


July 1, 2010	<b>SANTA ROSA FIRE DEPARTMENT</b> FIRE PREVENTION BUREAU PLAN REVIEW CHECKLIST
	<b>SHELL BUILDING</b>

<b>Address:</b>	<b>Permit #:</b>
<b>Inspector:</b>	<b>Date Inspected:</b>
<b>Inspector:</b>	<b>Date Inspected:</b>
<b>Inspector:</b>	<b>Date Inspected:</b>
<b>A-Approved; AC-Approved w/comments; I-Incomplete; D-Denied</b>	

**This Checklist outlines general requirements. Information contained herein applies to typical instances and may not address all circumstances.**

**NOTE: Santa Rosa City Code, Section 18-44.903.3.2** - No final inspection as required for any portion of the development shall be deemed completed, and no Certificate of Occupancy or Temporary Certificate of Occupancy shall be issued unless and until the installation of the prescribed facilities and access ways have been completed, and the final approval thereof of the Chief or designee and the Community Development Department has been given as provided, and all inspection costs paid. Final inspections shall be conducted solely to implement the enforcement of the provisions of this section, and shall in no manner be deemed an assurance on the part of the City that the facilities are or will continue in good working order. Fire Flow Availability Certification shall be furnished to the Fire Department to include static pressure, residual pressure and gallons per minute, witnessed by the inspection authority prior to final acceptance.

**PURPOSE**

Shell buildings are often completed prior to tenants being available for all building spaces or suites. This leaves the shell building, or large portions of the shell building, unoccupied and incomplete for extended periods of time until tenant improvements are completed. Because of the unfinished or incomplete nature of a shell building, it can present certain hazards to tenants and fire fighters. While the entire building may not be occupied, the entire building must comply with the same fire and life safety requirements as though it were entirely occupied. All required fire and life safety features must be installed, tested and approved prior to any tenant occupying any portion of the building. All fire sprinklers, fire alarms, exits, exit signs, exit hardware, emergency lighting, fire extinguishers and other such equipment must be provided and maintained in all spaces of the building, even while only a portion of the building may be occupied initially.

**CODE REFERENCES**

The California Fire Code, as adopted by the City of Santa Rosa (Santa Rosa City Code - SRCC), is the primary Code used as the authority both the inspections and the corrective actions that are necessary. These Codes are listed as "SRCC 18-44", followed by the particular code section. Other commonly used code references are the California Building Code (SRCC 18-16), the California Electrical Code (SRCC 18-32), the California Mechanical Code (SRCC 18-36), the California Vehicle Code (CVC), the California Business and Professions Code (B&P) and Title 19 of the California Code of Regulations (CCR).

**REQUIRED PERMITS** - Separate permits are required for:

- Building Permit (construction)

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- Business Permit (license)
- Conditional Use Permit (zoning)
- Fire Underground water supply
- Fire Sprinkler installation
- Fire Alarm installation

**FIRE DEPARTMENT CONSTRUCTION FILE REVIEW**

- Review conditions and letters in file; verify compliance in field.
- All previously noted deficiencies must be corrected.
- All required permits and licenses must be obtained.
- All outstanding fees and fines must be paid.

**REVIEW APPROVED PLANS**

- All requirements and general conditions on approved plans must be met.

**INSPECTION APPROVAL SIGN-OFFS**

- Underground hydro
- Underground flush
- Fire alarm
- Fire pump
- Fire sprinkler monitoring
- Special systems (dust collection, high piled stock,
- BUILDING ADDRESS SIGN - SRCC 18-44.505.1
- 
- Address must be displayed on the building, on the high point of building, facing the addressed street, not obstructed by building or landscaping features. Other supplemental address signs, such as landmark signs at property entry points, may be required in addition to the building address sign, but cannot be used as a substitute for the address sign on the building. Suite or unit numbers must be displayed on front and back doors.
- 12" minimum height of address characters for building address, 6" minimum height for suites or units.
- Color of address characters must be contrasting with background.
- Address sign must be illuminated. Light source must be "on" continuously, or photo-cell controlled; timers are not acceptable. Light must be under the control of the addressed property (cannot use illumination from adjacent property or public source, such as street lights).
- Refer to Fire Prevention Bureau Standard 015 for additional information.

