



CLARK COUNTY FIRE DEPARTMENT
Fire & Hazard Prevention Services
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TITLE: Temporary Certificate of Occupancy Guideline

SCOPE: This Guideline describes the requirements for the fire protection and life safety features, and the Fire Protection Report (FPR) for the duration of a Temporary Certificate of Occupancy (TCO). At a minimum, occupancies in high rise buildings in the resort corridor as noted in Title 30 will be required to observe this guidelines when a TCO is requested.

PURPOSE: This guideline establishes minimum requirements for fire protection and life safety features for a building portion that may be occupied while the balance of a building structure is still under construction. A TCO-FPR describing the fire protection and life safety features will be reviewed and approved by CCFD. The approved report will be used as the basis for field inspections and verification by CCFD Inspectors. The area(s) issued a TCO are to have the equivalent level of fire and life safety as would be provided in a completed construction project.

Clark County Development Services (CCDS) has authority to approve or disapprove all requests for TCO's. CCFD inspects tests and accepts fire & life safety systems required by the Southern Nevada Building Code (SNBC) and within the scope and authority of the currently adopted Clark County Fire Code. The CCFD Fire & Hazards Prevention Division supports the CCFD Fire Suppression Division and therefore, ensures that the intent of the codes are met for emergency response operations and safety.

CCFD will notify CCDS and recommend revocation of the TCO if conditions of the TCO are violated.

This Guideline does not replace or supersede applicable requirements of the SNBC or interpretation(s) of the Building Official. Conflicts between the requirements of this Guideline, the SNBC, or the Building Official's interpretation(s) are to be resolved by Clark County Development Services.

DEFINITIONS:

The following are special definitions within the context of this Guideline:

Active Fire Protection Features: Fire safety features with mechanical and/or electrical equipment that require energy to operate and human intervention. These include, but are not limited to, automatic sprinklers, automatic fire extinguishing systems, commercial cooking suppression, hand portable fire

extinguishers, fire alarm and detection, fire fighters elevators and mechanical smoke control equipment and its controls.

Assembly Points: Locations separated from the locations of the emergency where employees are instructed to report so that they can be accounted for after their evacuation.

Buffer Floor or Zone: Floor levels above and/or below the TCO building portion(s) that are void of occupancy, storage or any other operations placed for the purpose of separating the active construction operations from the building portions covered by the TCO. Unoccupied areas known as Buffer Zones will be required for large TCO areas comprising single level locations.

Emergency Responders: CCFD, Metropolitan Police Department, Development Services and other personnel authorized to enter the site of an emergency to provide emergency medical services, fire suppression, building safety or law enforcement services.

Fire Department Ingress Points: Locations where emergency responders may access the TCO areas.

Fire and Life Safety Professionals: Professionals with training and knowledge specific to fire protection engineering or building life safety design that are Registered in the State of Nevada to provide such services.

Fire Watch: A condition of assigning additional personnel meeting the CCFD Fire Watch Personnel Qualifications that is in continuous communication with an active Proprietary Monitoring Station for the building occupied under authority of a TCO.

Hazards: Conditions that increase the likelihood of a fire, mishap or accident.

Hot Works: The use of welding, cutting and other hot-work equipment as covered by Article 49 of the Clark County Fire Code.

Human Element Programs: Fire prevention activities carried out by personnel training including, but not limited to, Fire Watches and site specific training on fire safety and building evacuation for occupants of the TCO areas.

Impairments: An Active Fire Protection feature that is in disrepair, taken out of service or otherwise not functional.

Major Projects: Any building that required an FPR as a condition of building permit issuance and is in the Resort Corridor as defined in Title 30.

Passive Fire Protection Features: Fire safety features that are not actively mechanical or electrical that do not require human intervention including, but not limited to fire rated construction and egress arrangements.

Secondary Response Points: Second locations where fire alarm system status may be read from a fire alarm panel.

TCO Boundary: Physical boundaries around the TCO area(s) as designated by the ownership and / or the Fire and Life Safety Professionals.

