



GRUPO  
**KOMTES**

## SITES AND FACILITIES



**SIEX**

**AG** SPRINKLER

**Koneba®**

**Komttech**

**Macoin** **Ribõ**

**Tecno Envases**





***KOMTES:  
world-class experts in all  
fire control systems and  
in precisely what your  
project needs.***



In the case of buildings and facilities in general, safety means **reducing to acceptable limits the risk that users might suffer injury** caused by accidental fires.

This means that we must ensure both the physical integrity of people and of stored goods as well as the structure of the buildings themselves, be they residential housing (single family, multiple, and/or multi-story units), public service facilities (schools, hospitals, etc. ), private facilities (malls, hotels, offices, archives, etc.) or high-rise edifices or special buildings (museums, trade fair installations, etc.).

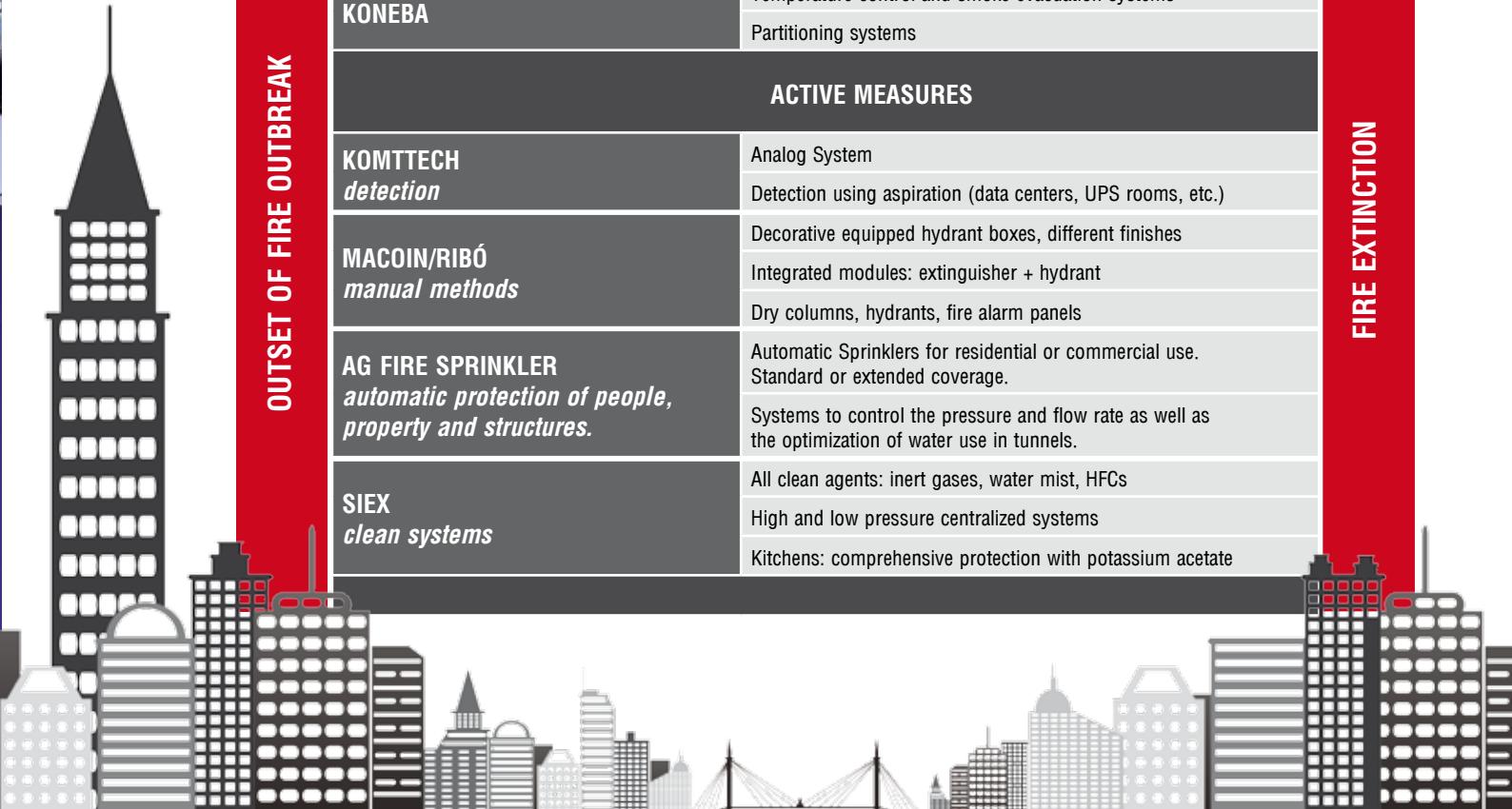
*Proper protection and the structural behavior of a building during a fire depend on adequate fire protection facilities in proper operating condition.*

Public buildings have the unique aspect of harboring a **large number of occasional users** (hotels, offices, shops or schools, retirement homes, banks, etc.), who are usually not familiar with neither the facilities nor with the corresponding safety or evacuation plans.



