FIRE SAFETY INSPECTION HANDBOOK

THE BORGER FIRE DEPARTMENT CONDUCTS FIRE SAFETY INSPECTIONS OF BUSINESS, COMMERCIAL, AND MULTI-FAMILY RESIDENTIAL PROPERTIES. THE MAIN GOAL OF THIS FIRE INSPECTION PROGRAM IS TO ENCOURAGE A COMMUNITY SAFE FROM FIRE.

If you have any questions or concerns about the safety of your business, please contact the fire prevention bureau at 806-273-0952 or to request an inspection

Annual Fire Inspections and pre-fire planning activities have become accepted as standard practices in the United States as a cost effective and proactive manner to reduce fire related threats and hazards.

The Borger Fire Department conducts fire safety inspections of business, commercial, and multi-family residential properties. The main goal of the fire inspection program is to promote and encourage a community safe from fire. A second goal is to improve community relationships between the Fire Department and the Business community through professional, kind, and courteous interactions outside of a typical emergency situation.

During these inspections, items such as construction, occupancy, built-in and portable fire protection equipment, and other fire safety related issues are all reviewed. All schools in the City of Borger are also inspected. These school inspections are conducted in the presence of personnel from the school in order to provide for the fire safety of all school-age children.

This handbook has been developed to acquaint you, the business owner or operator, with the general criteria that will be looked at during an inspection. Codes referenced in this document include but are not limited to:

1. IBC- International Building Code 2006 edition
2. IFC- International Fire Code 2006 edition
3. NFPA- National Fire Protection Association
4. City of Borger Code of Ordinances

For an accurate and complete listing of current adopted codes, contact the Fire Prevention Bureau or the Department of Planning and Zoning.

Any other questions regarding fire inspections, pre-planning or other fire prevention related activities should be directed to the Fire Marshal's Office of the Fire Prevention Bureau.

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FIRE SAFETY INSPECTION HANDBOOK

General Commercial/Public Buildings

1. Building

1.1 Premises identification: New and existing buildings shall have approved address numbers, building numbers, or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. (IFC 505.1)

Fire Department Connection

1.3 Accessible: Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other object for a minimum of three (3) feet. (IFC 912.3)

1.4 Caps and Plugs: The fire code official is authorized to require locking caps on fire department connections for water based fire protection systems where the responding fire department appropriate key wrenches for removal. (IFC 912.3.1)

1.5 Inspection, Testing, and Maintenance: All fire department connections shall be periodically inspected, tested, and maintained in accordance with NFPA 25. (IFC 912.6)

Electrical Service

1.6 Support on building: Electrical equipment shall be secured to the surface on which it is mounted

Gas Meters

1.8 Protection: Above ground gas meters, regulators and piping subject to damage shall be protected by a barrier complying with Section 312 or otherwise protected in an approved manner. (IFC 603.9)

Exit Discharge

1.10 Obstruction: A means of egress shall be free from obstructions that would prevent its use, including the accumulation of ice and snow. (IFC 1028.3)

1.12 General Maintenance: The means of egress for buildings or portions thereof shall be maintained in accordance with this section. (IFC 1028)

Electrical Equipment

1.13 Abatement of Electrical hazards: Identified electrical hazards shall be abated. Identified hazardous electrical conditions in permanent wiring shall be brought to the attention of the code official responsible for enforcement of the International Electrical Code. (IFC 605.1)

1.14 Working Space and Clearance: A working space of not less than 30 inches in width, 36 inches in depth and 78 inches in height shall be provided in front of electrical service equipment. No storage of any materials shall be located within the designated working space.