REQUIRED SUBMITTALS

CCFD requires a TCO - Fire Protection Report (FPR) for all TCO requests in construction that requires a Fire Protection Report. The TCO-FPR shall describe how the intent of the SNBC and currently adopted 2005 Clark County Fire Code is achieved for the building portions or areas to be occupied in advance of completion of the construction project. Equivalent means for protection of the occupants, construction personnel and emergency responders is required by CCFD. Project ownership or their designated fire and life safety professionals are to demonstrate and document how this will be achieved. Conditions known to be significant with respect to fire and life safety in the TCO location(s), i.e. Alternate Means and Methods of Construction or other features are to be identified within the TCO-FPR.

The required features and operations and TCO FPR shall contain the following documentation at a minimum:

TCO and TCO-FPR REQUIREMENTS

Occupancy and Operations:

1. This section of the TCO-FPR is to inform CCFD of the building portions covered by the TCO, the nature of the operations and the number of persons present and their anticipated hours of occupancy. It is to inform CCFD of any special hazards and the duration of the TCO in calendar days.
2. Provide a complete description of the use of the building portion during the TCO. Include operations and personnel to be allowed into the building portions permitted for the Temporary Certificate of Occupancy. Provide the maximum Occupant Loads and the percentage of the TCO Occupant Load as compared to the full Occupant Load at the completion of construction. Note their functions and typical operations; i.e., residential use, office use, cleaning, painting, etc.

Site Conditions:

1. The TCO area shall have exterior and interior fire department access and fire fighting equipment shall be readily accessible. The TCO area shall have exterior routes for pedestrian traffic so that personnel being evacuated from the building may have safe routes to Assembly Points.
2. Active water supplies and fire department access routes are to be in place prior to any TCO. The TCO-FPR shall state the locations of fire department vehicle access and active fire hydrants.
3. The TCO-FPR shall state the locations of fire department connections, fire pump room(s), Fire Command Center, Proprietary Monitoring location, Secondary Response Points and fire evacuation assembly points.
4. Locations for Fire Department Ingress are to be identified.

Active Fire Protection:

1. All Active Fire Protection features shall be functional within the TCO location(s).
2. The fire protection water supply system shall be completed and fully functional. Water supply tanks shall be filled to the design capacity and monitored by the fire alarm system.
3. Building portions requiring service of a stationary fire pump shall be provided with a functional fire pump. Alternative, temporary fire pumps may be used when approved and permitted. The design of permanent or temporary fire pump systems shall be approved by CCFD prior to the TCO. Impairments are to be limited and scheduled during time periods of least occupancy.
4. Automatic sprinklers shall be active within the TCO location. Sprinkler system impairments, i.e. periods during filling and draining for service, are to be reported to CCFD. The TCO location is to be under a Fire Watch during any sprinkler system impairment. Sprinklers are to be active on Buffer Floors as well as the TCO location. Impairments are to be limited and scheduled during time periods of least occupancy.
5. Automatic wet standpipe systems are to be active during the TCO period as required by the base FPR. Pressure reducing valves used on standpipe systems serving the TCO location shall be tested and commissioned for the water service conditions during the TCO.

6. Special extinguishing systems may not be used as an alternative to the required automatic sprinkler systems.
7. Commercial cooking operations shall be protected with dedicated fire suppression systems. These are also to be monitored by the fire alarm system.
8. Hand portable fire extinguishers are to be provided as required by the base FPR. They are to be placed and specified according to the Standard for Portable Fire Extinguishers, NFPA10.
9. The Fire Command Center indicating panels required by the base FPR are to be installed and functional. These include but are not limited to; emergency generator status, power shunt trip buttons, elevator status panels, fire alarm panel, fire pump status panel, smoke control graphics panels etc. Areas under construction are not required to have active panels.
10. A Proprietary Monitoring System or an approved Central Station shall be provided in accordance with the National Fire Alarm Code, NFPA 72.
11. The fire alarm and detection system shall be functional during the TCO period. Fire alarm components, including batteries, are to have been tested and approved by CCFD prior to the TCO. Due to the complexity of fire alarm system programming and the special knowledge required, a qualified representative of the fire alarm system installing contractor shall monitor the fire alarm control panel (FACP) during any periods when the FACP is in the alarm, supervisory or trouble conditions. A temporary FACP, dedicated to the TCO location may be used. The main FACP may be used if 24-hour monitoring by a qualified representative of the installing contractor is provided.
12. The Secondary Response Points as required by the base FPR shall be active. Alternate SRP's may be approved by CCFD as appropriate and as determined by the project fire and life safety professionals.
13. The TCO location shall be served by fire fighters elevator(s) as required by the base building FPR. The designated fire fighters elevator cab is to be identified and shown on diagrams available in the FCC. All other functioning elevators shall have functional elevator recall features. The primary and secondary designated recall locations are to be identified. Construction levels are to be locked-out of the elevator call button panel to prevent those using the TCO location from entering the construction site. The State Elevator Inspections are to be completed.
14. Planned impairments are to take place during periods of lowest occupancy of the TCO location. CCFD will review each planned impairment and determine the appropriate action. Fire engine stand-by or evacuation of the TCO location may be in order, depending on the severity of the impairment.