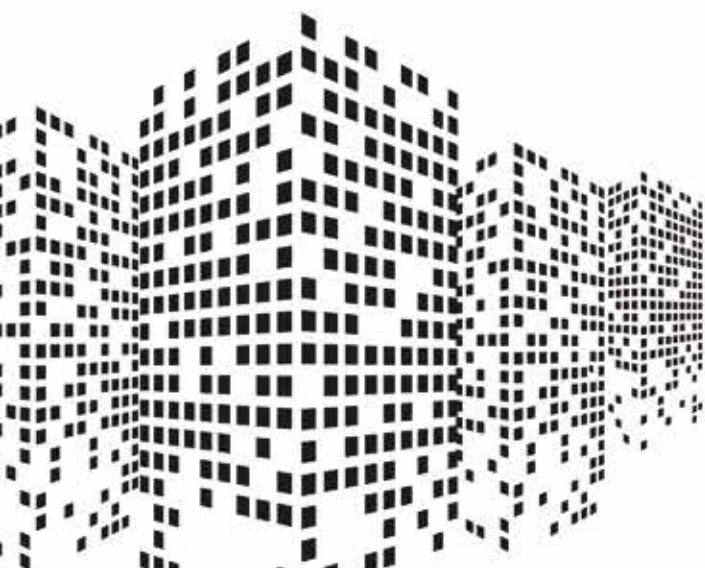
This means that when a fire occurs in one of these structures, most people do not know the protocols to be followed, nor are they familiar with the use of the available means of fire protection. Therefore, security levels must be higher for these structures than in the case of buildings destined for private use.

PASSIVE MEASURES	
Preventive actions	
KONEBA	Temperature control and smoke evacuation systems Partitioning systems
ACTIVE MEASURES	
KOMTTECH <i>detection</i>	Analog System Detection using aspiration (data centers, UPS rooms, etc.)
MACOIN/RIBÓ <i>manual methods</i>	Decorative equipped hydrant boxes, different finishes Integrated modules: extinguisher + hydrant Dry columns, hydrants, fire alarm panels
AG FIRE SPRINKLER <i>automatic protection of people, property and structures.</i>	Automatic Sprinklers for residential or commercial use. Standard or extended coverage. Systems to control the pressure and flow rate as well as the optimization of water use in tunnels.
SIEX <i>clean systems</i>	All clean agents: inert gases, water mist, HFCs High and low pressure centralized systems Kitchens: comprehensive protection with potassium acetate



# GRUPO **KOMTES**

*The extensive background of the KOMTES Group in all manner of fire suppression products affords us an in-depth knowledge of both normal fire hazards and the requirements for and constraints on the design of firefighting installations inside a building.*



**SPECIFIC INDUSTRY  
KNOWLEDGE**

**+**

**MISSION-SPECIFIC  
SYSTEMS**

**=**

**PROTECTION  
TAILORED TO  
YOUR NEEDS**

**We offer proven solutions to specific challenges.**

## **SOCIAL CHALLENGE**



### **HIGH OCCUPANCY**

**KOMTES acts:**  
Protecting people is paramount. A high number of occupants, including the possible presence of occupants with limited mobility, such as children, the elderly or the disabled.

### **KOMTES offers: QUICK & HARMLESS LIFE- SAVING ACTION FOR PEOPLE**

From detection to fire suppression, our products are designed to save lives: Increasing safety by augmenting available evacuation time, avoiding panic through enhanced visibility, and reducing ambient toxicity.

## **AESTHETIC CHALLENGE**



### **ARCHITECTURAL DESIGN**

**KOMTES acts:**  
We commercialize components with discrete finishes, customizable in material, color or features.

### **KOMTES offers: ATTRACTIVE FINISHES**

Not only is it important to reduce the visual impact on space and architecture, but this must be accomplished without hindering evacuation or complicating assembly:

Greater spatial coverage and the use of special accessories can reduce the number of fixtures and facilitate their placement.