**BUILDING ACCESS - SRCC18-44-503.6, 18-44.503.2.3**

- |     | <b>Y</b>                 | <b>N</b>                 |  |
|-----|--------------------------|--------------------------|--|
| 22. | <input type="checkbox"/> | <input type="checkbox"/> | All gates on access roads to the building must be approved by the Fire Department prior to installation, and comply with the requirements of Fire Prevention Bureau Standard 002.    |
| 23. | <input type="checkbox"/> | <input type="checkbox"/> | All required access roads and driveways must be completed. Required roads and driveways which are still planned or under construction at the time of inspection cannot be accepted.  |
| 24. | <input type="checkbox"/> | <input type="checkbox"/> | Access roads must be provided to within 150 feet of the exterior portions of the ground floor of the building, as measured by an approved route around the exterior of the building. |
| 25. | <input type="checkbox"/> | <input type="checkbox"/> | The maximum grade of a Fire Access Road shall not exceed 15 percent (City Street Design Standards, Section VI, A3)   |
| 26. | <input type="checkbox"/> | <input type="checkbox"/> | Fire Access Roads shall have a minimum unobstructed vertical clearance of 13 feet, 6 inches.   |

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- |     | <b>Y</b>                 | <b>N</b>                 |  |
|-----|--------------------------|--------------------------|--|
| 27. | <input type="checkbox"/> | <input type="checkbox"/> | Fire Access Roads serving buildings two (2) stories or less in height must be a minimum of 25 feet in width. This road width provides the required access needed to accommodate operating fire apparatus and room for emergency exiting of private vehicles (Fire Prevention Bureau Standard 002).   |
| 28. | <input type="checkbox"/> | <input type="checkbox"/> | Fire Access Roads serving buildings three (3) or more stories, or in excess of 35 feet in height must be a minimum of 28 feet in width. This road width provides the required access needed to accommodate aerial apparatus required for structures of this height and room for emergency exiting of private vehicles (Fire Prevention Bureau Standard 002).   |
| 29. | <input type="checkbox"/> | <input type="checkbox"/> | Fire Access Road inside turning radius shall be a minimum of 20 feet; outside radius shall be a minimum of 40 feet, and shall be approved by the Fire Department. Turning radius shall be identified on submitted site plans for Fire Department review and approval (Fire Prevention Bureau Standard 002).  |
| 30. | <input type="checkbox"/> | <input type="checkbox"/> | All bridges used on Fire Access Roads must meet or exceed the structural requirements as provided in the City Street Design and Construction Standards.  |
| 31. | <input type="checkbox"/> | <input type="checkbox"/> | A secondary means of emergency vehicle access is required when the road serves in excess of 50 residential units, or exceeds 500 feet in length or, when in the opinion of the Fire Chief, access by a single road might be impaired or unsafe due to vehicle congestion, condition of terrain, climatic conditions, very high fire hazard severity zones or other such local conditions (City Street Design Standards). |
| 32. | <input type="checkbox"/> | <input type="checkbox"/> | All required Fire Lanes must be completed, maintained, unobstructed and marked appropriately (Fire Prevention Bureau Standard, SRCC 18-44.503.3, CVC 22500.1).   |
| 33. | <input type="checkbox"/> | <input type="checkbox"/> | All exterior building doors must be available for Fire Department emergency access (exterior doors with no exterior key access or hardware (SRCC 18-44.506.1).   |

