



DENTON COUNTY EMERGENCY SERVICES DISTRICT NO. 1

FIRE MARSHAL'S OFFICE

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FIRE CODE QUICK REFERENCE – IFC BASICS

For general informational purposes only. Not a substitute for the adopted codes.

Always refer to the applicable code and local amendments.



FIRE LANES & ACCESS

IFC 503 / Appendix D

- 24' wide for buildings up to 30' in height (measured from ground to eave)
- 26' wide if building is > 30' in height, and 15' min. – 30' max. from building
- 30' inside turning radius
- Dead-end fire lanes > 150' in length must have an IFC-approved turn-around (Appendix D of the IFC)
- All parts of an unsprinklered building must be within 150' of a fire lane
- All parts of a sprinklered building must be within 300' of a fire lane
(Fire Code Official-approved option to increase IFC 503.1.1 reach)



RESIDENTIAL CODES

Single Family (SF-Detached) / Townhomes / 2-Family (Duplexes)
IRC

- Built under the IRC (International Residential Code)
- If > 30 homes, then must have 2nd point of access and satisfy remoteness requirement or install NFPA 13D systems in all homes if single point of access
- Townhomes must have NFPA 13D sprinkler system (IRC P2904 which is the NFPA 13D equivalent)
- Townhomes require fire suppression as per IRC R313.1
- Single Family Homes require fire sprinkler systems if > 4,999 sq. ft.



MULTIFAMILY

IBC

- Built under the IBC, considered commercial, even if used for residential purposes
- If 200 units or less and sprinklered, may have single FD-approved point of access
- If > 200 units or > 30' in height, must have 2nd point of access
- If 2nd point of access is required, it must be remote, meaning no less than half the diagonal of the maximum overall dimension
- Requires NFPA 13R sprinkler system: up to and including 4 stories = NFPA 13R.
5+ stories = full NFPA 13 system



COMMERCIAL / INDUSTRIAL

IBC

- Built under the IBC (International Building Code)
- Buildings exceeding 62,000 sq. ft. gross building area must have 2nd point of access (unsprinklered)
- Buildings up to 124,000 sq. ft. gross building area may have single point of access as long as they are sprinklered
- Buildings > 30' in height = 2nd point of access is required
- If 2nd point of access is required, it must be remote, meaning no less than half the diagonal of the maximum overall dimension
- If building square footage > 5,000 sq. ft., a fire sprinkler system is required (local amendment in all four towns)
- A-2 Assembly occupancies (restaurants/bars) must have NFPA 13 sprinkler system if > 4,999 sq. ft. or > 99 occupant load



WATER SUPPLY

IFC 507 / Appendix B

- All parts of an unsprinklered building must be within 400' of a fire hydrant
Exception: R-3 Single Family Homes (600')
- All parts of a sprinklered building must be within 600' of a fire hydrant
- Standpipe FDC must be within 50' of a fire lane, 100' of a fire hydrant
- Sprinkler FDC must be within 50' of a fire lane, 100' of a fire hydrant

(Hydrant locations and FDC requirements are subject to the most restrictive standard in the adopted code and local amendments.)



THE 3 TYPES OF FIRE SPRINKLER SYSTEMS

- **NFPA 13** – Highest level of coverage – Commercial and Industrial and some Residential when > 4 stories. Protects occupants and building ("sprinklered throughout").
- **NFPA 13R** – (Apts/Hotels) Protects occupants and some of the building – low-rise residential up to and including 4 stories.
- **NFPA 13D** – (Single/Two-Family and Townhomes) Protects occupants and none of the building (intended to prevent flashover).