

**Hospital - Where safety really matters !**

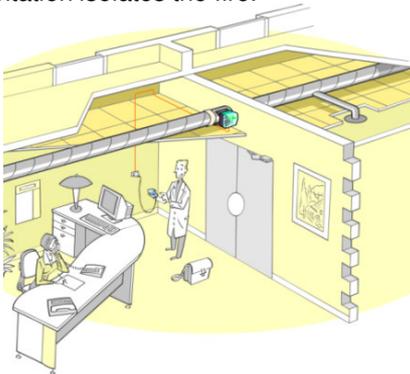


**Umm Al Quwain General Hospital – Construction Site**

Healthcare facilities are one key infrastructure sector addressed by the federal government due to the growing need of efficient care required for all UAE inhabitants.

Fire safety in health care facilities as hospitals, nursing homes, clinics is a key issue as fire represents a serious threat in such sensitive buildings. **Patients may be very old, young, frail, and disabled** (limited mobility, mental acuity, intensive operative care...) that make them especially vulnerable in a fire emergency, thus increasing **the risk of casualties**.

As a result, **fire compartmentation** is a fundamental element of fire strategy for hospitals which require a **higher level of Safety**. Thus, an efficient fire compartmentation isolates the fire.



Thanks to Aldes (France) great experience in ventilation and fire protection (compartmentation and smoke extraction), Aldes ME has been able to become a **strong partner for all MEP contractors** by providing its expertise and supplying high quality solutions in many healthcare facilities all over the UAE and abroad.

Aldes ambition is to enhance the **level of safety, IAQ and thermal comfort** in the UAE, and especially inside sensitive buildings such as healthcare facilities.

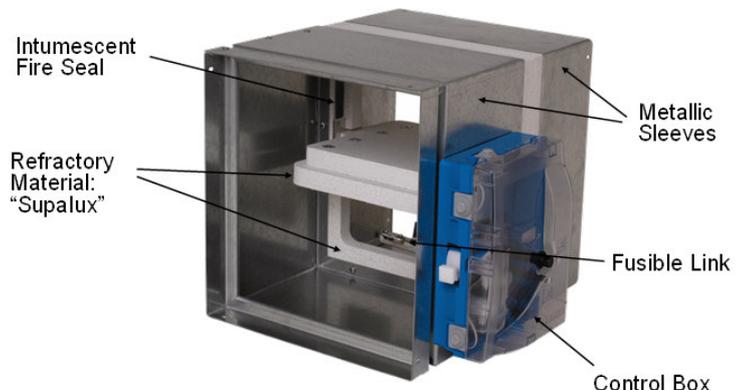
In 2009, Aldes ME has introduced in the UAE the safest solution for fire compartmentation called **ISONE®** which has been installed in **Umm Al Quwain General Hospital** in 2009 – 2010, a huge hospital under **Ministry of Public Works** with 13 buildings covering 50,000 m².

ISONE® is a **fire damper**, installed in fire separating walls, floors and ceilings, which is used to prevent fire, smoke & heat propagation (i.e. a Fire Smoke and Heat Damper) from one fire compartment to another one through the HVAC ductwork system.



ISONE® fire dampers, as per stringent European standards **EN 1366-2**, are ensuring **2 hour fire resistance without any heat transfer and smoke leakage** (EIS 120 – 500Pa\*).

ISONE® fire dampers have four main advantages in comparison to conventional fire dampers.



**No heat transfer:**

ISONE® fire damper is made with an efficient isolating blade made of refractory material (calcium silicate). This refractory blade, totally asbestos free, prevents any heat transfer through the damper, and thus reduces any fire hazards further on.

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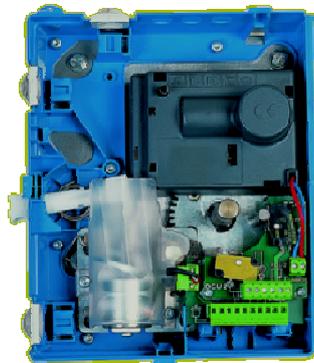
### No smoke leakage:

Smoke represents a real key issue during a fire as smoke remains the main cause of deaths. Thanks notably to an intumescent fire seal, ISONE® fire damper ensures **no smoke leakage/or a proper air tightness at low and high temperatures** through the damper resulting in a safer environment for people in case of fire.

### Quick activation with no power consumption available:

A quick and instantaneous (2s) operation of a fire damper via a fire alarm panel connected to smoke detectors is fundamental to ensure the highest level of safety and prevent any smoke leakage before closing the blade. That is why Aldes advises any MEP consultants or contractors to specify or use a **motorized fire damper**.

Thus, ISONE® fire dampers can be provided through an upgradable activation system with a **24V/48V electromagnetic tripping device** and **electric limit switches** as well as the mandatory thermal trip or **fusible link** inside Aldes control box. Moreover, ISONE® motorized fire dampers can operate with a power cut-off (VM version) or with a **power emission** (VDS version) which allows **no power consumption** at all for any low-energy building requirements.



### Easy maintenance:

To ensure a quick and **easy maintenance**, Aldes control box can be supplied with a reset motor for remote maintenance and inspection purposes.

ISONE® motorized fire Dampers are the perfect solution to ensure the safest fire compartmentation for any ductwork sizes including **installation in multi-sections**.



These ISONE® solutions are coming from a long and recognized experience of Aldes in Fire Protection (more than 100,000 dampers a year). One of the best proofs of our expertise is the supply of different **highly sensitive nuclear power plants** since 1992 in France. Aldes has also just developed a specific solution for the new « Pressurized Water Reactor » nuclear power plant in Flamenville.



Aldes has always focused to bring a **high level of expertise** in ventilation and fire protection systems to support our clients, and to act as a **reliable supplier fully committed to deliver quality and efficient solutions** from fans, sound attenuators, VCDs, fire dampers... to grilles and diffusers. Consequently, Aldes ME will continue to provide the best support and solutions to the UAE market **to enhance the Safety, IAQ and thermal comfort in all buildings**, and especially in sensitive ones (hospitals, hotels, schools...).

**A full commitment towards our clients (MoPW), consultants (Hospital Designers & Planners) and contractors (STS Abu Dhabi E/M - BPower) – Aldes & BPower representatives during a site visit in UAQ General Hospital.**



*\*As per EN 13501-3 classification used for fire dampers and other construction products, ISONE® motorized fire dampers are classified EIS 120 – 500 Pa:*

- E: Integrity (no damage)
- I: Insulation (no heat transfer)
- S: Smoke leakage (no smoke leakage)
- 120min: timing for fire resistance
- 500Pa: pressure under which fire performances of ISONE® motorized fire dampers has been assessed