2. Building Interior

Entrance/Exit

2.1 Number: It shall be unlawful to alter a building or structure in a manner that will reduce the number of exits or the capacity of the means of egress to less than required by this code. (IFC 1001.2)

2.2 Obstruction: A means of egress shall be free from obstructions that would prevent its use, including the accumulation of ice and snow. (IFC 1027.3)

2.3 Reliability: Required exit accesses, exit or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in case of fire or other emergency. Security devices affecting means of egress shall be subject to approval of the fire code official. (IFC 1027.2)

Common Stairways

2.4 Enclosures: Interior exit stairways and interior exit ramps shall be enclosed with fire barriers. Exit enclosures shall have a fire resistance rating of not less than two (2) hours where connecting four (4) floors or more and not less than a one (1) hour rating where connecting less than four (4) floors. (IFC 1019.1)

2.5 Stairway Width: The width of stairways shall be determined as specified in Section 1005.1, but such width shall not be less than 44 inches (1118 mm). See Section 1007.3 for accessible means of egress stairways. (IFC 1009.1)

2.6 Stairway Doors Swing: Interior stairway means of egress doors shall be operable from both sides without the use of a key or special knowledge or effort. (IFC 1008.1.8.7)

2.7 Maintenance: The means of egress for buildings or portions thereof shall be maintained in accordance with this section. (IFC 1027.1)

2.8 Hardware: Where panic hardware is installed, it shall comply with the following: 1) The actuating portion of the release device shall extend at least one-half of the door leaf width 2) A maximum unlatching force of 15 pounds. (IFC 1008.1.9)

2.9 Condition: Storage of combustible materials in buildings shall be orderly. Storage shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur. (IFC 315.2)

2.10 Storage Ceiling Height: Storage shall not be within two (2) feet or more below the ceiling in a non-sprinklered areas of buildings or a minimum of 18 inches below sprinkler head deflectors in sprinklered areas of the building. (IFC 315.2.1)

2.11 Housekeeping: Storage of combustible materials in buildings shall be orderly. Storage shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur. (IFC 315.2)

3. HVAC Equipment Base Building

Common Units

3.1 Access: The installation shall be readily accessible for the cleaning of hot surfaces; removing burners; replacing motors, controls, air filters, chimney connectors, draft regulators and other working parts; and for adjusting, cleaning and lubricating parts. (IFC 603.1.5)

3.2 Proper Installation: Heating appliances shall be installed in accordance with the manufacturer's instructions, the International Building Code, the International Mechanical Code, the International Fuel Gas Code and the ICC Electrical Code. (IFC 603.5.2)

3.3 Combustion Air: Unvented fuel fired heating equipment shall not be located in or obtain combustion air from, any of the following rooms or spaces: sleeping rooms, bathrooms, toilet rooms, or storage closets. (IFC 603.4.1)

3.6 Clear of Combustibles: Open flames such as from candles, lanterns, kerosene heaters and gas fired heaters shall not be located on or near decorative materials or similar combustible materials. (IFC 308.3.3)

3.7 Condition of Units: The provisions of this chapter shall apply to the installation, operation and maintenance of fuel fired appliances and heating systems, emergency and standby power systems, electrical systems and equipment, mechanical refrigeration system,…. (IFC 601.1)

4. Electrical

Common Panel

4.1 Access: A clearance of not less than thirty (30) inches shall be provided between all electrical service equipment and storage. (IFC 605.3)

4.2 Properly Marked: Each disconnecting means shall be legibly marked. (IFC 605.3.1)

Circuits

4.3 Proper Size: Equipment intended to break current at fault levels shall have rating sufficient for the system voltage.

4.4 Identified: Each service, feeder, or branch circuit should be identified at the point where it originates and shall be legibly marked to indicate its purpose.

4.5 Unused Openings: Unused openings in boxes and circuit bodies and fittings shall be closed. Unused openings in cabinets or cutout boxes shall also be closed.

Outlets

4.6 Proper Locations: Identified electrical hazards shall be abated. Identified hazardous electrical conditions in permanent wiring shall be brought to the attention of the code official responsible for enforcement of the National Electrical Code. (IFC 605.1)

4.7 Proper Number: Identified electrical hazards shall be abated. Identified hazardous electrical conditions in permanent wiring shall be brought to the attention of the code official responsible for enforcement of the National Electrical Code. (IFC 605.1)

4.8 Covers: Each electrical outlet box shall have a cover, faceplate or fixture canopy. Open junction boxes and open wiring splices shall be prohibited. Appropriate covers shall be provided for all switches and electrical boxes. (NEC 370-15)