15. Active fire protection features are to be under the required maintenance contracts.

Passive Fire Protection:

1. The TCO-FPR shall include a copy of the approved exit plan when required by CCDS. The routes to safe assembly points shall also be identified. Construction traffic shall be considered as a hazard.
2. The TCO boundaries are to be identified. Foot traffic for construction activity is to be considered.
3. At least one Buffer Floor above and one Buffer Floor below the TCO to separate the TCO locations from active construction zones in high rise construction involving residential occupancies (sleeping rooms). The number of Buffer Floors may be increased according to the hazards presented.
4. Other Buffer Zone arrangements, for low-rise or large expanse of building areas in the horizontal plane, are to be described by the owner and/or the Fire and Life Safety Professional. These can occur when the TCO does not involve consecutive levels of building construction. For example, high limit gaming may be completed in advance of other gaming areas.
5. Markings and signage shall be provided for the TCO location. This will include, but not be limited to, required fire protection equipment indicating signage for fire department connections, standpipe pressure and flow, fire pump room, FCC, elevators, roof access, floor numbering, etc. Hazards are to be identified as required. Hard hat areas, open pits, and hazardous locations are to be marked as required.

Human Element Programs:

1. Hot works shall not be performed in the TCO location or within Buffer Floors or Buffer Zones. Hot Work Operations permits with Fire Watches are to be instituted for any hot works to be done outside of the active construction site.
2. Upon review and approval of the Chief, Fire Watches may be used as temporary alternatives to fire protection features that are not in service. These may be used when the constraints and limitation of the TCO FPR are not met.
 - a) Be physically capable and contracted to patrol the building during the duration of an eight hour shift. The floor should be patrolled in a time period not to exceed five (5) minutes, with the entire building being toured every 15 minutes. This schedule will determine the number of Fire Watch

- b) Patrol the designated TCO areas and other fire exposures continuously during the entire TCO period (except for breaks) and continue Fire Watch for 30 minutes after the conclusion of the work or resolution of the impairment. Replacement Fire Watch personnel must be provided to continue fire watch during personnel breaks.
 - c) Be equipped with, and able to use a bullhorn (or other loud sounding device), flashlight, remote radio and cellular phone.
 - d) Be capable of and willing to assist employees vacating the building in an emergency situation while utilizing a flashlight to illuminate the path of egress for evacuating employees.
 - e) Be trained in the use of a portable fire extinguisher and capable of extinguishing incipient fires utilizing a portable fire extinguisher.
 - f) Be instructed in and familiar with emergency notification, evacuation procedures and capable of notifying employees of an emergency and then assisting employees to evacuate the building.
 - g) All fire watch personnel on the property are responsible for responding immediately to any building where a fire condition is discovered.
 - h) Upon discovery of a fire, Fire Watch personnel shall contact the CCFD immediately (Dial 9-1-1), then advise all other Fire Watch personnel of the emergency in order to obtain their assistance in notifying and evacuating employees.
3. An Emergency Plan prepared according to Section 1303.4 of the 2005 Clark County Fire Code shall be submitted and approved by the CCFD. The Emergency Plan is also an Appendix to the TCO-FPR. Employee Duties, Assignments and Training shall be included in the Emergency Plan as required by Section 1303.5 of the 2005 Clark County Fire Code.
4. Fire drills are to be conducted including the persons designated to occupy the TCO areas. The drills shall be conducted according to Section 1303.5 of the 2005 Clark County Fire Code.
5. Security guard tours are to include the TCO locations during the TCO. These are to be determined by the buildings security staff and these operations are to be noted in the TCO-FPR.