**FUEL MODIFICATION**

- |     |                          |                          |   |
|-----|--------------------------|--------------------------|---|
| 34. | <input type="checkbox"/> | <input type="checkbox"/> | Fuel Modification Plan, where required, such as locations within Wildland Urban Interface Fire Areas, must be completed and approved (Fire Prevention Bureau Standard 051). |
|-----|--------------------------|--------------------------|---|

**FIRE PROTECTION SYSTEMS - SRCC 18-44.508.1**

- |     |                          |                          |   |
|-----|--------------------------|--------------------------|---|
| 35. | <input type="checkbox"/> | <input type="checkbox"/> | Fire hydrants, public and private, where required, must be installed as per approved plans.             |
| 36. | <input type="checkbox"/> | <input type="checkbox"/> | Location of hydrants must comply with approved plans, with outlets facing the street.                   |
| 37. | <input type="checkbox"/> | <input type="checkbox"/> | Types and models of hydrants installed must comply with approved plans.                                 |
| 38. | <input type="checkbox"/> | <input type="checkbox"/> | Hydrants must be installed in accordance with City Design and Construction Standards.                   |
| 39. | <input type="checkbox"/> | <input type="checkbox"/> | All private hydrants installed shall be painted "safety yellow".  |
| 40. | <input type="checkbox"/> | <input type="checkbox"/> | All public hydrants installed shall be painted "white".   |
| 41. | <input type="checkbox"/> | <input type="checkbox"/> | The location of all hydrants installed shall be marked with a blue reflectorized marker on the roadway. |
| 42. | <input type="checkbox"/> | <input type="checkbox"/> | Access to all hydrants shall be maintained and remain clear and unobstructed (SRCC 18-44.508.5.5).      |

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43.  **Y**  **N** Signs shall be provided to clearly identify all Fire Department Connections (FDC's), Post Indicator Valves (PIV's), Detector Check Valves (DCV's), and all other control valves associated with any fire protection system. Each sign shall be of a durable all-weather design and be securely attached to the valve, and shall indicate the function of each valve. Additional signs may be required for valves that are located within a building or behind a visual obstruction (Information Bulletin 024, SRCC 18-44.508.5.4).
44.   Protective bollards shall be installed where required to prevent damage caused by vehicles to hydrants, FDC's, PIV's, DCV's and other fire system assemblies. Protective bollards shall be installed as approved by the Fire Department and must allow for clear and unobstructed Fire Department access to the assembly.
45.   All Fire Department Connection openings shall be provided with an approved protective cover (SRCC 18-44.508.5.6)
46.   All control valves shall be locked and maintained in the "open" or "on" position at all times. Approved "break away" locks shall be used, and a key to the locks used shall be provided for storage in the Fire Department lock box where such key box is installed (SRCC 18-44.903.4.2).

**KEY BOXES – SRCC 18-44.506.1**

47.   Fire Department approved key boxes, where required, must be installed in an approved location, and keys necessary for emergency Fire Department access must be provided for storage in the key box (Fire Prevention Bureau Standard 041).

**TRASH ENCLOSURES – SRCC 18-44.304.3.3**

48.   Trash enclosures must not be stored within five feet of combustible walls, openings or roof eave lines. Trash enclosures may be allowed closer than five feet to combustible walls, openings or roof eaves if protected by an approved automatic fire sprinkler system; separate plan approval and permit required.

**OCCUPANCY CLASS – SRCC 18-16.302.1**

49.   Occupancy Classification must be specified for building, all rooms and areas.

**OCCUPANT LOAD AND SIGNS – SRCC 18.44.1004**

50.   Occupant load must match approved plans based on room size (SRCC 18-44.1004.1.1).
51.   Occupant load signs shall be provided for rooms where occupant load exceeds 50 in assembly use (SRCC 18-44.1004.3). Public Assembly Permit may be required (Fire Prevention Bureau Standard 018).

