BECAUSE WE BELIEVE IN THE VALUE
OF MEASURED PROTECTION.

THE MOST ADVANCED SECURITY SYSTEMS
FOR THE MOST DELICATE HAZARDS

RG W-FOG SYSTEMS

W-FOG SYSTEM

for the protection of

HOSPITALS

WATER MIST

IN HOSPITALS

Hospital infrastructures, in general, are complex and medium to large in size with a high occupation density and a high number of people with reduced or no mobility due to their state of health.

Any disaster that may fall on a health centre has a large social and medical impact. Because of the limited capacities of the patients, their evacuation is difficult and slow.

With this in mind, RG W-FOG makes an immediate fire fighting action possible, since it is safe for people (does not require delays in its activation to remove the occupants) and does not need to be airtight to act effectively (there is no need to wait for screens and doors to be closed).

Its action is central to suppressing the source from its initial stages, reducing the release of heat so that it doesn't grow or spread to occupied rooms or those that have valuable equipment.

In this way, a value time is gained that allows for the evacuation of the ill and controls the flame until the fire-fighters arrive.

At the same time, it improves evacuation conditions for the occupants, with better visibility and less perception of danger, favoured by the reduction in smoke and heat.

In summary, RG W-FOG avoids dangerous situations due to fire and the evacuation itself, while at the same time minimising damages to valuable equipment and installations in the centre.

WHY USE RG W-FOG
IN HOSPITALS

RG W-FOG ALLOWS, IN ITS USE IN HOSPITALS:

GUARANTEE PATIENT SAFETY: making it possible to cover an entire building with only pump unit

PROTECT COSTLY MEDICAL EQUIPMENT: by not leaving residues

ENSURE THE BUILDING'S INTEGRITY: due to its high level of effectiveness, which keeps the fire from affecting

Users with limited capacities and mobility	Complex evacuation. Great social impact	**Better visibility:** clears the atmosphere. Facilitates the orderly, quick and safe exit.
High occupancy of personnel in not familiar environment	Agglomerations and panic hazard	Control the fire and its consequences, it does not require sealing, acts promptly
Continuous presence of staff 24/365	Harmless evacuation for people	**Non-toxic,** clean and environmentally friendly agent. Acknowledged and proven reliability.
False alarms, vandalism, accidental discharges	Avoid deterioration of valuable equipment	**Minimal damage:** mist type discharge, without inundating the rooms (sprinklers)
Quite different applications	Adaptable and versatile system	Protection of several rooms with the same equipment with check valves. Fit for solids, liquids and energized fires type of different sizes.

CAUSES OF FIRE
IN HOSPITALS

Due to the large number of relative services that accompany any hospital facility, the causes and sources of fire are variable, being spread throughout the entire building.

Complete protection guarantees, at the same time, an immediate action to eliminate greater threats, interruptions in medical services and also the effects on equipment and the building's structure.

TESTING ROOM / DATA CENTRE

Fires from power sources.

Wiring, false floors, small spaces or those with limited access (racks, ducts, etc.).

Protection of equipment, without damaging it.

Reliable fire control and suppression to avoid spread.

HOSPITAL ROOMS

Occupants with limited mobility, not aware of the environment.

Carelessness, negligence.

Vandalism.

Protection of staff.

Direct and anti-vandalism accessories.

OPERATING ROOMS AND LABORATORIES

Critical uses, interrupted service.

Continuous ventilation.

Clean agent, without residues.

Minimal continuation shutdowns.

KITCHENS AND CAFETERIAS

Grease and oil fires (dense smoke).

Numerous contributing sources.

Open nozzles: complete action over specific equipment rooms.

Clean agent and for food.

WASHROOM

Machinery with a high working capacity and very high temperatures.

Overabundance of fuel.

Control action and source suppression.

Long-lasting mist, for reignitions.

OFFICES, CHANGING ROOMS, STAFF ROOMS

Fires from solids.

False floors, archives, lockers: small spaces that are difficult to reach.

Section valves: alert of the affected sector within the larger network.

High pressure: high penetration.

ARCHIVES AND STORAGE ROOMS:

High concentration of combustibles.

Reliable access control (records, tests).

Discharge times of up to 30 minutes or more, according to the demand.

Immediate action.

Centralised equipment rooms for specific installations.

BOILER ROOMS, HVAC, ELECTRICAL PANELS:

Heat and smoke sources.

Spread through ducts.

Usually unoccupied, little maintenance.

Automatic action.

Smoke clean-up, control and suppression.

HALLWAYS, VESTIBULES AND COMMON AREAS:

Masses.

