Polish Legislation

The prescriptive Polish fire safety code requires sprinklers in a limited number of situations, as below.

ROZPORZĄDZENIE
MINISTRA SPRAW WEWNĘTRZNYCH I ADMINISTRACJI[1)]

z dnia 21 kwietnia 2006 r.

w sprawie ochrony przeciwpożarowej budynków, innych obiektów budowlanych i terenów

(Dz. U. Nr 80, poz. 563 z dnia 11.05.2006 r.)

Na podstawie art. 13 ust. 1 ustawy z dnia 24 sierpnia 1991 r. o ochronie przeciwpożarowej (Dz. U. z 2002 r. Nr 147, poz. 1229 z późn. zm.[2)]) zarządza się, co następuje:

Rozdział 6

Stosowanie stałych urządzeń gaśniczych, systemów sygnalizacji pożarowej, dźwiękowych systemów ostrzegawczych i gaśnic

§ 27. 1. Stosowanie stałych urządzeń gaśniczych, związanych na stałe z obiektem, zawierających zapas środka gaśniczego i uruchamianych samoczynnie we wczesnej fazie rozwoju pożaru, jest wymagane w: (water or other automatic system)

1) archiwach wyznaczonych przez Naczelnego Dyrektora Archiwów Państwowych; (archives indicated by the Main Director of National Archives)
2) muzeach oraz zabytkach budowlanych, wyznaczonych przez Generalnego Konserwatora Zabytków w uzgodnieniu z Komendantem Głównym Państwowej Straży Pożarnej; (museums and heritage buildings indicated by the Heritage General Conservation Office agreed with the Headquarters of State Fire Service)
3) ośrodkach elektronicznego przetwarzania danych o znaczeniu krajowym. (National computer data centres)

2. Stosowanie stałych urządzeń gaśniczych wodnych jest wymagane w: (water automatic (fixed) systems)

1) budynkach handlowych lub wystawowych:

Exhibition and commercial buildings

[1)] Minister Spraw Wewnętrznych i Administracji kieruje działem administracji rządowej - sprawy wewnętrzne, na podstawie § 1 ust. 2 pkt 3 rozporządzenia Prezesa Rady Ministrów z dnia 31 października 2005 r. w sprawie szczegółowego zakresu działania Ministra Spraw Wewnętrznych i Administracji (Dz. U. Nr 220, poz. 1897)

[2)] Zmiany tekstu jednolitego wymienionej ustawy zostały ogłoszone w Dz.U. z 2003 r. Nr 52, poz. 452, z 2004 r. Nr 96, poz. 959 oraz z 2005 r. Nr 100, poz. 835 i poz. 836.

a) jednokondygnacyjnych, w strefie pożarowej zakwalifikowanej do kategorii zagrożenia ludzi ZL I o powierzchni powyżej 8 000 m^2, (single-storey buildings with fire compartments above 8,000 m^2)
b) wielokondygnacyjnych, **w strefie pożarowej** zakwalifikowanej do kategorii zagrożenia ludzi ZL I o powierzchni powyżej 5 000 m^2;
(multi-storey buildings with fire compartments above 5,000 m^2)

2) w budynkach o liczbie miejsc służących celom gastronomicznym powyżej 600;
(buildings with restaurants seating more than 600)

3) budynkach użyteczności publicznej wysokościowych;
(public buildings, high-rise)

4) budynkach zamieszkania zbiorowego wysokościowych.
(residential buildings, high-rise)

As well as the prescriptive code, Poland has a code which offers design freedoms (trade-offs) if sprinklers are fitted. These are detailed in the following pages.

Warsaw, 18 September 2015

Pos. 1422

NOTICE

MINISTRY FOR INFRASTRUCTURE AND DEVELOPMENT

of 17 July 2015

on announcing single text of the Regulation of the Ministry of Infrastructure on technical conditions to be met by buildings and their location

Occupancy classes
The regulation assigns the following building occupancy classes:

ZL I: buildings or parts of buildings intended for the simultaneous presence of more than 50 people other than their regular users (regular use = more than 4 hours per day) and not intended primarily for use by people with limited mobility. An example is shopping malls.
ZL II: buildings or parts of buildings intended primarily for use by people with limited mobility, such as hospitals, kindergartens
ZL III: public building not classified as ZL I or ZL II
ZL IV: collective dwelling (such as an apartment building)
ZL V: collective dwelling other than ZL I or ZL II
PM: production and storage areas.

§212 1. Establishes five classes of fire resistance of buildings or parts thereof, listed in order from highest to lowest, and marked with the letters "A," B "C" D "E, and characterized in § 216.

2. The required fire resistance class for a building, according to its height and occupancy class ZL, is set out in the table below:

Building Category	ZL I	ZL II	ZL III	ZL IV	ZL V
1	2	3	4	5	6
low (≤ 12 m high) N	B	B	C	D	C
high (> 12, ≤ 25 m) W	B	B	B	C	B
very high (> 25, ≤ 55 m) WW	B	B	B	B	B
elevated (> 55 m)	A	A	A	B	A

A reduction of the required fire resistance class in certain occupancy classes when at low level is permitted as listed in the table below.

Number of floors above ground	ZLI	ZLII	ZLIII
1	2	3	4
1	D	D	D
2*)	C	C	D

*) When the level of the ceiling over the first storey above ground is at a height of not more than 9 m above the ground.

