

# Element Z | General Design Requirements

Room Standards

## Z4010 Fire Command Rooms

---

### PART 1 - GENERAL

---

#### 1.01 OVERVIEW

- A. This document provides design and construction criteria for Fire Command Rooms at The University of Texas MD Anderson Cancer Center (Owner).
- B. Refer to the "D" series Design Guideline Elements for requirements relating to mechanical, plumbing, and electrical work.

---

### PART 2 - DESIGN CRITERIA

---

#### 2.01 DESIGN REQUIREMENTS

- A. The Fire Command Room shall be a minimum of 96 square feet in area, with a minimum dimension of 8 feet. Furnishings in the room shall be located so as to allow access to required wall mounted panels and equipment.
- B. Unless required to have a higher rating, walls shall be minimum 1-hour fire resistance rated, with 45 minute rated door.
- C. The room shall be located near the main entrance to the building (Lobby area), and is not to be located inside another space or under a vertical shaft enclosure.
- D. Electrical outlets on emergency power shall be provided on all four walls of the room. Room lighting shall also be served by emergency power circuits.
- E. The room shall include fire alarm panels, as well as visual indicator panels for all elevators and means to operate Phase 1 fire service.
- F. The room shall be climate controlled to the same design standards as other normally occupied spaces.
- G. Room finishes shall include lay-in ceiling, painted walls, resilient base, and vinyl composition tile or carpet at floor.
- H. A data connection and two wall mounted telephones shall be provided in the room. One telephone shall be located adjacent to the elevator panel, and shall be programmed with the ability to join a conversation in progress in any of the building elevator cabs. Phone numbers for each elevator cab and instructions on how to call the elevators shall be posted at this telephone. A separate telephone with an outside line shall be provided for emergency personnel use.
- I. Fire Department High-Rise plans and keys Knox Box shall be located in room

#### 2.02 FIRE-FIGHTERS SMOKE CONTROL PANEL

- A. The Fire Command Room shall include fire-fighters smoke control panel(s) for fire department emergency response purposes, installed adjacent to the fire alarm control panel(s). Design of the smoke control panel(s) shall be per applicable codes, and shall include, as a minimum, the following features:

# Element Z | General Design Requirements

## Room Standards

## Z4010 Fire Command Rooms

1. Manual control or override of automatic control for mechanical smoke control systems, including stair pressurization.
2. Prioritized controls for operating smoke control equipment, which allow ON-AUTO-OFF, OPEN-AUTO-CLOSE, and ON-OFF or OPEN-CLOSE control.
3. Indication of each fan, with display of air flow direction and relationship to other components.
4. Status indicators for smoke control equipment, annunciated by fan and zone, and by pilot-lamp-type indicators as follows:
  - a. WHITE- normal status for fans, dampers, and other equipment.
  - b. RED- off or closed status for fans, dampers, and other equipment.
  - c. GREEN- on or open status for fans, dampers, and other equipment.
  - d. YELLOW/AMBER- fault status for fans, dampers, and other equipment.

### 2.03 GENERATOR ANNUNCIATOR PANEL

- A. The Fire Command Room shall include remote generator annunciator panels for each generator providing power to the building. Points that shall be monitored and indicated include the following:
  1. High, Low, and Normal Battery Voltage
  2. Generator Running
  3. Normal Utility Power
  4. EPS Supplying Load
  5. Low Oil Pressure, and Low Engine Temperature
  6. Pre-High Coolant Temperature
  7. Overspeed and Overcrank
  8. Not In Auto
  9. Battery Charger Malfunction
  10. Low Fuel, and Low Coolant Level
  11. All Automatic Transfer Switch Status. This is critical when emergency power is supplied from another location.

### 2.04 SECURITY

- A. The Fire Command Room shall be equipped with card access control hardware. UT Police Department (UTPD) and MD Anderson Environmental Health and Safety (EH&S) personnel will have access to this room. Hardware is to fail safe in a fire alarm event.

# Element Z | General Design Requirements

Room Standards

## Z4010 Fire Command Rooms

- B. An electronic key override cylinder shall be provided inside the Fire Command Room. The cylinder shall accommodate a Best core, which interfaces with the access control system. Upon activation, the key switch will provide a signal to unlock all stairwell doors with card access in place and send an alarm signal to the security system.

### 2.05 FURNISHINGS

- A. The Fire Command Room shall be designed to accommodate the following furnishings:
  - 1. Dry marker erase board
  - 2. 30 inch x 60 inch table
  - 3. Task stool with adjustable arms
  - 4. Task chair with adjustable arms

---

## PART 3 - SPECIAL CONTRACT DOCUMENT REQUIREMENTS

---

### 3.01 GENERAL

- A. Obtain approval from Owner's Project Manager/Planner Designer for all finish schedules prior to issuance of Construction Documents.
- B. All finishes should reflect the standard finish application for the specific building in which the Fire Command Room is located.

---

## PART 4 - PRODUCTS

---

### 4.01 GENERAL

- A. For all projects (renovation and new), refer to Owner's Interior Finishes Standards. These are available on the Owner's Design Guidelines website:  
<http://www2.mdanderson.org/depts/cpm/standards/interiors.html>
- B. For renovation projects, refer to Owner's Master Construction Specifications. These are available on the Owner's Design Guidelines website:  
<http://www2.mdanderson.org/depts/cpm/standards/specs.html>
- C. Knox Box: Model 1303, with tamper switches, keyed to Houston Fire Department and MD Anderson Cancer System, sub-master.

# Element Z | General Design Requirements

Room Standards

## Z4010 Fire Command Rooms

### PART 5 - DOCUMENT REVISION HISTORY

| Issue  | Date     | Revision Description                                                                                                                                                        | Reviser |
|--------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
|        | 07-08-10 | Initial Adoption of Element                                                                                                                                                 |         |
| Rev. 1 | 08-02-11 | Changed the word “temporary” to “temperature” in 2.03 A. 5&6.                                                                                                               | JRC     |
| Rev. 2 | 07-19-12 | Revised telephone requirements in 2.01H.                                                                                                                                    | JRC     |
| Rev. 3 | 07-24-14 | Standardized all High-Rise key boxes and Fire Depository boxes that house documents and keys used by the Houston Fire Department. Paragraphs 2.01 I. & J., 2.04 A., 4.01 C. | JJ      |
| Rev. 4 |          |                                                                                                                                                                             |         |
| Rev. 5 |          |                                                                                                                                                                             |         |

END OF ELEMENT Z4010