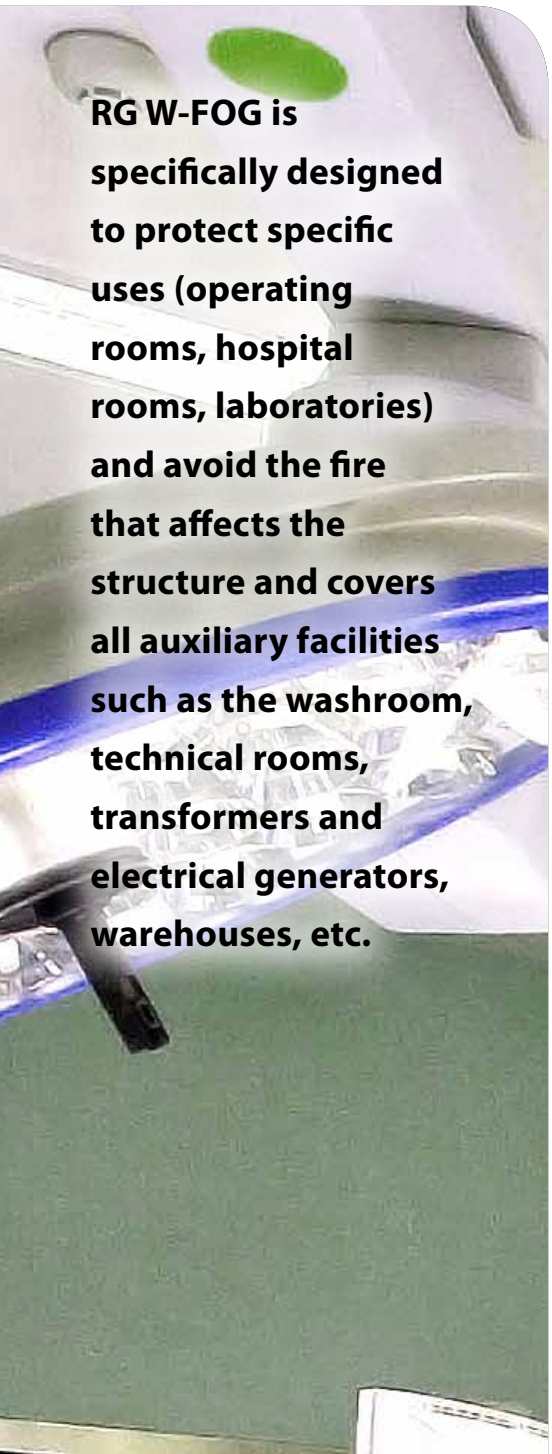
Users with reduced mobility.

Safe evacuation for longer.

Avoid situations of panic and confusion.

Maintain adequate visibility.