## **FUNCTIONAL CHALLENGE**



### **MULTIPLE ASSOCIATED AND INTERRELATED USES**

**KOMTES acts:**  
Especially effective equipment for light or regular duty, versatile and with a wide range of applications.

### **KOMTES offers: FLEXIBLE, ADAPTABLE SOLUTIONS**

For retail, public facility, single-unit, high-rise commercial or residential uses, protection must be optimum without negatively impacting the normal daily operation of your building.





# DETECTION

It is important to equip all public buildings with fire detection and alarm systems which enable evacuating all occupants quickly and safely.

**KOMTECH** has highly suitable **conventional analog systems** for controlling the risk of fire in residential, commercial and public buildings. Their aesthetic and crafted finishes act to respect the architectural integrity of the building.

The wide range of systems available from KOMTECH can adapt to the differing needs and risks present within a single building. In areas of high economic or strategic value, such as data centers, server or UPS rooms, it is best to install an early warning system that is tailored to the precise vulnerabilities pertaining to the room conditions.

The acoustic alarms, flashing sirens, and sirens with pre-recorded voice messages allow effectively alerting all occupants to any danger, regardless of physical condition or disability.

*The acoustic alarms, flashing sirens, and sirens with pre-recorded voice messages allow effectively alerting all occupants to any danger, regardless of physical condition or disability.*

# PASSIVE PROTECTION

Statistics reveal that most deaths caused by fire are not due to the fire itself, rather to toxic gases. Therefore, in large public spaces installing both extraction systems and smoke control partitioning is necessary, to prevent the spread of smoke and to reduce damage.

**KONEBA** provides comprehensive and customized solutions for smoke control by means of automatic extraction systems that allow for removal of heat and combustion gases. They are designed in accordance with the required flow, consisting of a slatted or gated design. These are adapted in size to structural coverage requirements, and automation allows for their dual use; i.e. as a ventilation system for daily use, employing all the devices for effective control according to the weather.

The **firewall barriers** make partitioning the best architectural solution in the industry, complying with all possible classifications: E, EW and EI. They are movable, which enables smooth spatial continuity with no visual obstructions during normal operation of the property.



*We are intimately familiar with the industry, we outsell the competition in standard product lines, and we lead among specialty suppliers:*

*EXPERTS IN EVERYDAY SITUATIONS,  
AND LEADERS IN THE EXCEPTIONAL*

# MANUAL METHODS

A building must possess manual means for the occupants themselves to be able to control fire outbreaks at an early stage, extinguishing them or buying time until arrival of the fire service. Similarly, in turn the occupants should have adequate systems available on-site.


The most common means of fire control in residential and public buildings is that of the **portable extinguisher**. MACOIN/TECNOENVASES distributes compact models **charged with the most appropriate risk-appropriate agent**, such as water or dry chemicals for common areas, or CO<sub>2</sub> for electrical components.

Fire hydrant boxes allow water to be drawn from the existing building water supply. **MACOIN/TIPSA equipped hydrant boxes for light-duty** are simple and **manageable for use by untrained users**.

**SIEX** also offers **water mist hydrant boxes**, reducing the quantity of agent needed and blocking heat radiation on the operator.

**Customization possibilities are vast**, given KOMTES' advanced production methods for manufacturing components in any color or finish, regardless of size or quantity. We supply cabinets, decorative surface or embedded hydrant boxes, and integrated modules composed of extinguisher + hydrant, extending if needed to an additional technical cabinet, compact and discreet in design.

For the fire service, **we install wet column hydrants, dry column hydrants with a deposit** to prevent freezing in cold regions or breakage from vehicle impacts, or recessed hydrants with a flush lid. The solutions available from MACOIN/TIPSA include outdoor cabinets with full a complement of auxiliary equipment for firefighters (Siamese fork, light and heavy-duty hoses, customizable accessories and handled nozzles).



*Discrete embedded or free-standing decorative cabinets enable integrating hydrant box modules + extinguishers, with an optional additional technical cabinet. The 25mm semi-rigid models facilitate staff intervention, and can integrate additional 45mm outlets for the fire service for use in cases of fire hazards of greater importance.*





*Water extinguishers for public use are clean and facilitate intervention without users feeling threatened during their localized action, which does not reduce visibility*



# FIXED AUTOMATIC PROTECTION SYSTEMS

In order for user evacuation time to be sufficient and for fire services to work safely, **the structural safety of the building should be ensured by means of a water-based system of automatic sprinklers** for fire control. **AG FIRE SPRINKLER offers wide range of sprinklers with normal and extended coverage** for all hazard levels and aesthetic requirements.

