

Major Code Impacts 2018 to 2024 IFC

Lithium-ion battery and ESS requirements

Major revisions affected:

- Battery energy storage systems
- Thermal runaway protection
- Fire detection
- Deflagration/explosion control
- Separation distances
- Ventilation
- Emergency operations planning

This is one of the biggest themes of the 2024 IFC.

Additive manufacturing (3D printing)

New sections regulated:

- Industrial and nonindustrial 3D printing
- Powder handling
- Ventilation
- Combustible dust hazards
- Hazardous materials

Emergency responder communication systems

ERRCS/ERCES requirements expanded:

- Better in-building radio coverage
- Performance requirements
- Broader communication technologies
- Reliability/testing enhancements

Upholstered furniture and mattress storage

Storage and manufacturing requirements were revised for:

- Fire protection
- Sprinkler criteria
- Commodity classification
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Hazardous materials / control areas coordination

- Coordination between IFC and IBC control area provisions improved, especially regarding fire walls and MAQ separation concepts.

Electric vehicle infrastructure coordination

Expanded requirements tied to:

- EV charging
- Parking structures
- Hazard mitigation
- Electrical safety
- Fire department response planning

Enhanced hazardous materials provisions

Additional revisions addressed:

Emerging technologies .

- Flammable gas systems
- Energy systems integration
- Industrial process hazards

Carbon monoxide detection

- Expanded from R & E occupancies