Egress Lighting

4.9 Adequate: The power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of a power system failure, illumination shall be automatically provided from an emergency system for the following occupancies where such occupancies require two or more means of egress. (IFC 1026.5)

Exit Signs

4.11 Where Required: Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel. Access to the exits shall be marked by readily visible exit signs in cases where the exit or path of egress travel is not immediately visible to the occupants. Exit sign placement shall be such that no point in an exit access corridor is more than 100 feet (30480 mm) or the listed distance for the sign, whichever is less, from the nearest visible exit sign. (IFC 1011.1)

4.12 Illumination: Exit signs shall be internally or externally illuminated. (IFC 1011.2)

Key Lock Box Maintenance (Knox Box)

4.13 Required: For immediate access for life-saving or firefighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official. (IFC 506.1)

4.14 Maintenance: The operator of the building shall immediately notify the fire code official and provide the new key when a lock is changed or rekeyed. The key to such lock shall be secured in the key box. (IFC 506.2)

Additional Requirements

1. Tenant Space

Entrance/ Exit Interior

1.1 Number: All rooms and spaces within each story shall be provided and have access to the minimum number of approved independent exits required by Table 1018.1 based on the occupant load except as modified in Section 1014.1 or 1018.2. (IFC 1018.1)

1.2 Obstructed: A means of egress shall be free from obstructions that would prevent its use, including the accumulation of ice and snow. (IFC 1027.3)

1.3 Reliability: Required exit accesses, exit or exit discharges shall be continuously maintained free from obstructions or impediments to the full instant use in case of fire or other emergency. Security devices affecting means of egress shall be subject to approval of the fire code official. (IFC 1027.2)]

1.4 Door Swing: All means of egress doors shall be of a side hinged swing type. (IFC 1008.1.2)

1.5 Hardware: Doors, handles, pulls, latches, locks and other operating devices on doors required to be accessible by Chapter 11 of the International Building Code, shall not require tight grasping, tight pinching, or twisting of the wrist to operate. (IFC 1008.1.8.1)

1.6 Address/Suite Number: Duty of the owners. Prior to the issuance of an occupancy permit for any new buildings, additions, alterations or any changes for which an occupancy permit is required, other than for accessory buildings, it shall be the owner's duty to have placed, in a location easily observed, clear of obstruction and readable from the roadway, alley or similar access, Arabic numerals at least four inches high with a minimum stroke width of 0.5 inches showing the address of the building or structure. House or building numbers shall contrast with the background, shall be constructed of durable materials, be permanently installed and be readily visible. Script or written numbers are not permitted. On corner lots where the building faces the intersecting street, additional numbers shall also be placed on the side of the buildings street address.

Stairways

1.7 Enclosure: Interior exit stairways and interior exit ramps shall be enclosed with fire barriers. Exit enclosures shall have a fire resistance rating of not less than two (2) hours where connecting four (4) floors or more and not less than a one (1) hour rating where connecting less than four (4) floors. (IFC 1019.1)

1.8 Capacity: Where exits serve more than one floor, only the occupant load of each floor considered individually shall be used in computing the required capacity of the exits at that floor, provided that e exit capacity shall not decrease in the direction of egress travel. (IBC 706.1)

1.9 Door Swing: Interior stairway means of egress doors shall be operable from both sides without the use of a key or special knowledge or effort. (IFC 1008.1.8.7)

1.10 Obstruction/Condition: A means of egress shall be free from obstructions that would prevent its use, including the accumulation of ice and snow. (IFC 1027.3)

1.11 Hardware: Where panic hardware is installed, it shall comply with the following: 1) The actuating portion of the release device shall extend at least one-half of the door leaf width 2) A maximum unlatching force of 15 pounds. (IFC 1008.1.9)

Corridors/Aisles

1.12 Width: The minimum corridor width shall be as determined in Section 1005.1 but not less than 44 inches. (IFC 1016.2)