**FLAME SPREAD RATINGS - SRCC 18-44.803, 18-44.805, 18-44.807, Table 803.3**

52.   Flame spread ratings shall be provided.

**FIRE EXTINGUISHERS - SRCC 18-44.906.2, 906.6, Title 19 CCR, Section 567(h).**

53.   Light Hazard occupancies (offices) shall be provided with a minimum of one fire extinguisher having a minimum rating of 2A:10BC. Fire extinguisher(s) shall be located within 75 feet of travel, near exits or along exit paths, and for each 3,000 square feet.

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54.  **Y**  **N** Moderate Hazard occupancies (retail, manufacturing, and warehouse) shall be provided with a minimum of one fire extinguisher having a minimum rating of 2A:10BC. Fire extinguisher(s) shall be located within 75 feet of travel.

**EXTERIOR WALLS – SRCC 18-16.704.2**

55.   Fire Resistive rating must be specified and comply when required due to distance to property line.

**DOORS AND WINDOWS – Fire Resistive Rating SRCC 18-16.704.8**

56.   Fire Resistive rating must be specified and comply when required due to distance to property line.

**COMBUSTIBLE PROJECTIONS - SRCC 18-44.704.2**

57.   Fire Resistive rated construction must be provided where required as specified.

**AREA SEPERATION LOCATIONS - SRCC 18-16.508**

58.   Fire Resistive construction details must be provided.
59.   Penetrations and Openings (including doors and windows) must be protected as specified in SRCC 18-16. 704.8.

**OCCUPANCY SEPERATION LOCATIONS - SRCC 18-44.508**

60.   Fire Resistive construction details must be provided.
61.   Penetrations and Openings (including doors and windows) must be protected as specified in SRCC 18-44.704, 704.8, 718

**EXITING – SRCC 18-44.1005, 1008, 1015, 1018, 1019**

62.   Number of required exits must be provided as specified in approved plans, and in compliance with the requirements of SRCC 18-44.1005, Table 1005.1, SRCC 18-44.1019.1, Table 1019.1.
- Minimum two exits required for:
    - Conference rooms – 750 square feet
    - Offices – 5,000 square feet
    - Retail – 3,000 square feet
    - Warehouses – 25,000 square feet
63.   Distance to exits must not exceed (SRCC 18-44.1016.1, Table 1016.1, 18-44.1027.17, Table 1027.17.2):
- 200 feet in buildings with no fire sprinklers.
  - 250 feet in buildings with approved fire sprinkler system.
  - 100 feet additional distance allowed in rated corridor.
64.   Exit route may not pass through hazardous rooms (SRCC 18-44.1018.1).
65.   Exit route must terminate at a public way and be unobstructed (SRCC 18-44.1018.1).
66.   Exit doors shall be located at least one-half of the diagonal measurement of the room (SRCC 18-44.1019.4, 1015.2, 1015.2.1, 1015.2.2).

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- |     | Y                        | N                        |   |
|-----|--------------------------|--------------------------|---|
| 67. | <input type="checkbox"/> | <input type="checkbox"/> | All door hardware must be "no knowledge" and single action lever or "panic" style (SRCC 18-44.1008.1.8, 1019.1.9). <ul style="list-style-type: none"><li>o Main entry door may have a "key locking" hardware if door is equipped with sign above door "DOOR SHALL REMAIN UNLOCKEDWHEN BUILDING IS OCCUPIED" (SRCC 18-44.1008.1.8.3.2.2).</li><li>o Additional "dead bolts" or other locking devices allowed only if connected to the lever or "panic" hardware (single action required to open all locks) (SRCC 18-44.1008.1.8.5).</li><li>o "Panic" hardware required where occupant load exceeds 50 in Group A, or other assembly area not classified as a Group A, Group E, Group I-2 or I-2.1, or any Group H occupancy (SRCC 18-44.1008.1.9).</li><li>o Manual flush bolts are prohibited (SRCC 18-44.1008.1.8.4).</li></ul> |
| 47. | <input type="checkbox"/> | <input type="checkbox"/> | All exit doors and exit pathways must be functional and unobstructed (SRCC 18-44.1002.1, 1003.6, 1008.1.8).   |
| 48. | <input type="checkbox"/> | <input type="checkbox"/> | Building exit and evacuation plans must be provided where required by Title 19 CCR, Section 3.09.   |
| 49. | <input type="checkbox"/> | <input type="checkbox"/> | Exit doors must swing in direction of travel when occupant load exceeds 50 or in hazardous areas (SRCC 18-44.1008.1.2).   |
| 50. | <input type="checkbox"/> | <input type="checkbox"/> | Exit must be continuous to a public way (SRCC 18-44.1007.2).  |