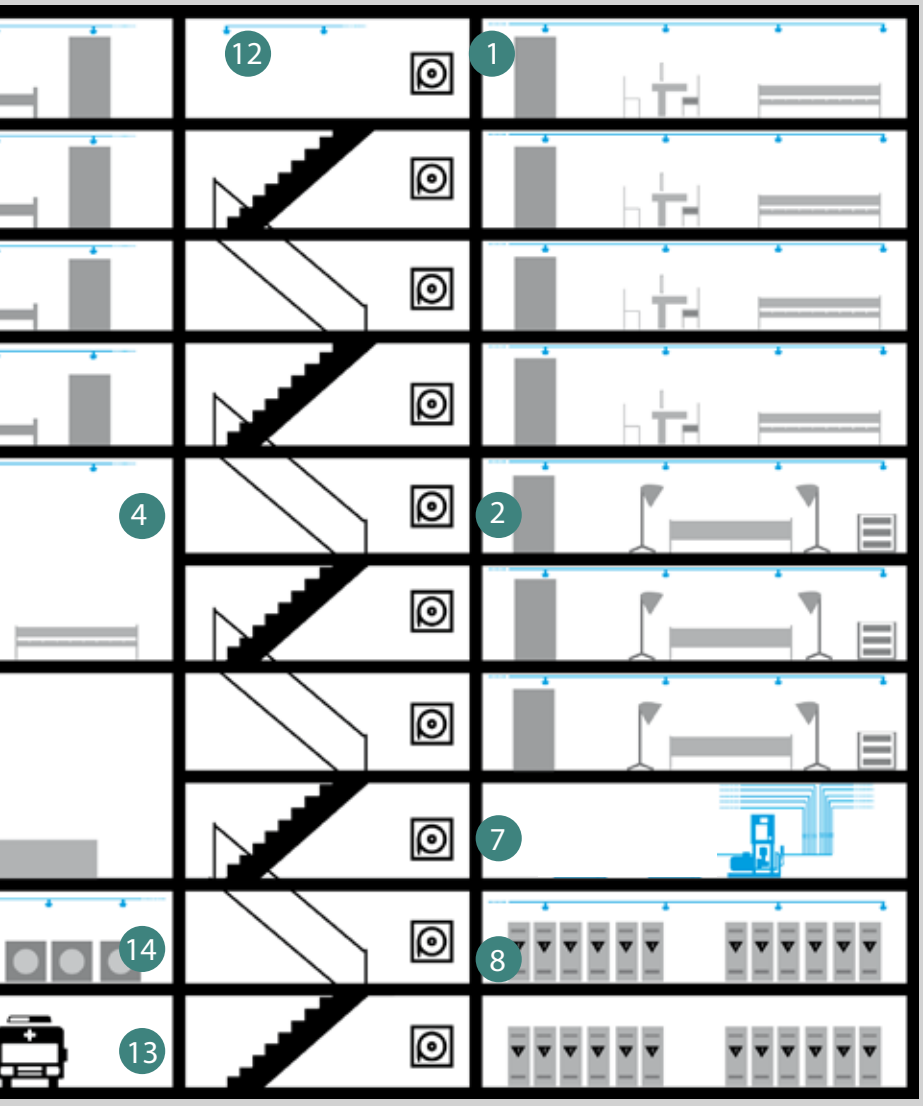
INSTALLATION EXAMPLE



RG W-FOG is specifically designed to protect specific uses (operating rooms, hospital rooms, laboratories) and avoid the fire that affects the structure and covers all auxiliary facilities such as the washroom, technical rooms, transformers and electrical generators, warehouses, etc.

1. Consultation
2. Operating
3. Rooms
4. Hall
5. Changing Rooms
6. Administration
7. PCI Installations
8. Other installations

9 Kitchens
10 Cafeteria
11 Warehouse
12 Aisle
13 Car parks
14 Washroom



The most common causes are due to:

- **Electrical or mechanical failures**
- **Spread from other uses**
- **Accumulation of materials along with heat sources**
- **Faulty maintenance**
- **Vandalism and negligence**

Frequently, they can be aggravated by other risk factors. It is, therefore, imperative that fixed installations be used for a rapid and reliable response to any event.

COMPONENTS

RG W-FOG equipment are adapted to the needs of each building. One single pump unit can simultaneously cover numerous and different areas, reducing costs.

In one type of installation for an entire hospital,

PUMP UNITS + TANKS:

- RG W-FOG UAP electric
- RG W-FOG UAPD diesel
- Mixed, with electric and diesel pumps

MIST SPRAY NOZZLES OR NOZZLES:

RG-Systems has closed nozzles with a fuse for the total flood of an area near the source.

SHUT-OFF VALVES:

Make maintenance easy while at the same time block the flow in the case of an accident or vandalism.

SECTION VALVES:

detect the passage of water, alerting of the sector where a discharge or leak has been produced.

FLOW DETECTOR:

they alert of water movements through wet piping.

SAFETY VALVES:

To relieve overpressure in the installation, keeping them at safe levels.

If a point-based protection is chosen for equipment or small rooms at risk:

ACCUMULATOR UNIT:

Composed of water bottles propelled by nitrogen.

CONTROL VALVES:

They direct the agent to the sector in question, without the others being affected.

OPEN NOZZLES:

For local application, with specific homologation for machinery.

FIRE HYDRANTS WOULD BE USED:

At the time of planning manual protection in a hospital building, RG-Systems water mist FHCs allow for fire fighting action that is quick, effective and safe for patients or costly medical equipment. Easy to use by anyone, they clear the atmosphere and block heat radiation and smoke for the occupants, with which good evacuation conditions can be maintained for the visitors and patients for the longest amount of time. The activation/closure is manual, being able to be supplied with the same pump unit in the hospital's water mist network, with which it is achieved additional protection with minimum additional costs that is safe and highly effective.

ADVANTAGES FOR ALL

The optimization of the extinguisher that the mist provides, thanks both to the enormous heat capacity of water and to the quick exchange by the microdrops, allows for effective dispersion, overcoming obstacles and reaching the flame itself.

The activation mechanism is not a massive flood from a sprinkler, which completely drenches an area and its content, but rather it seeks the evaporation of the agent for a triple anti-fire effect:

Cooling of the flame using heat absorption.

Local oxygen displacement around the source due to the increase in volume as it changes to a gaseous state.

Blockage of heat radiation, due to the shielding produced by the suspended microdrops.

PROJECT

Design and calculation of the needs according to applicable regulations.

INSTALLATION

Reduction in diameters and faster installation. Advice during assembly.

MAINTENANCE

We offer installation and maintenance manuals.

TRAINING

RG-Systems offers courses in design, standards and installation.

GUARANTEE AND CERTIFICATIONS

All of the products have approvals and suitability statements according to trials in internati nally-recognised bodies.

C. Alfoz de Bricia, 4 P.I. Villalonquéjar
09001 BURGOS (SPAIN)

Tlfno. +34 947 28 11 08
Fax. +34 947 28 11 12

www.rg-systems.com

RG SYSTEMS