipment and systems components, and water-heating equipment and system components shall be installed in accordance with the manufacturer's installation instructions.

- a. Impact protection systems
- b. Fenestration components
- c. Fenestration assemblies
- d. Composite material assemblies

261. Manufacturer's installation instructions shall be available on the job site at the time of _____.

- a. Initial construction
- b. Pre-construction
- c. Construction
- d. Inspection

262. Except as provided in par. (b), a thermal resistance identification mark shall be applied by the manufacturer to each _____ of dwelling envelope insulation 12 inches or greater in width.

- a. Design
- b. Area
- c. Component
- d. Piece

263. Insulation without a thermal resistance identification mark may be used if the insulation installer provides a signed and dated certification for the insulation installed in each element of the building envelope, listing the _____.

- a. Type of insulation
- b. Manufacture
- c. R-value
- d. All of the above

264. For blown-in or sprayed insulation, the installer shall also _____ the initial installed thickness, the calculated settled thickness, the coverage area and the number of bags installed.

- a. Provide
- b. Consider
- c. Estimate
- d. Determine

265. Roof and ceiling, floor and wall cavity batt or board insulation shall be installed in a manner which will permit _____ of the manufacturer's R-value identification mark.

- a. Classification
- b. Evaluation
- c. Assessment
- d. Inspection

266. The thickness of roof and ceiling insulation that is either blown in or sprayed shall be identified by thickness markings that are labeled in _____ installed at least one for every 300 square feet through the attic space.

- a. Fathoms
- b. Centimeters
- c. Inches
- d. Feet

267. The markers shall be affixed to trusses or joists marking the _____ initial installed thickness and minimum settled thickness with numbers a minimum of one inch in height.

- a. Maximum
- b. Minimum
- c. Acceptable
- d. Appropriate

Comm 22.04: Protection of insulation.

268. Except in the _____, insulating blankets or batts shall be held in place with a covering or other means of mechanical or adhesive fastening.

- a. Subfloor
- b. Soleplate
- c. Box sill
- d. Corner posts

269. Exterior foam plastic insulation shall be protected from physical damage and damage from _____ light.

- a. Visible
- b. Infrared
- c. Ultraviolet
- d. Observable

Comm 22.05: Fenestration product rating certification and labeling

270. Except as provided in sub. (2), fenestration product rating, certification and labeling, _____ of windows, doors and skylights shall be determined in accordance with the National Fenestration Rating Council standard 100, Procedures for Determining Fenestration Product Thermal Properties, by an accredited, independent laboratory.

- a. R-values
- b. U-values
- c. Insulation
- d. Glazing

271. Where the existence of a particular feature cannot be determined with _____ certainty, the product shall not receive credit for that feature.

- a. Absolute
- b. Reasonable
- c. Complete
- d. None of the above

Comm 22.06 Definitions.

272. _____ means self-acting, operating by its own mechanism when actuated by some impersonal influence, such as a change in current strength, pressure, temperature or mechanical configuration.

- a. Manual
- b. Conditioned
- c. Automatic
- d. Renewable

273. _____ means the elements of a dwelling with enclosed conditioned space through which thermal energy may be transferred to or from the exterior.

- a. Exterior wall area
- b. Gross exterior wall area
- c. Dwelling envelope
- d. Gross floor area

274. _____ space means a space directly or indirectly supplied with mechanical cooling to maintain air temperature within the space of 85 °F or less at design conditions.

- a. Crawl
- b. Cooled
- c. Conditioned
- d. Enclosed

275. _____ means the rate of heat loss through a slab per foot of perimeter measured in Btu/h •ft •°F.

- a. U-value
- b. F-value
- c. Design temperature
- d. Thermal resistance

276. _____ wall means the opaque portion of a wall which encloses a crawl space and is partially or totally below grade.

- a. Crawl space
- b. Basement
- c. Foundation
- d. Below grade

277. _____ means slab-on-grade construction in which the heating elements or hot air distribution system is in contact with or placed within the slab or the subgrade.

- a. Shallow foundation
- b. Heated slab
- c. Spread footing foundation
- d. Mat-slab foundation

278. _____ means the equipment, distribution network, and terminals that provide either collectively or individually the processes of heating, ventilating, or air conditioning to a building.