1.13 Continuity: Fire resistance rated corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms. (IFC 1016.5)

Firewalls

1.14 Separation: Fire barriers used for separation of shafts, exits, exit passageways, horizontal exits or incidental use areas, to separate different occupancies \, to separate a single occupancy into different fire areas, or to separate other areas where a fire barrier is required elsewhere in this code or the International Fire Code, shall comply with this section. (IBC 706.1)

1.15 Fire Doors and Frames: Means of egress doors shall meet the requirements of this section. Doors serving a means of egress shall meet the requirements of this section and Section 1017.2. Doors provided for egress purposes in numbers greater than required by this code shall meet the requirements of this section. (IFC 1008.1)

1.16 Door Hardware: Where panic hardware is installed, it shall comply with the following: 1) The actuating portion of the release device shall extend at least one-half of the door leaf width 2) A maximum unlatching force of 15 pounds. (IFC 1008.1.9)

Storage

1.17 Height: Storage in buildings and structures shall be maintained two (2) feet or more below the ceiling in non-sprinklered areas of buildings or a minimum of 18 inches below sprinkler head deflectors in sprinklered areas of the building. (IFC 315.2.1)

1.18 Housekeeping: Storage of combustible materials in buildings and structure shall be orderly. Storage shall be separated from heaters and heating devices by distance or shielding so that ignition cannot occur. (IFC 315.2)

1.19 "No Smoking" Signs: The fire code official is authorized to order the posting of "No Smoking" signs in conspicuous location in each structure or location in which smoking is prohibited. The content, lettering, size, color and location of required "No Smoking" signs shall be approved. (IFC 310.3)

2. Restaurants

Hood and Ducts

2.1 General: Commercial kitchen exhaust systems shall comply with the requirements of the International Mechanical Code. (IFC 609.1)

2.2 **Where Required:** a Type 1 hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors

3. Compressed Gas

3.1 Properly Secured: All compressed gas containers, cylinders and tanks shall be secured to prevent falling caused by contact, vibration or seismic activity. (IFC 3003.3.3)

3.2 Marking: Stationary and portable compressed gas containers, cylinder tanks and systems shall be marked in accordance with Sections 3003.2.1, 3003.2.2, and 3003.2.3. (IFC 3003.2)

3.3 "No Smoking" Signs: The fire code official is authorized to order the posting of "No Smoking" signs in conspicuous location in each structure or location in which smoking is prohibited. The content, lettering, size, color and location of required "No Smoking" signs shall be approved. (IFC 310.3)

4. HVAC Equipment

Units

4.1 Access: The installation shall be readily accessible for the cleaning of hot surfaces; removing burners; replacing motors, controls, air filters, chimney connectors, draft regulators and other working parts; and for adjusting, cleaning and lubricating parts. (IFC 603.1.5)

4.2 Heating Appliance Installation: Heating appliances shall be installed in accordance with the manufacturer's instructions, the International Building Code, the International Mechanical Code, the International Fuel Gas Code and the National Electrical Code. (IFC 603.5.2)

4.3 Combustion Air: Unvented fuel fired heating equipment shall not be located in or obtain combustion air from, any of the following rooms or spaces: sleeping rooms, bathrooms, toilet rooms, or storage closets. (IFC 603.4.1)

4.6 Clear of Combustibles: Open flames such as from candles, lanterns, kerosene heaters and gas fired heaters shall not be located on or near decorative materials or similar combustible materials. (IFC 308.3.3)

4.7 Condition of Units: The provisions of this chapter shall apply to the installation, operation and maintenance of fuel fired appliances and heating systems, emergency and standby power systems, electrical systems and equipment, mechanical refrigeration systems. (IFC 601.1)

5. Electrical

Outlets

5.1 Proper Location: Hazardous conditions arising from defective or improperly used or installed wiring, equipment or appliances shall be remediated. (IFC 605.1)

5.2 Proper Number: Hazardous conditions arising from improperly used outlets (multiple pieces of equipment and appliances) shall be remediated. (IFC 605.1)

5.3 Covers: Each outlet box shall have a cover, faceplate or fixture canopy. Open junction boxes and open wiring splices shall be prohibited. Appropriate covers shall be provided for all switch and electrical boxes. (IFC 605.6)

