

# NEXT-GENERATION STATIONARY FIRE PROTECTION CABINET



***Rapid response  
in the first minutes of a fire***

An engineering solution  
integrated into the building architecture  
without disrupting the interior design concept

JETEX AkuSafeguard



## Key Characteristics

- stationary configuration with **permanent readiness** for use;
- integrated pump unit — **independent of network pressure**;
- maintained operability during power outage for **30–40 minutes** via built-in battery;
- coverage area: **20–60 m fire hose** plus **up to 20 m of effective two-phase jet**;
- flush-mounted cabinet for architectural discretion;
- cabinet dimensions: **810 × 650 × 420 mm**.

## Concept and Design

**AkuSafeguard** is fully integrated into a stationary fire protection cabinet with a depth of up to 420 mm.

All active components are located inside the cabinet and protected by a cover panel:

- pump unit;
- electric drive;
- control unit;
- hydraulic components.

User-accessible elements only include:

- fire hose with manual nozzle;
- system start/stop controls;
- water and foam supply controls (if applicable);
- visual status indicators.

*To activate the system, simply **open the shield**, **unroll the hose** and **turn on the supply** of the extinguishing mixture (water / water + foam)*

Introducing **JETEX AkuSafeguard** — a fixed fire safety cabinet for early response.

It is based on the integrated JETEX Aku system, operating on the **JETEX SGT** proprietary technology, which provides effective local extinguishing in the first minutes of a fire.

Its application solves four key tasks of the initial fire stage:

- ✓ **Localization** of the fire source.
- ✓ **Reduction** of the intensity of combustion and heat emission.
- ✓ **Containment** of the spread of fire and smoke.
- ✓ **Gaining critical time** before the arrival of fire crews:

*AkuSafeguard is classified as a **higher-efficiency manual primary fire-fighting device**: automatic fire suppression systems, fire detection systems, smoke control systems, or the internal fire-fighting water supply system, — creating an **additional, powerful layer of protection**.*

## Application Areas

**AkuSafeguard** is intended for use in:

- public buildings;
- administrative and office buildings;
- commercial and retail facilities;
- mixed-use developments;
- other buildings with permanent occupant presence.

The installation may be used by:

- building operation and security personnel;
- in critical situations — any person inside the building, provided there is no threat to life.

Use is permitted only at the early stage of a fire and is aimed at localization, not suppression of a fully developed fire.

The simplicity of design and controls allows operation of **AkuSafeguard** without special training, provided there is direct visual contact with the fire source.



# Operating Principle and Effectiveness

## Operating principle

AkuSafeguard uses a two-phase gas-liquid jet created by JETEX SGT technology:

- jet formed as a **water-air mixture at approximately 50 / 50 ratio**;
- **droplet size reduced to 100–300 µm**;
- **significantly increased contact surface and evaporation rate.**

## Physical effect and outcome

In the combustion zone this provides:

- intensive **heat absorption**;
- active **steam generation**;
- localized **oxygen displacement** in the combustion zone.

Due to the physical evaporation effect, the generated steam volume can be **up to ~1000 times greater** than that of a conventional solid water jet, which dramatically increases the effectiveness of extinguishing and reduces the overall risk.

## Placement and Connection

The AkuSafeguard fire safety cabinets are installed:

- in stair-and-elevator lobby areas and protected vestibules;
- in public and technical areas of floors;
- outside areas of permanent occupancy;
- near project-defined water supply sources.

The number of cabinets and hose length are determined by the building layout and required coverage area.

The system may be connected:

- to the building's internal fire water supply (IFWS);
- to internal water supply networks;
- to autonomous / alternative water sources.

*Power supply — 230 V; in the event of a building power outage, the system remains operational for 30–40 minutes via the built-in battery.*