- a. Thermodynamic system
- b. Fluid mechanic system
- c. Heat transfer system
- d. HVAC system

279. _____ means the time rate of heat flow through a body, frequently per unit area, from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady state conditions. It is expressed as $\text{Btu/h} \cdot \text{ft}^2 \cdot ^\circ\text{F}$.

- a. Thermal resistance
- b. Thermal conductance
- c. Thermal transmittance
- d. Thermal dynamics

280. _____ or “Uo” means the overall, average heat transmission of a gross area of the exterior dwelling envelope expressed as $\text{Btu/h} \cdot \text{ft}^2 \cdot ^\circ\text{F}$.

- a. Thermal transmittance overall
- b. Thermal resistance overall
- c. Thermal resistance
- d. Thermal transmittance

281. _____ means tested and listed by an independent testing laboratory as being suitable for installation in a cavity where thermal insulation will be in direct contact with the fixture.

- a. Inherently protected type non-IC
- b. Inherently protected type IC
- c. Thermally protected type non-IC
- d. Thermally protected type IC

282. _____ or “R” means a measure of the ability to retard the flow of heat.

- a. Thermal resistance
- b. Thermal transmittance
- c. Thermal resistance overall
- d. Thermal transmittance overall

283. _____ means a source of natural daylighting and of thermal, chemical or electrical energy derived directly from conversion of incident solar radiation.

- a. Solar energy source
- b. Solar power
- c. Thermal mass
- d. Insolation

284. _____ means the uncontrolled inward air leakage through cracks and interstices in any dwelling element and around windows and doors of a dwelling caused by the pressure effects of wind, and the effect of differences in the indoor and outdoor air density.

- a. Irrigation
- b. Infiltration
- c. Saturation
- d. Conductivity

285. _____ means capable of being reached quickly for operation, renewal or inspections, without requiring a person to climb over or remove obstacles or to resort to portable ladders or access equipment.

- a. Readily accessible
- b. Unrestricted accessibility
- c. Accessibility metrics
- d. Usability

286. _____ wall area means the normal projection of the dwelling envelope wall area bounding interior space which is conditioned by an energy-using system including opaque wall, window and door area.

- a. Grade
- b. Below grade
- c. Gross exterior
- d. Exterior

287. _____ means energy utilized which would otherwise be wasted and would not contribute to a desired end use, from an energy utilization system.

- a. Renewable energy
- b. Recovered energy
- c. New energy
- d. Solar energy

288. _____, as applied to equipment, means admitting close approach to equipment not guarded by locked doors, elevation or other effective means.

- a. Automatic
- b. Accessible
- c. Infiltration
- d. Inherently protected

289. _____ or “U” means the time rate of heat flow through a body or assembly which is located in between 2 different environments, expressed in Btu/h • ft.2 • °F.

- a. Thermal transmittance overall
- b. Thermal resistance overall
- c. Thermal resistance
- d. Thermal transmittance

290. _____ means the process of treating air to control simultaneously its temperature, humidity, cleanness, and distribution to meet the requirements of the conditioned space.

- a. Refrigeration
- b. Air cleaning
- c. Air conditioning
- d. Ventilation

291. _____ means insulation around the perimeter of the floor slab or its supporting foundation.

- a. Floor insulation
- b. Basement insulation
- c. Foundation insulation
- d. Slab-on-grade floor insulation

292. _____ means tested and listed by an independent testing laboratory as being suitable for installation in a cavity where the fixture may be in direct contact with thermal insulation or combustible materials and the fixture construction is such that, even without a thermal protector, the fixture cannot be overlamped or mislamped.

- a. Inherently protected type IC
- b. Inherently protected type non- IC
- c. Dynamically protected
- d. Government inspected

293. _____ areas means all exposed areas of a dwelling envelope which enclose conditioned space except openings for windows, skylights, doors and dwelling service systems.

- a. Curtain wall
- b. Translucent
- c. Opaque
- d. Glazed

294. _____ means sources of energy, excluding minerals, derived from incoming solar radiation, including natural daylighting and photosynthetic processes: from phenomena resulting there from, including wind, waves and tides, lake or pond thermal differences and from the internal heat of the earth, including nocturnal thermal exchanges.

- a. New energy sources
- b. Recovered energy sources
- c. Renewable energy sources
- d. Natural energy sources

295. _____ means the range of values within which an input variable can be varied without initiating any noticeable change in the output variable.