**CORRIDORS - SRCC 18-44.1017**

- |     |                          |                          |  |
|-----|--------------------------|--------------------------|--|
| 51. | <input type="checkbox"/> | <input type="checkbox"/> | Dead end corridors may not exceed 20 feet (SRCC 18-44.1017.3).                                   |
| 52. | <input type="checkbox"/> | <input type="checkbox"/> | Corridors may not be interrupted by intervening rooms (SRCC 18-44.1017.5; exceptions allowed).   |
| 53. | <input type="checkbox"/> | <input type="checkbox"/> | Corridors are required to be fire rated as specified in SRCC 18-44.1017, Table 1017.1.           |
| 54. | <input type="checkbox"/> | <input type="checkbox"/> | Construction details of corridors must be as per approved plans (SRCC 18-44.1017).               |
| 55. | <input type="checkbox"/> | <input type="checkbox"/> | Openings in corridors shall be protected (SRCC 18-44.1017; exceptions allowed).                  |
| 56. | <input type="checkbox"/> | <input type="checkbox"/> | Smoke dampers required for penetrations in fire rated corridors (SRCC 18-44.909.5.2.1, 703.1.2). |
| 57. | <input type="checkbox"/> | <input type="checkbox"/> | Fire dampers required for penetrations in fire rated corridors (SRCC 18-44.703.1, 703.2)         |

**EXIT SIGNS – SRCC 18-44.1011**

- |     |                          |                          |   |
|-----|--------------------------|--------------------------|---|
| 58. | <input type="checkbox"/> | <input type="checkbox"/> | Required so that no point is farther than 100 feet from nearest visible sign (SRCC 18-44.1011.1).       |
| 59. | <input type="checkbox"/> | <input type="checkbox"/> | Must clearly indicate direction of exit travel (SRCC 18-44.1011.1).                                     |
| 60. | <input type="checkbox"/> | <input type="checkbox"/> | Must be visible from any direction of approach (SRCC 18-44.1011.1).                                     |
| 61. | <input type="checkbox"/> | <input type="checkbox"/> | Low level exit signs required in corridors of Group A, Group I, Group R-1(SRCC 18-44.1011.6).           |
| 62. | <input type="checkbox"/> | <input type="checkbox"/> | Pathway marking at floor level required unless equipped with fire sprinkler system (SRCC 18-44.1011.7). |

**EXIT SIGN ILLUMINATION – SRCC 18-44.1011**

- |     |                          |                          |   |
|-----|--------------------------|--------------------------|---|
| 63. | <input type="checkbox"/> | <input type="checkbox"/> | Exit sign illumination is required when two or more exits are required (SRCC 18-44.1011.2). |
|-----|--------------------------|--------------------------|---|

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64.  **Y**  **N** Illuminated signs must have back-up power supply and remain illuminated when power supply is disconnected, or be self-luminous (SRCC 18-44.1011.5.3).
- Illuminated Exit Signs required for:
    - Assembly – occupant load 50
    - Office – occupant load 30
    - Retail – occupant load 50

**EMERGENCY PATHWAY LIGHTING – SRCC 18-44.1027**

65.   Required when occupant load exceeds 100 (SRCC 18-44.1027.5), or 50 in State regulated occupancies.
66.   Required in all public areas, including restrooms.
67.   Must be provided with back-up power supply and illuminate when power is disconnected (SRCC 18-44.1027.5.1).