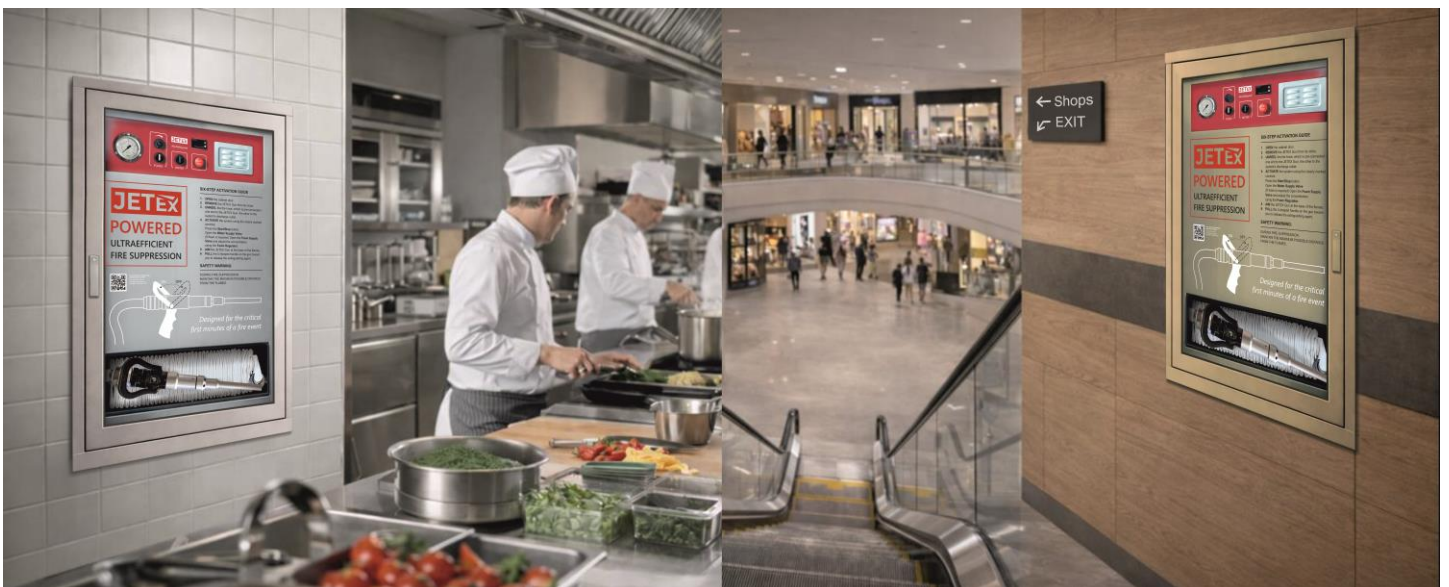


## Difference from the Internal Fire-Fighting Water Supply System (IFWS)

AkuSafeguard:

- features an integrated pump unit and is independent of IFWS pressure;
- enables rapid activation without complex hose deployment;
- supports water and foam solution supply (subject to configuration);
- is designed for **early-stage fire localization and reduction of fire intensity.**

*Exclusive connection to IFWS is not mandatory. The installation **complements** the internal fire-fighting water supply system (IFWS) by providing earlier and more targeted intervention, and **does not replace it.***



## Insurance Risk Reduction

AkuSafeguard addresses fire development during the critical 2–7-minute window, when:

- automatic systems have not yet reached design effectiveness;
- fire brigades have not yet arrived;
- the growth of damage is most intense.

From an insurance assessment perspective, the system:

- reduces the probability of total loss of a floor or zone;
- limits the damaged area;
- reduces secondary damage (water, soot, corrosion);
- shortens the duration of fire and smoke exposure;
- reduces the probability of recovery and litigation cases.

## Classification and Status

JETEX AkuSafeguard is classified as:

- primary fire-fighting equipment;
- stationary localized fire impact equipment;
- an additional fire protection measure for buildings.

## Integration into High-End Interiors

In high-class buildings, fire protection must be integrated, not demonstrative.

AkuSafeguard is installed flush with the wall and perceived as part of the building's engineering layer rather than an interior element, allowing enhanced fire protection without visual impact on architectural concepts.



## Test Results

Here are just two examples of extinguishing fires of different categories (types) by Aku systems, demonstrating the capabilities of AkuSafeguard

**Tires – 15 pcs.**

Water – 51 L

Foam – 1.5 L

Extinguishing time – 1.05 min

**Kerosene – 40 L**

Water – 8 L

Foam – 0.25 L

Extinguishing time – 14 sec

Follow the link or scan the code below to view the corresponding video:

<https://www.jetex-sgt.com/video/JETEX-VS-Tires.mp4>

<https://www.jetex-sgt.com/video/JETEX-VS-Kerosene.mp4>



The use of stationary fire protection cabinets equipped with **JETEX AkuSafeguard** enables early-stage fire consequence reduction and enhances the overall fire safety level of a building without altering the mandatory composition of fire protection systems.

Learn more about the JETEX SGT technology at the heart of AkuSafeguard on our website:

<https://www.jetex-sgt.com>

