



Barcelona's premier hotel, the Mandarin Oriental, provides guests with the best of everything in its luxurious new suites – including the ultimate in fire protection technology



 Mandarin Oriental Hotel Barcelona City Centre, Spain. Integrated by Climava (www.climava.com)

Application:

 Protection of new hotel extension with 22 luxury suites

Challenges:

- High false ceilings with difficult access
- Inspection hatches forbidden by the architect

Requirement:

- No false alarms
- Fire detectors suitable for installation in a difficult environment with settling dust in false ceilings
- Integration with existing fire detection system covering other areas of the hotel
- Simple maintenance in difficult to access areas
- Unobtrusive fire detection to meet stringent aesthetic limitations

The solution: FAAST LT

- 24 FAAST LT devices installed in the false ceilings
- All devices connected to and managed by, an existing intelligent automatic fire detection system control panel



FAAST LT





The latest state-of-the-art technology, aesthetics and service, are a key part of the overall package.

A false alarm from the fire detection system would be a major issue for the hotel management as it would cause disturbance for the guests, who rightly expect the ultimate in security and protection while they occupy the accommodation. Conversely, in the very unlikely event of a fire, the fire detection system must give as early as possible warning.

The design, appearance and finish of the suites are critical elements of the guests' experience of the facility, so for aesthetic reasons, the architects have expressly forbidden access panels being installed in any of the ceilings.

Environmental challenges

The main technical challenges for the reliable operation of the fire detection system are the dusty atmosphere in the false ceilings and the requirement for very high false alarm immunity.

Marc Oliva, Climava's
Project Manager, explains why
the FAAST LT aspiration system
detector was selected, the
challenges faced in implementing
the project and the benefits for
the guests and the hotel facility
management team.

He commented, "The 22 suites all have high false ceilings with difficult access and there is the added complication that the architects had forbidden access and inspection hatches so as not to spoil the overall appearance of the suites. The environment in the area to be protected, with settling dust in the false ceilings meant that traditional detectors would be at high risk of generating false alarms, a totally unacceptable state of affairs. Aspiration technology, with its unobtrusive sampling pipes, remote detection chambers and very efficient filtering, was the obvious solution to the false alarm issue.

Similarly, using remote detectors meant that access for routine maintenance and cleaning would be simplified."

Marc continued, "The challenges we faced when planning the fire detection system for this new build project were quite severe. We had to come up with a way of providing extremely reliable protection for the false ceilings of suites and the corridors of the new extension. We had been introduced to Honeywell's FAAST next generation aspiration detection range, and the FAAST LT unit was of great interest. Not only could it deliver the performance we required for the project, but it could also be integrated into the existing intelligent fire detection system. We evaluated competitive alternative ASDs, but FAAST LT was the obvious choice."

Zero false alarms

False alarms are one of the major issues with automatic fire detection systems. They cause business disruption, reputational damage and incur costs. In the

upmarket hotels such as the Mandarin Oriental, subjecting guests to any form of inconvenience and stress is totally unacceptable.

Marc itemised the benefits of the FAAST LT false alarm reduction technology. "The sampled air from the protected areas is filtered before it enters the high sensitivity detection chamber, reducing the possibility of dust triggering an alarm. The unique laser-based detectors can be configured to give single channel, single channel dual sensor or dual channel protection, offering flexibility for different detection strategies. Customisable settings maximise device performance and give the ability to adapt to different application needs. Day/Night/Weekend mode enables the alarm thresholds to be optimised in response to routine changes in the protected environment."

Integration with the existing detection system control panel

A key FAAST LT benefit for Climava was its loop capability, which allows device integration, maintenance and management from

the control panel. Marc said, "We installed 24 **FAAST LT** units in the new part of the hotel, each protecting specific areas.

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To be able to integrate them on to an additional loop on the existing control panel allowed us to save on installation costs, and as an additional benefit, allowed us to take advantage of the panel's group polling and other false alarm reduction technology to reduce even further the likelihood of a false alarm."

Installation environment

The FAAST LT units protecting the suites' false ceilings are installed in the false ceiling area itself; the ones protecting the corridors' false ceilings are installed remotely in the technical services areas. Since neither environment is normally accessible for regular cleaning, settling dust is the key issue. Marc commented, "We have to access the units for routine filter cleaning/replacement every four to six months. With FAAST LT airflow is continuously reported to the panel, so if it reduces to an unacceptably low level because of filter contamination, we can plan well in advance to service the device. The advanced warning enables us to schedule the service for a time when any particular suite is empty between guests."

In summary

The FAAST range provides the capability to install very sensitive fire protection into a wide selection of buildings where dusty conditions potentially cause traditional detectors to false alarm. In prestige hospitality venues such as the Mandarin Oriental Hotel, false alarms cannot be tolerated, so FAAST LT is the obvious choice, particularly given its capability of being integrated into an existing fire system.

Visit www.faast-detection.com for more information on FAAST LT.