To minimize the visual impact of the sprinklers, we have **hidden models**, which can be embedded in walls and ceilings. Extended coverage sprinklers are also useful and discreet, allowing covering any room with a minimum amount of components, installation work and overall cost.

**They may also include accessories** such as flexible hoses, decorative housings, and covers that easily adjust to decorative hanging ceilings (offices, hotels, hospitals, halls, etc.).

AG FIRE SPRINKLER also sells all the necessary valves for controlling water in any type of installation. AG specializes in controlling water pressure and flow in such large installations, on the one hand allowing optimized systems, and on the other ensuring the effectiveness of pumping systems and water reserves.



**Wet systems** are the most common, maintaining the entire network pressurized with water, ready for use. For large buildings we have **control stations by zones or floors**, for both high-rise Residential and Commercial buildings, which subdivide the various hazards in order to facilitate monitoring the entire network.

For sensitive applications, such as historic buildings, archives, museums or DPCs, single or double locking triggered action systems are the right solution, preventing false alarms, leaks and accidental discharges.



*The applications are numerous, as there are models adapted for each type of use: Dry residential or sprinklers for commercial use, hidden or recessed models for laboratories and clean rooms, hallway fixtures with an anti-tampering design, dry sprinklers for refrigerated enclosures, etc.*





*En usos sensibles como edificios históricos, archivos, museos o CPDs, el sistema más adecuado es el tipo preacción de simple o doble enclavamiento, que evita falsas alarmas, fugas y descargas accidentales.*

When designing fire protection for such sensitive locations, the hazards must be assessed not only for the structure, but also with a view to **preserving the goods contained therein**, to which end KOMTES also commercializes clean and reliable alternatives like **WATER MIST**.

**SIEX** brings this innovative technology for automatic extinction using high-pressure water to bear on a multitude of uses and applications (hotels, data centers, hospitals, museums, archives, schools, banks, ...), reducing the required water reserves by up to 90%. **We have pumping groups** for medium to large installations, **batteries of cylinders** for small enclosures or those with supply constraints, **section and control valves and also hidden**, open, closed and pneumatically controlled **diffusers**, stainless steel **direct fittings** for compact and discreet assembly, etc.

*The use of water mist in buildings is a great, safe and efficient alternative to traditional systems that combine sprinkler + gas:*

- *With the same applications as both together, a single unit covers an entire building*
- *Its maintenance is cheaper, as are test releases*
- *It is independent of the height of the building, making pumping easier to distant locations*
- *It does not require sealing*
- *Minimizes damage, washes fumes out of the air and facilitates evacuation.*
- *Acts to cool the building or structure*

Another type of automatic protection system, either structural or content-based, employing **clean agents**, protects using **inert gases**, using a restrictor or flow control FCT. For more compact systems, **chemical gases** with S-Flow have the widest range of approved pressures to overcome long runs of pipe.

Another activity with a high risk of causing fires in a residential or commercial building is the use of kitchens, where fats, oils, flammable liquids and combustible materials are at risk from nearby heat sources. Systems based on **potassium acetate** are an effective and clean solution, but **water mist** and even carbon dioxide can also be used.









*Fire engineering designs have to act in harmony with the architecture, especially in historic buildings, cultural facilities and for commercial uses (shops, hotels or offices).*





# FINAL SUMMARY

Complete fire protection in buildings is, in short, variable and complex. The KOMTES Group offers its extensive portfolio of products and systems with high-performance technical and aesthetic features, appropriate for every need:

HAZARD		Komttech	   	 SPRINKLER	Koneba®	
COMMON USES IN BUILDINGS	General purpose	Gas and smoke point systems	Decorative 25 mm hydrant boxes, water extinguishers, cabinets. Hydrants and equipment housings	Normal and Extended Coverage Automatic Sprinklers	THSECS	Water mist
	Hallways and stairwells				-	
	Parking garages	Optical / thermal point systems	Fire extinguishers, 25 mm 45 mm socket hydrant boxes		-	
	Facility rooms	Aspiration, smoke points			-	
COMMERCIAL BUILDINGS	Warehouses, archives	Laser barrier, aspiration	Extinguisher, 45 and 70 mm Hydrant boxes	Normal and Extended Coverage Automatic Sprinklers	Exhaust systems with skylight. Irrigated movable curtains	Water Mist, inert elements, HFCs
	Security monitoring, control, data centers	Smoke and gas aspiration points	Extinguisher, 25mm hydrant boxes			
	Kitchens	Smoke	Extinguisher (6kg)	-	Partitioning	Potassium acetate thermal fuses
	Cold rooms	Aspiration		Sprinklers and dry systems	-	Inert gases
HIGH-RISE BUILDINGS	False floors	Aspiration	-	-	-	Water mist, inert gases, HFCs
	Technical facilities	Aspiration, gas and smoke point	Extinguisher (6kg), 25 mm 45 mm socket hydrant boxes, cabinets	Normal and Extended Coverage Automatic Sprinklers	-	
	Multipurpose	Gases and smoke			-	
SPECIAL FACILITIES	Accommodations: rooms	Gases and smoke	Decorative 25 mm hydrant boxes, water-based extinguishers, cabinets. Hydrants and housings	Normal and Extended Coverage Automatic Sprinklers. Triggered Systems	-	Water mist
	Special areas: X-ray, CT scan, surgery	Aspiration			-	
	Exhibition area	Laser barrier, aspiration			Exhaust system with skylight. Irrigated mobile curtains	
	Meetings: auditoriums, classrooms, events					
	Prisons	Gases and smoke		Anti-tampering sprinklers for institutional use. Triggered systems.	Water mist, anti-vandalization accessories	
RESIDENTIAL USE	Residential Homes	Smoke point detection	Portable 6kg water-based fire extinguisher for kitchen use	Residential Sprinklers	-	Water mist
	Kitchen	Heat detectors			-	Potassium acetate

## DETECTION SYSTEMS

- **OPTIMAX**
- **PREMIUM**

## INTELLIGENT

Analog and algorithmic systems with voice evacuation.

## CONVENTIONAL

Option for remote access via TCP/IP for system management.

## SPECIALTY SYSTEMS

- HIGH SENSITIVITY LASER DETECTION VIA ASPIRATION
- LINEAR THERMAL DETECTION VIA HOT-MELT TECHNOLOGY OR FIBER OPTICS
- SPECIAL TEMPERATURE PROBES
- THERMO GRAPHIC CAMERAS
- ASSORTED ATMOSPHERES

## AUTOMATIC PROTECTION SYSTEMS

### SPRINKLERS

- SPRINKLERS
- VALVE CONTROL SYSTEMS
- VALVES

### FOAM

- CONTROL VALVES
- STORAGE TANKS
- FOAM PROPORTIONERS
- PROTECTION OF FLAMMABLE LIQUID STORAGE TANKS AND TROUGHS
- GENERATORS
- MONITORS

### WATER SPRAY

- HIGH/MEDIUM VELOCITY OPEN SPRAY NOZZLE
- VALVE CONTROL SYSTEMS

## FIRE SUPPRESSION SYSTEMS

### CLEAN AGENTS

- SIEX-HC™
- SIEX-HC™ S-FLOW
- SIEX-NC™ 1230
- INERT-SIEX™
- INERT-SIEX™ CFT
- SIEX™CO<sub>2</sub>

### WATER MIST

- UAC (cylinder groups)
- UAP (electrical / diesel pump unit)

### DRY CHEMICAL POWDER

- STORED PRESSURE
- CARTRIDGE OPERATED
- STATIONARY / SEMI-PORTABLE HAND HOSE LINE DRY CHEMICAL EXTINGUISHING SYSTEMS UNITS
- HAND HOSE DRY CHEMICAL EXTINGUISHER TRAILERS
- TWIN AGENT

### FOAM PREMIX

### AUTONOMOUS DETECTION

### KITCHEN SYSTEMS

## MANUAL FIRE PROTECTION

### HOSE REEL CABINETS

- WITH SEMI-RIGID HOSE
- WITH FLAT HOSE
- ALARM AND EXTINCTION CENTERS

### HYDRANTS

- DRY BARREL
- WET BARREL
- BURIED
- CUSTOM CABINETS FOR HOSE AND ACCESSORIES

### EXTINGUISHERS

- WATER
- DRY CHEMICAL
- CO<sub>2</sub>
- SPECIAL APPLICATIONS (non-magnetic, etc.)

## FIRE, SMOKE AND TEMPERATURE CONTROL

### SECTORIZATION

- **SMOKE CONTROL:**
  - KORTX SMOKE FIX 600 C°
  - KORTX SMOKE AUTOMATIC 600 C°
  - KOTEX SMOKE AUTOMATIC 1100 C°
- **FIRE CONTROL:**
  - KORTX FIRE E
  - KORTX INSULATION FIRE EW
  - KORTX RAIN FIRE EI

### ELECTRONIC MECHANISMS OF CONTROL

### EXPULSION OF SMOKE

- LOUVER (LAM)
- TWIN FLAP

