

Important Update on the International Building Code (IBC) regarding Lightning Protection

The International Building Code (IBC) has recently undergone significant updates, particularly in Section 2703, which focuses on lightning protection. These changes are pivotal in enhancing the safety and resilience of buildings against lightning strikes.

Key Points of the 2024 IBC Updates:

Compliance with Accepted US Safety Standards:

For a lightning protection system to comply with the updated IBC Section 2703, it must be installed in compliance with NFPA 780 or UL96A. Such systems typically incorporate Franklin Rods (refer to Figure 1 for a visual representation), roof-networks, down conductors, bonding connections, grounding and surge protection.

Non-Compliance of Deviant Systems:

Systems that do not follow the requirements of NFPA 780 or UL 96A, such as Early Streamer Emission (ESE) systems (see Figure 2) and Dissipation Array Systems (see Figure 3), will typically not be considered compliant with the IBC.

Adoption Timeline:

The updates to the IBC were nationally adopted in August 2023. However, it's important to note that the implementation timeline varies by county, with a maximum adoption period of up to three years.

The Code

SECTION 2703 LIGHTNING PROTECTION SYSTEMS

2703.1 General.

Where provided, lightning protection systems shall comply with Sections 2703.2 through 2703.3.

2703.2 Installation.

Lightning protection systems shall be installed in accordance with NFPA 780 or UL 96A. UL 96A shall not be utilized for buildings used for the production, handling, or storage of ammunition, explosives, flammable liquids or gases, and other explosive ingredients including dust.

2703.2.1 Surge protection.

Where lightning protection systems are installed, surge protective devices shall also be installed in accordance with NFPA 70 and either NFPA 780 or UL 96A, as applicable.

2703.3 Interconnection of systems.

All lightning protection systems on a building or structure shall be interconnected in accordance with NFPA 780 or UL 96A, as applicable.

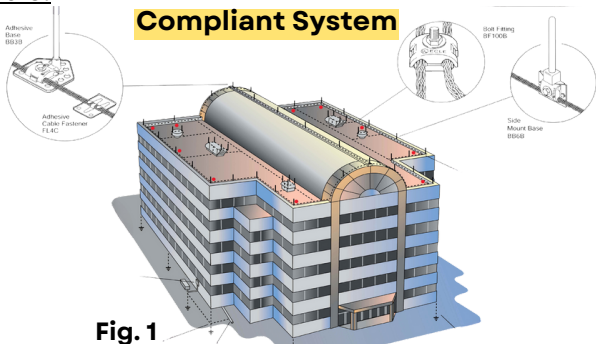


Fig. 1

Non-Compliant Systems

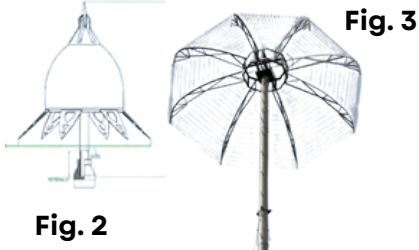


Fig. 2

Fig. 3

Members of the Lightning Safety Alliance, including professionals in the lightning protection industry, architects, and engineers, should understand and communicate these changes effectively. This will ensure that all future lightning protection installations adhere to the new code and enhance the safety of the structures we work on.