Smoke Control Panel Guide & Checklist

City of Henderson **Development Services Center** **Fire Safety Engineering** 240 Water Street, PO Box 95050 Henderson, Nevada 89009-5050 (702) 267-3630 phone (702) 267-3603 fax	This checklist is provided for the convenience of our customers. Complete and accurate plan submittals help speed the plan review process. Attention to the completeness and accuracy of information at the beginning of the process generally leads to fewer delays and requests for revisions by City staff. Please use the following information to assure that your application includes all of the information that is necessary for a complete review of your plans.
Part. 1 Applicant's Responsibility	**Applicants are responsible for ensuring applications submitted are complete**. Incomplete applications will result in plans being rejected for acceptance, or returned to the applicant during the review process. City service commitments will not apply to incomplete submissions.
Part. 2 Prerequisites	**Plan Readability**. Easily Read; legible; a readable typeface. Vivid contrast or difference in brightness between the light and dark areas of the drawing.
Part. 3 Applicable Codes	**Plans shall meet the requirements of the adopted codes, ordinances and regulations**.
Part. 4 Submittal Package	**Provide the following information at the time you submit your application for a smoke control panel permit.** ☐ 1. Plans (Minimum 2 Sets). ☐ 2. Material Submittals (Permit Types).
Part. 5 Purpose	Rapid visual comprehension of the system configuration is the goal of a smoke graphic panel. The design methodology is to produce a panel that will afford an emergency responder the ability to quickly understand the arrangement of the building, the origin of the alarm and assess the configuration of the mechanical system; then to provide them with a manual means to change the configuration if deemed necessary. Of necessity the information portrayed through the graphics, text and indicators needs to be clear, understandable and usable. The logical organization of the information presented is crucial. The panel graphically depicts the building arrangement and smoke-control zones. It provides manual control or override of automatic mechanical smoke control systems. Fans, major ducts and dampers within the building are shown graphically depicting airflow paths. See sample panel for more information.
Part. 6 Checklist	☐ Color graphic annunciator on white panel background (grease board style) ☐ Colors correlated between floor plan, section and isometric ☐ Panel title showing the project name, facility name or site name as appropriate and the heading "FIREFIGHTERS SMOKE CONTROL PANEL"

- [ ] Status box (subdivided into 3 sections

   General status annunciation

  - [ ] Power on green Light Emitting Diode (LED)

  - [ ] : Smoke control on blue LED

  - [ ] Light emitting diode LED operational sequence

    - [ ] A narrative description of each different color/type of LED used and it's intended operation meaning

  - [ ] ormal switch position yellow LED

  - [ ] Abnormal Smoke Control Maintenance (SCM) switch position yellow LED

  - [ ] Power fault yellow LED - monitoring of power e.g., what happens when normal power is lost, disconnect switches are thrown on dampers, fans, etc.

  - [ ] Stairwell Door Unlock Switch (if doors are electrically locked, NFPA 72 § 6.15.7)

- [ ] Symbol legend and abbreviation list

  - [ ] or used to indicate differing type of smoke control method used

  - [ ] Acronyms and abbreviations cross-referenced to complete word

- [ ] Firefighter's notes

   A narrative description of system operation for each smoke zone

   A narrative description of the panel control switches

- [ ] Lamp test switch, momentary type (recommended placement at the top of the panel)

- [ ] SCM (tri-colored LED) enable switch, maintained position type (On-Off, normally off)

- [ ] Manufacturers' logo / Contractors' logo

- [ ] The maximum panel height is 6'-6" nominal

- [ ] Floor plan

  - [ ] Drawn to a minimum 1/16" scale (1/8" preferred)

  - [ ] Detailed floor plan(s) (architectural floor plan(s)) showing rooms, corridors, and doors in a light shade of gray or silver

  - [ ] Solid color overlay to show active and passive zones

  - [ ] Show area served by each fan (i.e., general fan location)

  - [ ] Label common reference points

    - [ ] Fire command center, emergency generator (larger font, different color than other font)

    - [ ] Stairs and pressurized exit enclosures (indicate if stairs provide roof access)

☐ Building section and/or elevation

    ☐ resentation of all levels, basement, floors, mechanical, attic, roof

    ☐ ropriate use of colors to show passive elevator shafts, mechanical airflow patterns etc.

    ☐ Elevator machine-room / shafts with labels

    ☐ Stairs & pressurized stair enclosures with labels (same as building labels)

    ☐ Fans, dampers & air-flow paths with labels

    Control Switched

        ☐ Fans (Exhaust-On, Auto, Off) or (Press-On, Auto, Off) or (Exhaust, Press, Auto, Off)

        ☐ Zone or floor damper control

            ☐ Supply dampers (Open-On, Auto, Closed-Off)

            ☐ Exhaust dampers (Open-On, Auto, Closed-Off)

    Status lights (LED's) [FSN: SCM (tri-colored LED) enable switch shall be required]

        ☐ Zone or floor alarm red LED

        ☐ Zone or floor smoke control on blue LED (when required)

        ☐ Fans tri-colored (red, yellow, green) LED [red & green work when enabled]

        ☐ Damper tri-colored (red, yellow, green) LED [red & green work when enabled]

        ☐ Door (if monitored) tri-colored (red, yellow, green) LED [R/G when enabled]

☐ etric plan (used when the BLDG. footprint is non-rectangular)

    ☐ Graphically represent all floors

    ☐ Appropriate use of colors (each floor a different color)

    ☐ Show fans

    ☐ Show stairs and pressurized stair enclosures

    ☐ Show elevators

☐ ss check fire sprinkler zones, fire riser rooms, with sprinkler contractor. (Fire Safety Note [FSN]: Cross check required with sprinkler plan checker)

☐ Comply with other codes and life safety report/outline requirements.

☐ See fire alarm annunciator checklist for fire alarm annunciator requirements.