**ROOFING SURFACE MATERIAL – SRCC 18-16.1505.1**

68.   Must be proper class for building and location.

**WOOD**

**TJI / COMPOSITE JOISTS - NFPA 13-8.15.1.2.8, 13-8.15.1.2.13**

69.   Composite wood joists in sprinklered buildings; maximum 22” depth (NFPA 13-8.6.4.1.2(4)), or:
  - Provide 5/8” type “X” drywall on underside of joists, or
  - Provide sprinkler coverage between joists, or
  - Fill concealed open spaces between joists with non-combustible insulation, and
  - Spaces are firestopped into volumes not more than 160 square feet.
70.   Open joists require fire stopping of channels into 300 square foot areas (NFPA 13-8.6.4.1.2(5)).
71.   Closed joists require fire stopping of channels into 160 cubic foot areas (NFPA 13-8.15.1.2.6).

**DRAFT STOPS - SRCC 18-16.717**

72.   Floor-ceiling assemblies - SRCC 18-16.717.3
73.   Required in buildings with combustible construction as specified (see exceptions for fire sprinklers):
  - Group R-1 buildings (SRCC 18-16.717.3.2).
  - Group R-2 buildings with three or more dwelling units (SRCC 18-16.717.3.2).
  - Group R-3 with two dwelling units (SRCC 18-16.717.3.2).
  - Group R-4 buildings (SRCC 18-16.717.3.2).
  - All other Groups, so that the horizontal floor areas do not exceed 1,000 square feet – see exceptions (SRCC 18-16.717.3.3).
74.   Attics and concealed roof spaces - SRCC 18-16.717.4
75.   Required in attics, mansards, overhangs or other concealed roof spaces (see exceptions for fire sprinklers):



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- Group R-1 buildings (SRCC 18-16.717.4.2).
- Group R-2 buildings with three or more dwelling units (SRCC 18-16.717.4.2).
- All other Groups, so that the horizontal floor areas do not exceed 1,000 square feet – see exceptions (SRCC 18-16.717.4.3).

**SKYLIGHTS - SRCC 18-16.711.4**

76.  **Y**  **N** Not installed within distance to property lines or area separation walls required to be protected.

**SMOKE VENTS - SRCC 18-44.910**

77.   Must be operable from exterior (SRCC 18-44.910.4.4)
78.   Proper size 4' x 4" (SRCC 18-44.910.3.3)
79.   Required number within each area formed by draft curtains (SRCC 18-44.910.3.4)
80.   20 feet from property line (SRCC 18-44.910.3.4)
81.   Required in F1 and S1 greater than 50,000 square feet (SRCC 18-44.910.2.1)

**DRAFT CURTAINS - SRCC 18-44.910.3**

82.   Proper construction, depth, location and number (SRCC 18-44.910.3.5.2, Table 910.3)
83.   Penetrations not allowed unless sealed (SRCC 18-44.910.3.5.1).
84.   Required for certain high-piled stock areas (SRCC 18-44.2306.2).

**ROOF ACCESS - SRCC 18-44.504.3, 1009.11**

85.   Proper size and location (SRCC 18-44.1009.11.1)
86.   Access door(s) must have approved signage (SRCC 18-44.510.1)

**FIRE AND SMOKE DAMPERS**

87.   Smoke dampers required for penetrations in fire rated corridors (SRCC 18-44.909.5.2.1, 703.1.2).
88.   Fire dampers required for penetrations in fire rated corridors (SRCC 18-44.703.1, 703.2)

**SMOKE DETECTION SHUT DOWN OF HVAC**

89.   Required for air handling units exceeding 2,000 cubic feet per minute (SRCC 18-36.609)

**MECHANICAL VENTILATION**

90.   For areas handling hazardous materials (SRCC 18-44.2703.8.4.2)
91.   Equal to 1 cubic foot per minute per square foot (SRCC 18-44.2704.3.1)