- a. Backlash
- b. Hysteresis
- c. Deadband
- d. Regulation

296. _____ means the sum of areas of all floors of the structure, including basements, cellars, and intermediate floored tiers measured from the exterior faces of exterior walls or from the center line of interior walls, excluding covered walkways, open roofed-over areas, porches, pipe trenches, exterior terraces or steps, chimneys, roof overhangs and similar features.

- a. Gross floor area
- b. Floor area ratio
- c. Floor space index
- d. None of the above

297. _____ means all components of the roof and ceiling envelope through which heat flows, thus creating a building transmission heat loss or gain, where such assembly is exposed to outdoor air and encloses a heated or mechanically cooled space.

- a. Roof deck
- b. Roof assembly
- c. Rake
- d. Roof system

298. _____ means capable of being operated by personal intervention.

- a. Automatic
- b. Manual
- c. Involuntary
- d. Voluntary

299. _____ means any enclosed space provided with a direct or indirect supply of heat to maintain the temperature of the space to at least 50 ° F at design conditions.

- a. Hydronic heating
- b. Heated space
- c. Central heating
- d. Unheated space

300. _____ energy means energy other than recovered energy, utilized for the purpose of heating or cooling.

- a. Vacuum
- b. Physics
- c. Environmental
- d. New

301. _____ means a consecutive series of operations.

- a. Chain
- b. Sequence
- c. Order
- d. Cycle

302. _____ means all energy-using systems in a dwelling that are operated to provide services for the occupants or processes housed therein, including HVAC, service water heating, illumination, transportation, cooking or food preparation, laundering and similar functions.

- a. Service systems
- b. Network systems
- c. Service design
- d. Organization design

303. _____ means energy that is transferred by virtue of a temperature difference or a change in state of a material.

- a. Thermodynamics
- b. Chemical reaction
- c. Temperature
- d. Heat

304. _____ means a supply of hot water for purposes other than comfort heating.

- a. Heat exchanger
- b. Service water heating
- c. Water heaters
- d. Boilers

305. _____ means the maximum design rate of energy withdrawal from a service water heating system in a designated period of time; usually an hour or a day.

- a. Service water heating demand
- b. Service water supply
- c. Point of use supply
- d. Instantaneous supply

306. _____ means provided with permanently installed electrical space heating equipment which has an input capacity of 3 kilowatts or more to meet all or part of the space heating requirements.

- a. Radiant heat
- b. Conventionally heated
- c. Electrically heated
- d. Convective heat

307. _____ means the capacity for doing work, taking a number of forms which may be transformed from one form into another, such as thermal heat, mechanical work, electrical and chemical in customary units, measured in kilowatt-hours (kWh) or British thermal units (Btu).

- a. Kinetic
- b. Thermal
- c. Entropy
- d. Energy

308. _____ means a combination of central or terminal equipment and their components, controls, accessories, interconnecting means, and terminal devices by which energy is transformed so as to perform a specific function such as, HVAC, service water heating or illumination.

- a. Structure
- b. System
- c. Organization
- d. Network

309. _____ means a space or group of spaces within a dwelling with heating or cooling requirements sufficiently similar so that comfort conditions can be maintained throughout by a single controlling device.

- a. Area
- b. Region
- c. Zone
- d. Climate

310. _____ or “Ro” means the reciprocal of overall thermal conductance expressed as $\text{Btu/h} \cdot \text{ft}^2 \cdot ^\circ\text{F}$.

- a. Thermal resistance
- b. Thermal transmittance
- c. Thermal resistance overall
- d. Thermal transmittance overall

311. _____ means a regulating device, actuated by changes in humidity, used for automatic control of relative humidity.

- a. Relay amplifier
- b. Valve
- c. Damper
- d. Humidistat

312. _____ means heating, ventilating and air conditioning.

- a. Thermodynamics
- b. Fluid mechanics
- c. HVAC
- d. Heat transfer

313. _____ means an automatic control device actuated by temperature and designed to be responsive to temperature.

- a. Thermostat
- b. Thermometer
- c. Thermocouples
- d. Semi-conductor

314. _____ wall is the opaque portion of a wall that encloses one side of a basement and is partially or totally below grade.

- a. Basement
- b. Pre-cast
- c. Foundation
- d. Interior

315. _____ means space within the dwelling envelope which is provided with heated or cooled air or surfaces to provide a heated space or a cooled space.

- a. Insulated space
- b. Crawl space
- c. Air-sealed space
- d. Conditioned space

Comm 22.07: Indoor and outdoor temperatures.

