FIRE-SUPPRESSION SYSTEM

31.1. Vocabulary

Ex. 1.	. Match	the w	vords	with	their	Russian	equivalents.
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1. glass bulb	а. система мокрого трубопровода			
2. wet pipe system	b. система орошения			
3. activation temperature	с. спринклерная система пенного			
_	тушения			
4. active fire prevention	d. спусковой механизм			
5. smoke alarm	е. огнетушитель			
6. fire extinguisher	f. активная профилактика			
	пожаров			
7. fire-suppression system	g. стеклянный баллон			
8. trigger	h. дымовой извещатель			
9. fusible alloy	і. система пожаротушения			
10. foam water sprinkler system	ј. пожарный спринклер			
11. dry pipe system	k. легкоплавкий сплав			
12. fire sprinkler	1. тепло			
13. heat	т. система сухого трубопровода			
14. deluge system	n. температура активации			

Ex. 2. *Complete the sentences with the given words.*

dry pipe system, fire extinguisher, smoke alarm, wet pipe system, foam water sprinkler system, deluge system, fire sprinklers, fusible alloy, trigger, glass bulb, fire-suppression system, Active fire prevention, fire sprinkler

The _____(1) went off late at night, waking everyone in the house.

When he pulled the _____(2) on the fire extinguisher, a loud noise filled the room.

A _____(3) keeps water ready to fight fires quickly and efficiently.

The _____(4) activated automatically when the temperature rose significantly.

In some large buildings, a _____(5) is necessary to cover vast areas in case of fire.

Every office should have a _____(6) that employees can access easily at all times.

Heat from the flames triggered the _____(7) to start working immediately.

The activation temperature for the _____(8) is set to prevent any unnecessary water damage.

(9) strategies, like regular drills, are essential in schools and workplaces.

The _____(10) in the sprinkler activates when it melts due to high temperatures.

A _____(11) contains liquid that breaks when exposed to extreme heat, releasing water.

The _____(12) is particularly useful for fighting flammable liquid fires.

A _____(13) must be tested to ensure it functions correctly in emergencies.

31.1. Reading

Ex. 1. Read the text.

Fire-suppression systems are crucial in safeguarding buildings and their occupants from fire dangers. These systems come in different types, each designed to serve specific environments and fire risks. For instance, the wet pipe system constantly holds water in its pipes and releases it when a fire sprinkler is triggered by heat. Conversely, the dry pipe system contains pressurized air, and water fills the pipes only when a fire sprinkler is triggered, making it ideal for colder climates where pipes might freeze.

Fire-suppression systems often incorporate smoke alarms to detect smoke and initiate the suppression process. One common type is the sprinkler system. The most frequently used sprinkler has a small glass bulb filled with a liquid that expands when exposed to heat. Once the liquid reaches a certain temperature, the bulb bursts, causing water to pour out.

Another advanced option is the foam water sprinkler system, which mixes foam concentrate with water to effectively cover and cool the fire, preventing it from spreading. Additionally, there is the deluge system which releases a large amount of water quickly, often used in high-hazard areas like chemical plants.

Portable fire extinguishers are also a vital part of active fire prevention. These devices come filled with different suppressants such as water, foam, or dry chemical agents. Each type is suitable for combating different classes of fires, like electrical or oil fires.

Moreover, each system has an activation temperature at which it operates. Some employ a fusible alloy that melts at a specific heat level, allowing the fire-suppressing agent to be released.

Understanding these systems and their specific components, from sprinkler types to the methods of active fire prevention, is essential in maintaining safety and preventing disaster. Whether employing a simple fire extinguisher or a sophisticated foam water sprinkler system, proper knowledge and maintenance are key to ensuring these fire-suppression systems function effectively when needed.

Ex. 2. Read the text.

1. What are the two main types of fire-suppression systems mentioned in the text?

2. How does a wet pipe system differ from a dry pipe system in terms of water release?

3. What role do smoke alarms play in fire-suppression systems?

4. How does a sprinkler system work to suppress fires?

5. What is the purpose of a foam water sprinkler system in fire suppression?

6. When is a deluge system typically used, and why?

7. Why is it important to understand the activation temperature of firesuppression systems?

31.3. Communication

Ex. 1. *Make questions using the followings words:*

- 1. activation temperature/for/fire sprinkler
- 2. deluge system/from/dry pipe system
- 3. fire suppression system/important/in buildings
- 4. fire extinguisher/in public places

- 5. active fire prevention/method
- 6. fire sprinkler/works/in detail
- 7. fire suppression system/in action
- 8. benefits/of/having
- 9. fire sprinkler/fire extinguisher/difference
- 10.fire suppression system/in a home