**ELECTRICAL**

92.   Main panel room identified on exterior (SRCC 18-44.510.1)
93.   Circuit breakers clearly labeled (SRCC 18-44.605.1)



**ELEVATORS**

- |     | <b>Y</b>                 | <b>N</b>                 |   |
|-----|--------------------------|--------------------------|---|
| 94. | <input type="checkbox"/> | <input type="checkbox"/> | Must comply with fire department requirements for recall, override, and emergency signage (SRCC 18-44.607.1, 607.2) |
| 95. | <input type="checkbox"/> | <input type="checkbox"/> | Provided with method for summoning emergency assistance from within elevator (SRCC 18-16.1116B.1.8)                 |
| 96. | <input type="checkbox"/> | <input type="checkbox"/> | Must be minimum size to accommodate wheel chair (SRCC 18-16.1116B.1.8).   |

**FIRE SPRINKLERS - SRCC 18-44.903**

- |      |                          |                          |  |
|------|--------------------------|--------------------------|--|
| 97.  | <input type="checkbox"/> | <input type="checkbox"/> | <b>PROVIDED AS PER APPROVED PLANS - SRCC 18-44.901.2.1</b>   |
| 98.  | <input type="checkbox"/> | <input type="checkbox"/> | <b>ACCEPTANCE INSPECTIONS COMPLETE - SRCC 18-44.901.5</b> <ul style="list-style-type: none"><li>o Weld</li><li>o Overhead</li><li>o Hydrostatic test(s)</li><li>o Contractor's Material and Test Certificates for above and underground ground piping (NFPA 13)</li><li>o Final Inspection</li></ul>   |
| 99.  | <input type="checkbox"/> | <input type="checkbox"/> | <b>SPARE FIRE SPRINKLERS AND WRENCH - FIRE SPRINKLERS - NFPA 13-2.2.7.1 - A representative sample of all fire sprinkler types and ratings in a system available as spares in case emergency replacement is needed; an appropriate sprinkler wrench is also required to be provided. These items must be stored in a metal "spare head" box and located near the fire sprinkler riser, or fire alarm panel.</b> |
| 100. | <input type="checkbox"/> | <input type="checkbox"/> | <b>FIRE SPRINKLER RISER ACCESS SIGN – SRCC 18-44.510.1</b> <ul style="list-style-type: none"><li>o On exterior and interior doors as necessary to quickly locate riser.</li></ul>  |
| 101. | <input type="checkbox"/> | <input type="checkbox"/> | <b>RISER SIGNAGE – SRCC 18-44.510.1</b> <ul style="list-style-type: none"><li>o All valves identified as to function.</li></ul>  |
| 102. | <input type="checkbox"/> | <input type="checkbox"/> | <b>RISER CLEARANCE – NFPA 13 9-3.4.1, 9-3.4.2, NFPA 24</b>   |
| 103. | <input type="checkbox"/> | <input type="checkbox"/> | <b>HYDRAULIC CALCULATION DESIGN INFORMATION SIGN / DATA PLATE - NFPA 13 16.5.1</b> <ul style="list-style-type: none"><li>o Calculation plate on each riser; must be stamped or engraved metal sign.</li><li>o Pressure available meets or exceeds pressure required on calculation plate.</li></ul>  |
| 104. | <input type="checkbox"/> | <input type="checkbox"/> | <b>2 INCH DRAIN TEST - SRCC 18-44.903.3.1.1, NFPA 13</b> <ul style="list-style-type: none"><li>o Witness and record 2 inch drain opening (risers 4" or larger) (NFPA 13 8.15.2.4.2)</li><li>o Residual pressure should drop and then return.</li><li>o If pressure does not return, check all valves.</li></ul>  |
| 105. | <input type="checkbox"/> | <input type="checkbox"/> | <b>INSPECTOR TEST ALARM - SRCC 18-44.903.4.2, NFPA 13 16.2.3.1</b> <ul style="list-style-type: none"><li>o Witness and record opening of inspector's test valve.</li><li>o Inspector's test valve must have ½" orifice at opening.</li><li>o Exterior alarm must activate within 5 minutes of water flow.</li></ul>  |