316. The indoor temperatures listed in sub. (2) and the outdoor temperatures listed in Table 22.07 shall be used to determine the total dwelling heat loss and to select the size of the _____.

- a. Ventilation
- b. Heating equipment.
- c. Thermostat
- d. System

317. Unheated, _____ basement areas shall use a design temperature of less than 50_F. All other areas of a dwelling shall use a design temperature of 70_F.

- a. Non-habitable
- b. Habitable
- c. Industrial
- d. Commercial

Comm 22.08: Ventilation and moisture control.

318. At least _____ of the net free ventilating area shall be distributed at the low sides of the roof.

- a. 50%
- b. 25%
- c. 30%
- d. 35%

319. At least 50% of the ventilating area shall be provided at _____ sides of the crawl space or as far apart as possible.

- a. Bordering
- b. Parallel
- c. Adjacent
- d. Opposite

320. The dryer vents may not terminate in an attic space or crawl space or basement.

- a. True
- b. False

Comm 22.13: Supplementary heater for heat pumps

321. If a heat pump is installed, it shall include a control to prevent _____ heater operation when the operating load can be met by the heat pump alone.

- a. Auxiliary
- b. Complementary
- c. Supplementary
- d. Corresponding

322. Supplementary heater operation is permitted during _____ periods, such as start-up periods, following set point advance room thermostat, and during defrost periods.

- a. Stable
- b. Transient
- c. Standard
- d. Regular

323. A _____ thermostat, which controls the supplementary heat on its second stage, shall be accepted as meeting this requirement.

- a. Two-stage
- b. One-stage
- c. Programmable
- d. Non-programmable

324. The _____ temperature for the compression heating shall be higher than the cut-on temperature for the supplementary heat.

- a. Cut-off
- b. Cut-on
- c. Average
- d. Adjustable

Comm 22.14: Mechanical ventilation.

325. Mechanical ventilation system supply and exhaust shall be equipped with a _____ means for shutoff when ventilation is not required.

- a. Automatic
- b. Accessible
- c. Readily accessible
- d. None of the above

326. Automatic or gravity dampers that _____ when the system is not operating shall be provided for outdoor air intake and exhaust.

- a. Activate
- b. Adjust
- c. Close
- d. Open

Comm 22.15: Temperature control

327. A readily accessible manual or automatic means shall be provided to restrict or _____ the heating or cooling input to each zone or floor.

- a. Open
- b. Close
- c. Adjust
- d. Shut off

328. Each system shall be provided with a(n) _____ thermostat for the regulation of temperature.

- a. Digital
- b. Manual
- c. Adjustable
- d. Programmable

329. A thermostat shall be capable of being set by adjustment or selection of sensors. Which one of the following is NOT correct:

- a. When used to control heating only, the thermostat shall be capable of being set from 55°F to 75°F.
- b. When used to control cooling only, the thermostat shall be capable of being set from 70°F to 85°F.
- c. When used to control both heating and cooling, the thermostat shall be capable of being set from 55°F to 85°F and shall be capable of operating the system heating and cooling in sequence.
- d. The thermostat or control system shall have an adjustable deadband of at least 5°F.

Comm 22.16: Humidity control.

330. If a system is equipped with a means for adding or removing moisture to maintain a selected relative humidity in spaces or zones, a _____ shall be provided.

- a. Humidistat
- b. Sensing element
- c. Switch
- d. Relay

331. Humidistats of humidifiers shall be capable of being set to prevent new energy from being used to produce a space or zone relative humidity above _____.

- a. 60%
- b. 30%
- c. 50%
- d. 25%

332. Humidistats of dehumidifiers shall be capable of being set to prevent new energy from being used to produce a space or zone relative humidity of less than _____ .

- a. 60%
- b. 30%
- c. 50%
- d. 25%

Comm 22.17: Duct system insulation.

333. Except as provided in sub. (4), all heating and cooling duct systems, or portions thereof, that are located in unheated or uncooled spaces respectively, shall be provided with insulation with a thermal resistance of at least _____.

- a. R-3
- b. R-4
- c. R-4.8
- d. R-5

334. Where exterior walls are used as plenum walls, wall insulation shall be as required by the most _____ condition of this section or s. Comm 22.21.