Extension Cords

5.4 Condition: Extension cords shall not be used as a substitute for permanent wiring. Extension cords and flexible cords shall not be fixed to structures, extended through walls, ceilings or floors or under doors or floor coverings nor shall such cords be subject to environmental damage or physical impact. (IFC 605.5)

5.5 Maintenance: Extension cords shall be maintained in good condition without splices, deterioration or damage. (IFC 605.5.3)

5.6 Temporary Wiring: Temporary wiring for electrical power and lighting installations is allowed for a period not to exceed 90 days. Temporary wiring methods shall meet the applicable provisions of the National Electrical Code. (IFC 605.5 & IFC 605.9)

Egress Lighting

5.7 Adequate: The power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of a power system failure, illumination shall be automatically provided from an emergency system for the following occupancies where such occupancies require two or more means of egress. (IFC 1026.5) **Emergency Lighting**

5.13 Operational: The power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of a power system failure, illumination shall be automatically provided from an emergency system for the following occupancies where such occupancies require two or more means of egress. (IFC 1026.5)

Exit Signs

5.14 Where Required: Exits and exit access doors shall be marked by an approved exit sign readily visible from any direction of egress travel. Access to the exits shall be marked by readily visible exit signs in cases where the exit or path of egress travel is not immediately visible to the occupants. Exit sign placement shall be such that no point in an exit access corridor is more than 100 feet (30480 mm) or the listed distance for the sign, whichever is less, from the nearest visible exit sign. (IFC 1011.1)

5.15 Illumination: Exit signs shall be internally or externally illuminated. (IFC 1011.2)

6. Portable Fire Extinguisher

6.1 General Requirements: Portable fire extinguishers shall be selected, installed and maintained in accordance with this section and NFPA 10. (IFC 906.2)

6.2 Location: Portable fire extinguishers shall be installed in locations in accordance with the code. (IFC 906.1)

6.3 Conspicuous Location: Extinguishers shall be located in conspicuous locations where they are readily accessible and immediately available for use. In rooms or areas in which visual obstruction cannot be completely avoided, means shall be provided to indicate the locations of extinguishers. (IFC 906.6)

7. Flammable Liquids

7.1 Processing and Storage: Prevention, control and mitigation of dangerous conditions related to storage, use, dispensing, mixing and handling of flammable and combustible liquids shall be in accordance with Chapter 27 and this chapter. (IFC 3401.1)

7.2 "No Smoking" Signs: Signs shall be posted in storage areas prohibiting open flames and smoking. Signs shall comply with Section 3403.5. (IFC 3404.2.3.1)

7.3 Fire Control: Portable fire extinguishers with a minimum rating of 20–B:C and complying with Section 906 shall be provided where required by the fire code official. (IFC 3406.2.7)

8. Key Box

8.1 Maintenance: The operator of the building shall immediately notify the fire code official and provide the new key when a lock is changed or rekeyed. The key to such lock shall be secured in the key box. (IFC 506.2)

Fire Safety Inspection Handbook

Fire Inspection Basics:

Scheduling: Fire Inspections must be done annually on all commercial buildings. These inspections allow property owners to identify and correct any potentially dangerous problems.

Occupancy Classification: A building's occupancy classification determines how it can be used (i.e. office space, restaurant, theatre, etc.) Occupancy classification also specifies the number of occupants a building may have, as well as determining types fire protection systems required, exiting requirements, etc.

Fire Extinguishers: One fire extinguisher is required for every 75 feet of travel. Requirements can vary depending on type of occupancy.

Exit Signs: Signs and lighting are required for all exits other than the primary entrance. This helps occupants safely exit the building in an emergency.

Type 1 Hood/Vent: A type 1 hood is required for cooking operations that produce grease laden vapors. A type 1 hood is designed to exhaust cooking vapors and provides an extinguishing system to prevent a cooking fire from spreading to other parts of the business and/or building

Type 1 Hood

Fire Extinguisher label

Lighted

Self- Luminous

Borger Fire Department