

## Fire Safety Compliance Checklist for South Africa (Based on SANS 10400-T & Related Standards)

This checklist is designed to help facility managers and property owners ensure compliance with South African National Standards (SANS) for fire safety, particularly SANS 10400-T (Fire Protection) and SANS 10287 (Fire Sprinkler Systems). Always consult a competent fire engineer or certified professional for a comprehensive assessment.

### General Requirements

- **Fire Risk Assessment:** Conduct a fire risk assessment at least every 5 years by a competent person or Approved Inspection Authority (AIA) registered with SANAS, as per SANS 10400-T and Major Hazard Installation Regulations.
- **Competent Person Involvement:** Engage a qualified fire engineer or professional to design, verify, and sign off on fire safety systems (SANS Form 2 and Form 4).
- **Compliance Certificate:** Obtain an annual Fire Compliance Certificate, non-transferable upon change of ownership or premises relocation.
- **Record Keeping:** Maintain records of inspections, maintenance, and risk assessments, accessible for municipal inspection, as per the National Archives and Records Service of South Africa Act.

### Fire Protection Systems

- **Fire Extinguishers:**
  - Installed as per SANS 10105 and SANS 1475, bearing SABS certification marks.
  - Maintained and serviced annually by a qualified SAQCC Fire-accredited technician.
  - Placed in unobstructed, accessible locations.
- **Fire Hose Reels and Hydrants:**
  - Installed and maintained per SANS 543, SANS 1128, SANS 1475 Part 2, and SANS 10105 Part 2.
  - Connected to a reliable water supply with sufficient pressure.
- **Fire Sprinkler Systems:**
  - Installed in high-risk areas (e.g., warehouses >2,500 m<sup>2</sup>, basements, high-rise buildings) as per SANS 10287.
  - Regularly serviced to check for corrosion or malfunctions.
- **Fire Detection and Alarm Systems:**
  - Designed, installed, and maintained per SANS 10139 by a competent person.
  - Tested regularly to ensure functionality.

### Building Design and Structural Requirements

- **External Walls:**

- Meet fire resistance requirements (e.g., Type F walls resistant for at least 30 minutes for H4 occupancy, as per Table 1 of SANS 10400-T).
- Safety distances maintained where walls have no openings (per Table 2 of SANS 10400-T, e.g., 0.5 m for H4 buildings with elevation  $\leq 7.5$  m<sup>2</sup>).
- Openings (e.g., windows) comply with safety distance requirements based on building classification and window area (Table 2).
- **Fire Doors:**
  - Installed to prevent fire and smoke spread, compliant with SANS 10400-T.
  - Equipped with automatic releasing hold-open devices where applicable.
- **Roof Assemblies:**
  - Constructed with non-combustible materials, compliant with SANS 10400-T.
- **Structural and Non-Structural Walls:**
  - Meet fire resistance requirements as per SANS 10400-T Tables for structural and non-structural components.

#### Escape Routes and Signage

- **Escape Routes:**
  - Multiple, unobstructed escape routes lead to safe assembly points, free from storage or furniture.
  - Doors positioned appropriately relative to changes in level (per SANS 10400-T drawings).
- **Signage:**
  - Illuminated or photoluminescent exit signs installed per SANS 1186-1, SANS 1186-3, SANS 1186-5, and SANS 1464-22.
- **Evacuation Drills:**
  - Conduct regular evacuation drills to familiarise employees with escape routes.

#### Maintenance and Inspections

- **Regular Inspections:**
  - Conduct periodic inspections of all fire equipment (extinguishers, hose reels, sprinklers, alarms) by certified technicians.
- **Maintenance Schedules:**
  - Follow strict maintenance schedules for fixed and portable fire equipment to prevent inoperability.
- **Municipal Compliance:**

- Adhere to local municipal fire safety bylaws and submit to inspections by the chief fire officer.

#### **Additional Considerations**

- **Flammable Materials:**
  - Store flammable/hazardous substances appropriately, away from ignition sources.
- **Staff Training:**
  - Train employees on the location of fire equipment, emergency procedures, and evacuation protocols.
- **Vegetation and Waste Control:**
  - Manage vegetation and combustible waste to prevent fire hazards, as per municipal by-laws.

#### **Notes**

- **Legal Consequences:** Non-compliance may result in fines, legal action, business closure, or denial of insurance claims.
- **Local Authority Requirements:** Consult local fire authorities for additional requirements or rational design submissions for complex systems.
- **SABS Standards Access:** Obtain full SANS 10400-T and related standards from the SABS store for detailed compliance guidelines.

For professional assistance, contact certified fire protection services, such as Lionise Group (fire@lionize.co.za), to ensure compliance.