- a. Permissive
- b. Restrictive
- c. Reasonable
- d. None of the above

335. Insulation _____ shall be measured on a horizontal plane in accordance with ASTM standard C 518 at a mean temperature of 75°F at the installed thickness

- a. Integrity
- b. Maintenance
- c. Resistance
- d. Rating

336. Duct insulation (except as required to prevent condensation), is not required on any of the following ducts EXCEPT:

- (a) Supply-air or return-air ducts that are installed in basements, cellars or unventilated crawl spaces having insulated walls.
- (b) Ducts for which heat gain or loss, without insulation, will not increase the energy requirements of the building.
- (c) Ducts located within HVAC equipment.
- (d) Intake air ducts.

Comm 22.18: Duct and plenum sealing.

337. Sections of supply and return ducts not located _____ within the conditioned space and the unconditioned side of enclosed stud bays or joist cavities or spaces used to transport air shall be sealed.

- a. Primarily
- b. Entirely
- c. Largely
- d. Partly

338. Sealing shall be accomplished using welds, gaskets, mastics, mastic-plus-embedded-fabric systems or tapes installed in accordance with the manufacturer's _____ .

- a. Recommendations
- b. Instructions
- c. Directives
- d. Guidelines

339. Tapes with rubber-based adhesives may not be used.

- a. True
- b. False

Comm 22.19: Pipe insulation.

340. Except as provided in sub. (2), all _____ pipes in unheated spaces and all cooling pipes in uncooled spaces shall be insulated with material providing a minimum thermal resistivity of R-4 as measured on a flat surface in accordance with ASTM standard C 335 at a mean temperature of 75 °F.

- a. Heating
- b. Sealed
- c. Empty
- d. Thin

Comm 22.21: Envelope requirements.

341. Where basement and crawl space walls are part of the building envelope, their U-factors shall be based on the wall components and adjacent soil.

- a. True
- b. False

342. If an alteration results in the addition of permanently installed electrical space heating equipment with a combined input capacity of permanently installed electrical space heating equipment of the altered dwelling exceeds _____ kilowatts, either the area served by the new electrical space heating equipment shall meet the thermal performance standards of this subchapter for electrically heated dwellings or the entire dwelling, and the addition shall meet the thermal performance standards of this sub-chapter for electrically heated dwellings.

- a. 3
- b. 4
- c. 5
- d. 6

Comm 22.22: Vapor retarders

343. All joints in the vapor retarder shall be overlapped and secured or ____.

- a. Reinforced
- b. Diffused
- c. Sealed
- d. Controlled

344. Rips and punctures in the vapor retarder shall be _____ with vapor retarder materials and taped or sealed.

- a. Sealed
- b. Taped
- c. Patched
- d. Fastened

345. In all frame walls, floors and ceilings, the vapor retarder shall be installed on the _____ side of the thermal insulation.

- a. Winter
- b. Cool
- c. Warm
- d. Opposite

346. The vapor retarder shall cover the _____ insulation and the interior face of studs, joists and rafters.

- a. Exposed
- b. External
- c. Internal
- d. Perimeter

347. No vapor retarder is required in the box sill.

- a. True
- b. False

348. A vapor retarder shall be installed under the slab or under the base course of slabs and basement floors unless the slab is in a(n) _____ attached garage.

- a. Heated
- b. Unheated
- c. Approved
- d. Standard

Comm 22.26: Slab-on-grade floors

349. Where the perimeter edge of a slab-on-grade floor is above grade or less than ____ inches below the finished grade, the thermal resistance of the insulation around the perimeter of the floor shall not be less than the value given in Table 22.21.

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

350. Horizontal insulation extending outside of the foundation shall be covered by _____ or by soil a minimum of 10 inches thick.

- a. Permanent wood
- b. Concrete
- c. Pavement
- d. Masonry

Comm 22.27 Crawl space walls.

351. If the crawl space does not meet the requirements of s. Comm 22.25 and does not have ventilation openings which communicate directly with _____, then the exterior walls of the crawl space shall have a thermal transmittance value not exceeding the value given in Table 22.21.

- a. Intake air
- b. Outside air
- c. Dry air
- d. Wet air

352. The vertical wall insulation shall extend from the _____ of the wall to at least the inside ground surface.

- a. Base
- b. Bottom
- c. Middle
- d. Top

353. Where the vertical wall insulation stops less than 12 inches below the outside finish ground level, crawl space wall insulation shall extend horizontally and vertically downward a minimum total distance of 24 inches _____ from the outside finish ground level.

