



# ADCDA Requirements for Firestop & Through Penetration Systems



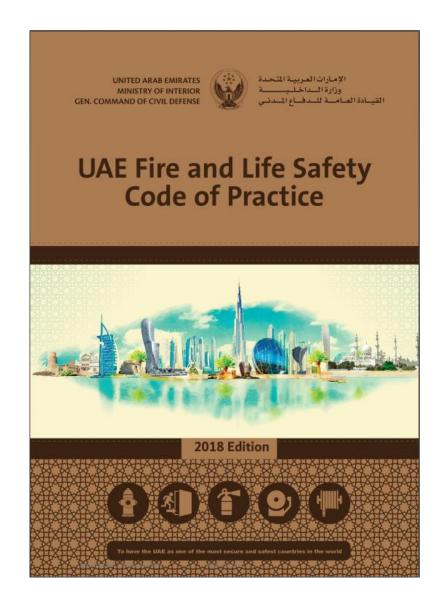
# **Why Firestop Systems Are Critical**

- Prevent the spread of fire and smoke
- Protect building occupants and assets
- Required by UAE Fire Code and international standards
- Ensures compartmentation in fire-rated walls and floors



## **Current Requirements for Firestop Systems**

- Suppliers must provide firestop systems that meet listing standards
- Systems must be tested and certified according to:
- UL, EN, ASTM and FM listing standards
- Only approved systems are permitted in Abu Dhabi



#### **Role of Firestop System Suppliers**

- Suppliers provide tested and listed firestop systems
- Must comply with UAE Fire Code
- Must provide documentation proving system compliance

#### **Class G Contractor Requirements**

- Must have qualified engineers and technicians
- Must demonstrate experience with certified firestop systems
- Must submit compliance documentation to ADCDA

### **PERMITS**

Plan review

Initial drawing

Shop drawing

Inspection

- Design
- Requirements
- Consultant
- Before permits

- Contracts
- Details
- Components
- Excel (Calculations)

- Handover
- Testing & Communing



#### **Class G Contractor Requirements**

- Must have qualified engineers and technicians
- Must demonstrate experience with certified firestop systems
- Must submit compliance documentation to ADCDA

#### **Step 1: Initial Drawings Approval**

- Contractors submit FLS drawings for review
- Doesn't include Firestop and through penetration details.
- Compliance with UAE Fire Code is verified

#### **Step 2: Shop Drawings Approval**

- Letters of the suppliers and contractors of systems are submitted.
- ADCDA verifies that only approved firestop systems are used
- Ensures compliance with initial drawings

#### **Step 3: Final Handover Inspection**

- Conducted after project completion
- Ensures installed systems match approved designs
- Ensures compliance with UAE Fire Code and international standards

#### **Future Improvements: Contractor Certification**

- ADCDA will enforce mandatory contractor certification
- Certification will be required through programs such as:
  FM 4991 or UL Qualified Firestop Contractor Program.
- Ensures only trained professionals install firestop systems

### Future Improvements: Engineering Judgment Certification

Suppliers issuing engineering judgments (EJs) must be certified

Certification will be required through the UL's Technical Evaluation Developer Program (TEDP)

- Ensures only qualified professionals issue EJs
- Includes surveillance over issued EJs

#### **Strengthening Compliance & Enforcement**

- Increased monitoring of firestop installations
- Stricter enforcement of non-compliance penalties
- Increased collaboration with industry stakeholders

#### **Exploring AI for Compliance Monitoring**

- The UAE's National Artificial Intelligence Strategy 2031
- Future Al solutions to track firestop systems in projects
- Compare project submissions with certified systems
- Identify discrepancies and non-compliance automatically

#### **Industry Collaboration & Training**

- ADCDA will work with FCIA and industry leaders
- Promote best practices and proper firestop installations
- Support professional training programs

### **Conclusion & Key Takeaways**

- Firestop systems are critical for building safety
- Contractor & supplier certification will be enforced
- Al solutions will enhance compliance monitoring
- ADCDA remains committed to improving industry standards

