



Fire Detection Requirements

Type of Occupancy	Class of Occupancy	Building of Any Size	Building over 4 storeys high	Building with any floor area in excess of 5000m2	SANS10139 Category of system
Entertainment and public assembly	A1	M	FD & VA	FD & VA	M/L4/P2
Theatrical and indoor sport	A2	M	FD & VA	FD & VA	
Place of instruction	A3		FD & VA	FD & VA	
Worship	A4				
Outdoor sport	A5				
High risk commercial service	B1	FD	VA	VA	
Moderate risk commercial service	B2	FD	VA	VA	
Low risk commercial service	B3		FD & VA	FD & VA	
Exhibition hall	C1	FD & M	VA	VA	
Museum	C2	M	FD & VA	FD & VA	
High risk industrial	D1	FD	VA	VA	
Moderate risk industrial	D2	FD	VA	VA	
Low risk industrial	D3		FD	FD	
Plant room	D4				
Place of detention	E1		FD & VA	FD & VA	M/L4/P2
Hospital*	E2	FD & VA			L1
Other institutional (residential)	E3	FD	VA	VA	L1 to L3
Health care	E4	FD	VA	VA	
Large shop**	F1	M	FD & VA	FD & VA	L1 to L3
Small shop	F2				
Wholesalers store	F3		FD & VA	FD & VA	
Office	G1		FD & VA	FD & VA	P2/M
Hotel	H1	FD	VA	VA	L1 or L2
Dormitory	H2	M	FD & VA	FD & VA	L1 or L2
Domestic residence	H3				
Detached dwelling house	H4				
Hospitality	H5	DFD			
High risk storage	J1	FD			
Moderate risk storage	J2	FD			
Low risk storage	J3		FD	FD	
Parking Garage	J4				

- FD Fire Detection system in accordance with SANS10139
- VA Voice alarm system in accordance with SANS7240-16; SANS 7240-19 and SANS 7240-24
- M Manually activated system that provided both audible and visual alarms
- DFD Smoke detectors connected to a security alarm system

* 4.31.3 For buildings classified E2, the design and installation of fire detection and alarm systems shall be in accordance with SANS322

** Large shops with floor area 500m2 or more should have FD

NOTE: The local authority can request for fire detection systems or voice evacuation systems to be installed outside the limits listed in the table or be required as the result of a risk assessment or rational design.