- a. Perpendicularly
- b. Horizontally
- c. Linearly
- d. Vertically

Comm 22.28: Basement walls

354. Except as provided in subs. (3) and (4), the exterior walls of basements below _____ floors shall have a transmittance value not exceeding the value given in Table 22.21.

- a. Uninsulated
- b. Insulated
- c. Unheated
- d. Heated

355. Changes in the exterior insulation area and basement wall minimum thermal transmittance may be included as part of a _____ allowed under the method of design by system analysis or other approved compliance method.

- a. Tradeoff
- b. Substitution
- c. Replacement
- d. Alternative

356. If interior insulation is used for code compliance, it shall extend the full height of the wall from basement floor to the underside of the joists above unless tradeoffs are _____ by supporting calculations that consider lateral heat conduction in the wall.

- a. Evaluated
- b. Substantiated
- c. Justified
- d. Reviewed

357. Where the total gross basement wall area is less than _____ below grade, the entire wall area, including the below-grade portion, is included as part of the gross area of exterior walls.

- a. 10 %
- b. 20 %
- c. 30 %
- d. 50 %

358. For the purpose of determining compliance with dwelling envelope performance requirements, _____ areas, including windows and doors, of all basement walls shall be included in the gross area of exterior walls.

- a. Non-opaque
- b. Opaque
- c. Transparent
- d. Translucent

Comm 22.29: Masonry veneer

359. When insulation is placed on the exterior of a foundation supporting a masonry veneer exterior, the horizontal foundation surface supporting the veneer is required to be insulated to satisfy the foundation insulation requirement.

- a. True
- b. False

Comm 22.30: Air leakage

360. The requirements of this section apply to those dwelling components that separate interior dwelling conditioned space from the outdoor ambient conditions, or unconditioned spaces such as crawl spaces, and exempted portions of the dwelling from interior spaces that are heated or _____ cooled.

- a. Automatically
- b. Manually
- c. Water
- d. Mechanically

361. Sealing shall be provided around tubs and showers, at the attic and crawl space panels, at _____ lights and around all plumbing and electrical penetrations, where these openings are located in the dwelling envelope between conditioned space or between the conditioned space and the outside.