The required fire resistance class for building categories PM and IN, subject to § 282, is set out below:

The maximum density of the fire load in the building fire zone Q [MJ/m^2]	The building has one floor above ground (without height restrictions)	Multi-storey building			
		low	medium	high	very high
1	2	3	4	5	6
Q ≤ 500	E	D	C	B	B
500 < Q ≤ 1000	D	D	C	B	B
1000 < Q ≤ 2000	C	C	C	B	B
2000 < Q ≤4000	B	B	B	*	*
Q > 4000	A	A	A	*	*

* According to paragraph § 228, such buildings are not allowed.

Reduction in minimum structural fire resistance with sprinklers

§214

In buildings equipped with automatic fixed firefighting water systems, with the exception of buildings classified as ZL II and very high (WW) buildings, it is allowed to:

1) Lower the fire resistance class by one in relation to classes described in §212
2) Establish fire resistance class “E” for single storey buildings. *Fire resistance class E does not specify a performance level for any part of the building structure.*

Increase in maximum compartment area with sprinklers

§227.1

Risk category occupancy	Permissible compartment area in m^2			
	Single-storey	Multi-storey building		
		Low rise (N)	Mid-rise (SW)	High rise (W) & (WW)
1	2	3	4	5
ZL I, ZL III, ZL IV, ZL V	10,000	8,000	5,000	2,500
ZL II	8,000	5,000	3,500	2,000

§227.4
The maximum fire compartment area, as set out in paragraph 1 (§227.1) and with the exception of fire compartments located in multi-storey high (W) and very high (WW) buildings, may be increased where the following are provided:

1) Fixed firefighting sprinkler systems – by 100 %
2) Automatic smoke extraction systems activated by a smoke detection system – 100 %

Where both systems listed in 1) and 2) are installed, the maximum fire compartment area may be enlarged by 200 %.

§228

Fire Area	Fire load density Q [MJ/m^2]	Maximum compartment area in m^2		
		Single storey building	Multi-storey building	
			Low and mid-rise (N) & (SW)	High rise (W) & (WW)
1	2	3	4	5
Areas at risk of explosion	Q > 4,000	1,000	*	*
	2,000 < Q ≤ 4,000	2,000	*	*
	1,000 < Q ≤ 2,000	4,000	1,000	*
	500 < Q ≤ 1,000	6,000	2,000	500
	Q ≤ 500	8,000	3,000	1,000
Other areas	Q > 4,000	2,000	1,000	*
	2,000 < Q ≤ 4,000	4,000	2,000	*
	1,000 < Q ≤ 2,000	8,000	4,000	1,000
	500 < Q ≤ 1,000	15,000	8,000	2,500
	Q ≤ 500	20,000	10,000	5,000

* Not allowed

§229
The maximum fire compartment area, as set out in §228 (production and storage buildings), may be increased where the following are provided:

1) Fixed firefighting sprinkler systems – by 100 %
2) Automatic smoke extraction systems – by 50 %

While both systems listed in 1) and 2) are installed, the maximum fire compartment area may be increased by 150 %.

§230.2
In single-storey buildings, the maximum area of production and storage fire compartments, with the exception of car parks, is not limited where automatic fixed firefighting water systems and automatic smoke extraction systems are installed.

Increase in maximum travel distances with sprinklers

§237.6
In public buildings, the maximum distance to another fire compartment or to exit the building, hereinafter referred to as "travel distance" may not exceed:
1) in occupancy class ZL - 40 m;
2) in PM occupancy class with a fire load density greater than 500 MJ / m^2 in a building of more than one storey above ground - 75 m;

3) in occupancy class PM with a fire load density less than 500 MJ / m^2, in a building with more than one storey above ground and in PM occupancy class building with one floor above ground, regardless of the size of the fire load - 100 m.

Maximum travel distances may be increased where the following are fitted:

1) Automatic fixed firefighting water systems – by 50 %
2) Automatic smoke extraction systems activated by smoke detection – by 50 %

§256.3

Type of fire zone	Travel distance in m	
	One-way	Two-way
1	2	3
In rooms with the potential for explosive atmospheres	10	40
PM with a fire load density Q> 500 MJ / m^2 without hazardous substances	30	60
PM with a fire load density Q≤ 500 MJ / m^2 without hazardous substances	60	100
ZL I, II, V	10	40
ZL III	30	60
ZL IV	60	100

Increase in maximum firefighter access distance with sprinklers

§256.4
The maximum fire-fighter access distance may be increased where the following are fitted:

1) Automatic fixed firefighting water systems in the fire compartment – by 50 %
2) Automatic smoke extraction system in the escape route – by 50 %

Decrease in minimum building separation with sprinklers

§271.6
The minimum distance between the external walls of two buildings may be reduced by 50 % from the distances described in paragraphs 1-5 (§271), if fixed firefighting water systems are fitted in all fire compartments adjacent to the walls of both buildings.

§271.7
The minimum distance between the external walls of two buildings may be reduced by 25 % from the distances described in paragraphs 1-5 (§271), if fixed firefighting water systems are fitted in all fire compartments adjacent to the walls of one building.

Doubling of enclosed car park compartment maximum area with sprinklers

§277.2 1)
The maximum fire compartment area in above- or underground enclosed car parks (5000 m^2) may be increased by 100 % if the compartment is protected by an automatic fixed firefighting water system.