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- Inspector's test valve must be locked "closed" at end of test; key provided for fire department lock box (NFPA 13 8.15.1.1.2.1, A.8.15.1.1.2).
- Valve must be equipped with permanent, all weather sign (NFPA 13 6.7.4.1, 13 6.7.4.2).

106.  **Y**     **N**    **FIRE ALARM BELL SIGN** – NFPA 13 8-16.1, A.8.16.1

- Sign required on or adjacent to exterior water flow bell
  - "FIRE ALARM – CALL 9-1-1"

**FIRE ALARM - SRCC 18-44.907, NFPA 70 & 72**

107.         Installed as required by approved plans (SRCC 18-44.907.1.1)

108.         Acceptance inspection – functional test (SRCC 18-44.907.17, 18-44.907.20, NFPA 72 Chapter 10)

- Annual service date displayed on panel when completed (SRCC 18-44.907.20, NFPA 72 Chapter 10)

109.         Remote annunciator

- Location at main entrance of facility (SRCC 18-44.907.9.2)
- Provide instructions for "silence" and "reset" functions at annunciator (SRCC 18-44.907.19)
- Provide necessary codes for functions in fire department lock box (SRCC 18-44.506.1, 907.19)
- 8 ½" x 11" framed floor plan is located at annunciator, showing (SRCC 18-44.907.19)
  - Alarm zones
  - Device locations

110.         Acceptance test (SRCC 18-44.907.17, 907.20, NFPA 72 Chapter 10)

111.         A/C power disconnect (trouble signal)

- Remainder of test conducted using battery power

112.         Witness and record activation valve tamper circuits (supervisory signal)

- Detector check
- Post Indicator Valve (PIV)
- Riser control

113.         Central Station receives and transmits alarm to dispatch; verify premise address

114.         Dedicated phone lines

- direct connection to public telephone network system; may not be connected through on-site private telephone network switch ("Centrex") system.
- send trouble signal to central station when disconnected

115.         Battery power disconnect (trouble signal)

116.         Batteries must be dated

117.         Pull station(s) located in occupied area and function properly

Plan Review  
Shell Building

- |      | <b>Y</b>                 | <b>N</b>                 |   |
|------|--------------------------|--------------------------|---|
| 118. | <input type="checkbox"/> | <input type="checkbox"/> | Horn/strobe device located in occupied area and function properly   |
| 119. | <input type="checkbox"/> | <input type="checkbox"/> | Address / zone – alarm must report proper activation area or zone   |
| 120. | <input type="checkbox"/> | <input type="checkbox"/> | Dedicated A/C power disconnect locked “on”; key provided for fire department lock box (Fire Prevention Bureau Standard 040) |

**SPRINKLER MONITORING – SRCC 18-44.903.4**

121.   Required when system installed in other than Group R-3 occupancies.

**FIRE PUMPS - SRCC 18-44.913.5.1, NFPA 20**

122.   **VERIFY ACCEPTANCE TEST PERFORMED**
- o All items completed
123.   **CONTROL VALVES - SRCC 18-44.913.2, 913.4**
- o Locked open
  - o Monitored by alarm system
  - o Permanent sign attached showing function and normal position of all valves
124.   **POWER SUPPLY - SRCC 18-44.913.5.2, NFPA 110**
- o Locked “on” ; key provided for fire department lock box
125.   **FUEL TANK SUPPLY - NFPA 110**

**STANDPIPES - SRCC 18-44.905.1, 905.2, NFPA 14**

126.   Acceptance inspection completed (including flow test)
127.   Installed at approved locations.