- a. Solar
- b. Recessed
- c. Fluorescent
- d. Incandescent

Construction Inspection/Qualifier Cont. Ed. Test 21

Answer Sheet Circle or Mark the Correct Answer

- | | | | | | | | |
|-----|---------|-----|---------|------|---------|------|---------|
| 1. | a b c d | 49. | a b c d | 97. | a b c d | 145. | a b c d |
| 2. | a b c d | 50. | a b c d | 98. | a b c d | 146. | a b c d |
| 3. | a b c d | 51. | a b c d | 99. | a b c d | 147. | a b c d |
| 4. | a b c d | 52. | a b c d | 100. | a b c d | 148. | a b c d |
| 5. | a b c d | 53. | a b c d | 101. | a b c d | 149. | a b c d |
| 6. | a b c d | 54. | a b c d | 102. | a b c d | 150. | a b c d |
| 7. | a b c d | 55. | a b c d | 103. | a b c d | 151. | a b c d |
| 8. | a b c d | 56. | a b c d | 104. | a b c d | 152. | a b c d |
| 9. | a b c d | 57. | a b c d | 105. | a b c d | 153. | a b c d |
| 10. | a b c d | 58. | a b c d | 106. | a b c d | 154. | a b c d |
| 11. | a b c d | 59. | a b c d | 107. | a b c d | 155. | a b c d |
| 12. | a b c d | 60. | a b c d | 108. | a b c d | 156. | a b c d |
| 13. | a b c d | 61. | a b c d | 109. | a b c d | 157. | a b c d |
| 14. | a b c d | 62. | a b c d | 110. | a b c d | 158. | a b c d |
| 15. | a b c d | 63. | a b c d | 111. | a b c d | 159. | a b c d |
| 16. | a b c d | 64. | a b c d | 112. | a b c d | 160. | a b c d |
| 17. | a b c d | 65. | a b c d | 113. | a b c d | 161. | a b c d |
| 18. | a b c d | 66. | a b c d | 114. | a b c d | 162. | a b c d |
| 19. | a b c d | 67. | a b c d | 115. | a b c d | 163. | a b c d |
| 20. | a b c d | 68. | a b c d | 116. | a b c d | 164. | a b c d |
| 21. | a b c d | 69. | a b c d | 117. | a b c d | 165. | a b c d |
| 22. | a b c d | 70. | a b c d | 118. | a b c d | 166. | a b c d |
| 23. | a b c d | 71. | a b c d | 119. | a b c d | 167. | a b c d |
| 24. | a b c d | 72. | a b c d | 120. | a b c d | 168. | a b c d |
| 25. | a b c d | 73. | a b c d | 121. | a b c d | 169. | a b c d |
| 26. | a b c d | 74. | a b c d | 122. | a b c d | 170. | a b c d |
| 27. | a b c d | 75. | a b c d | 123. | a b c d | 171. | a b c d |
| 28. | a b c d | 76. | a b c d | 124. | a b c d | 172. | a b c d |
| 29. | a b c d | 77. | a b c d | 125. | a b c d | 173. | a b c d |
| 30. | a b c d | 78. | a b c d | 126. | a b c d | 174. | a b c d |
| 31. | a b c d | 79. | a b c d | 127. | a b c d | 175. | a b c d |
| 32. | a b c d | 80. | a b c d | 128. | a b c d | 176. | a b c d |
| 33. | a b c d | 81. | a b c d | 129. | a b c d | 177. | a b c d |
| 34. | a b c d | 82. | a b c d | 130. | a b c d | 178. | a b c d |
| 35. | a b c d | 83. | a b c d | 131. | a b c d | 179. | a b c d |
| 36. | a b c d | 84. | a b c d | 132. | a b c d | 180. | a b c d |
| 37. | a b c d | 85. | a b c d | 133. | a b c d | 181. | a b c d |
| 38. | a b c d | 86. | a b c d | 134. | a b c d | 182. | a b c d |
| 39. | a b c d | 87. | a b c d | 135. | a b c d | 183. | a b c d |
| 40. | a b c d | 88. | a b c d | 136. | a b c d | 184. | a b c d |
| 41. | a b c d | 89. | a b c d | 137. | a b c d | 185. | a b c d |
| 42. | a b c d | 90. | a b c d | 138. | a b c d | 186. | a b c d |
| 43. | a b c d | 91. | a b c d | 139. | a b c d | 187. | a b c d |
| 44. | a b c d | 92. | a b c d | 140. | a b c d | 188. | a b c d |
| 45. | a b c d | 93. | a b c d | 141. | a b c d | 189. | a b c d |
| 46. | a b c d | 94. | a b c d | 142. | a b c d | 190. | a b c d |
| 47. | a b c d | 95. | a b c d | 143. | a b c d | 191. | a b c d |
| 48. | a b c d | 96. | a b c d | 144. | a b c d | 192. | a b c d |

Construction Inspection/Qualifier Cont. Ed. Test 21
Answer Sheet (Continued)

193.	a	b	c	d	241.	a	b	c	d	289.	a	b	c	d	337.	a	b	c	d
194.	a	b	c	d	242.	a	b	c	d	290.	a	b	c	d	338.	a	b	c	d
195.	a	b	c	d	243.	a	b	c	d	291.	a	b	c	d	339.	a	b	c	d
196.	a	b	c	d	244.	a	b	c	d	292.	a	b	c	d	340.	a	b	c	d
197.	a	b	c	d	245.	a	b	c	d	293.	a	b	c	d	341.	a	b	c	d
198.	a	b	c	d	246.	a	b	c	d	294.	a	b	c	d	342.	a	b	c	d
199.	a	b	c	d	247.	a	b	c	d	295.	a	b	c	d	343.	a	b	c	d
200.	a	b	c	d	248.	a	b	c	d	296.	a	b	c	d	344.	a	b	c	d
201.	a	b	c	d	249.	a	b	c	d	297.	a	b	c	d	345.	a	b	c	d
202.	a	b	c	d	250.	a	b	c	d	298.	a	b	c	d	346.	a	b	c	d
203.	a	b	c	d	251.	a	b	c	d	299.	a	b	c	d	347.	a	b	c	d
204.	a	b	c	d	252.	a	b	c	d	300.	a	b	c	d	348.	a	b	c	d
205.	a	b	c	d	253.	a	b	c	d	301.	a	b	c	d	349.	a	b	c	d
206.	a	b	c	d	254.	a	b	c	d	302.	a	b	c	d	350.	a	b	c	d
207.	a	b	c	d	255.	a	b	c	d	303.	a	b	c	d	351.	a	b	c	d
208.	a	b	c	d	256.	a	b	c	d	304.	a	b	c	d	352.	a	b	c	d
209.	a	b	c	d	257.	a	b	c	d	305.	a	b	c	d	353.	a	b	c	d
210.	a	b	c	d	258.	a	b	c	d	306.	a	b	c	d	354.	a	b	c	d
211.	a	b	c	d	259.	a	b	c	d	307.	a	b	c	d	355.	a	b	c	d
212.	a	b	c	d	260.	a	b	c	d	308.	a	b	c	d	356.	a	b	c	d
213.	a	b	c	d	261.	a	b	c	d	309.	a	b	c	d	357.	a	b	c	d
214.	a	b	c	d	262.	a	b	c	d	310.	a	b	c	d	358.	a	b	c	d
215.	a	b	c	d	263.	a	b	c	d	311.	a	b	c	d	359.	a	b	c	d
216.	a	b	c	d	264.	a	b	c	d	312.	a	b	c	d	360.	a	b	c	d
217.	a	b	c	d	265.	a	b	c	d	313.	a	b	c	d	361.	a	b	c	d
218.	a	b	c	d	266.	a	b	c	d	314.	a	b	c	d					
219.	a	b	c	d	267.	a	b	c	d	315.	a	b	c	d					
220.	a	b	c	d	268.	a	b	c	d	316.	a	b	c	d					
221.	a	b	c	d	269.	a	b	c	d	317.	a	b	c	d					
222.	a	b	c	d	270.	a	b	c	d	318.	a	b	c	d					
223.	a	b	c	d	271.	a	b	c	d	319.	a	b	c	d					
224.	a	b	c	d	272.	a	b	c	d	320.	a	b	c	d					
225.	a	b	c	d	273.	a	b	c	d	321.	a	b	c	d					
226.	a	b	c	d	274.	a	b	c	d	322.	a	b	c	d					
227.	a	b	c	d	275.	a	b	c	d	323.	a	b	c	d					
228.	a	b	c	d	276.	a	b	c	d	324.	a	b	c	d					
229.	a	b	c	d	277.	a	b	c	d	325.	a	b	c	d					
230.	a	b	c	d	278.	a	b	c	d	326.	a	b	c	d					
231.	a	b	c	d	279.	a	b	c	d	327.	a	b	c	d					
232.	a	b	c	d	280.	a	b	c	d	328.	a	b	c	d					
233.	a	b	c	d	281.	a	b	c	d	329.	a	b	c	d					
234.	a	b	c	d	282.	a	b	c	d	330.	a	b	c	d					
235.	a	b	c	d	283.	a	b	c	d	331.	a	b	c	d					
236.	a	b	c	d	284.	a	b	c	d	332.	a	b	c	d					
237.	a	b	c	d	285.	a	b	c	d	333.	a	b	c	d					
238.	a	b	c	d	286.	a	b	c	d	334.	a	b	c	d					
239.	a	b	c	d	287.	a	b	c	d	335.	a	b	c	d					
240.	a	b	c	d	288.	a	b	c	d	336.	a	b	c	d					

Name and Credential Number

Date

To obtain your WI continuing education credits follow the below instructions.

1. If taking the same quiz more than once per cycle, fill out the forms with different dates.
2. Fill in all fields applicable.
3. Include your credential or license number.
4. We take care of registering with the state and mailing back the test results.

FYI: The state allows a person to take the same course more than once (several times) per cycle.

Send by mail

1. Test answer sheets, fee, and the following form.
 2. Fill out this form below completely.
 3. Make check or Money Order to Brett Or Kathy Ward
 4. Mail to: Yourwicontinuinged.com P.O. Box 36 Kaukauna WI 54130.
- Questions call: 920-740-4348

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Attendee's Name _____
Address _____
Date _____

Credential Number _____
Phone# _____
Fax# _____

Course Title and Name Construction Inspection/Qualifier Cont. Ed. Test 21
Credited Hours 12 hrs
List the name of each credential held by attendee _____

Email address _____

To be completed by Brett or Kathy Ward yourwicontinuinged.com

Course Password _____ Course ID# 10288

Attendee passed the correspondence quiz with greater than 70% score _____
Date

Instructor Signature _____