



# Heritage

**VESDA**<sup>®</sup>  
by  **xtralis**<sup>™</sup>

## What will you tell your customers?

The damage bill from a warehouse fire is not limited to lost goods or buildings. Environmental damage to the local area, the cost of business interruption and the negative impact of press coverage following a spectacular blaze may also have severe business implications.

## Overview

Heritage buildings are the homes of irreplaceable architecture, works of art, archives, libraries, furniture and many other items owned by nations or private individuals.

Because conventional detection has proved to be difficult to install discreetly, smoke detection has generally been reliant on the actions of the occupants with suppression by the fire brigade.

A heritage fire results in the loss or damage of irreplaceable artefacts due to fire, smoke or water.

## A unique challenge

Due to the aesthetics of most heritage buildings, such as ornate ceilings or ceiling art-work, a discreet, unobtrusive smoke detection system is often desirable.

Large, open atria or voids feature stratified, thermal layers that can prevent cooled smoke from reaching ceiling level. As such, conventional systems will normally only respond when a fully-fledged fire condition is reached, by which time significant damage has already occurred.

## Why Aspirating Smoke Detection and VESDA by Xtralis?

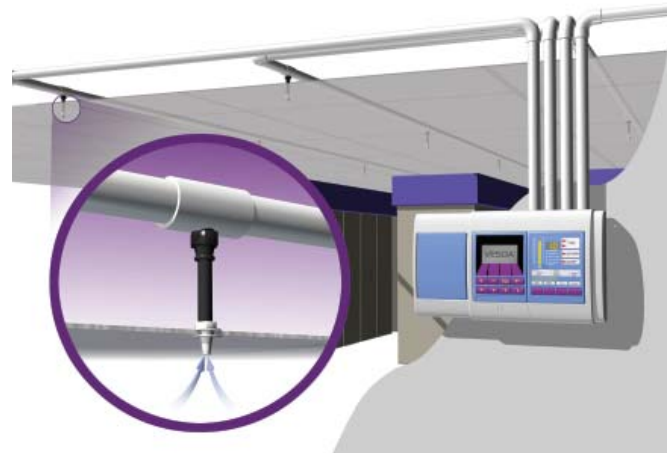
VESDA by Xtralis provides the discreet detection required in heritage buildings by routing the sampling pipes in areas that are not visible from normal occupancy.

Small-bore capillary pipes are used to provide detection at the required location. The room fabric often dictates the location of these capillary tubes. Hiding the capillary tubes behind light fittings, blending in with ceiling paintings or forming part of the ceiling sculptures can all be used to provide 'invisible' smoke detection.

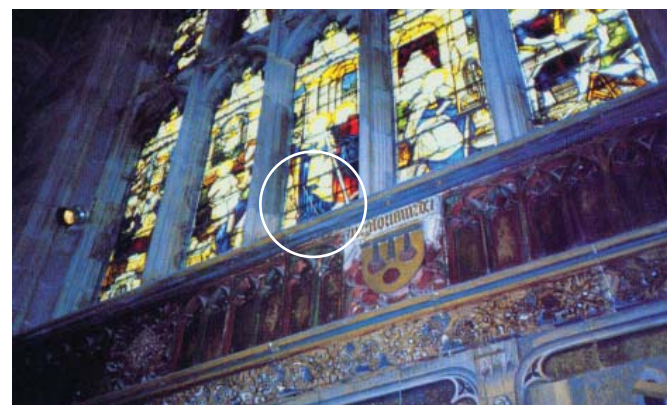
In high volume, atria applications such as cathedrals, capillary sample points can be routed into the area at intermediate vertical levels to good effect to overcome stratification. The higher potential sensitivity of the VESDA system means that less smoke is required at the sample points to provide an alarm condition.

## How does Aspirating Smoke Detection work?

Air is continuously drawn from an area, via a pipe network, to a central detector that is continuously sampling for small traces of smoke.

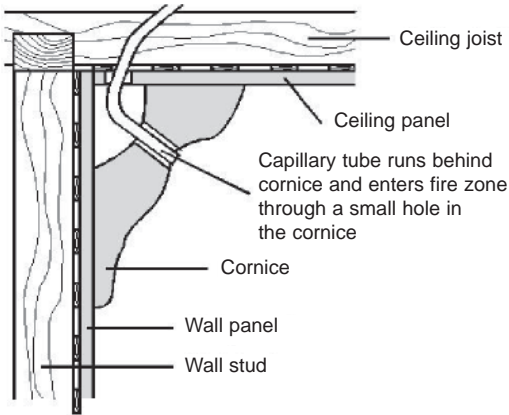


1 VESDA Pipe Network



2 Capillary tube protruding in to the risk

## A typical Heritage example



3 Pipework can be routed, via capillary tubes, to a convenient location within the risk area, using the building fabric to hide the sample points



4 Topkapi Palace, Turkey protected by VESDA using concealed capillary sampling tubes

## Where can VESDA by Xtralis be applied?

- Cathedrals
- Churches
- Stately Homes
- Museums
- Libraries
- Archives

## Heritage sites which rely on VESDA by Xtralis

American Museum Planetarium – New York, USA	Kings College – Stockholm, Sweden
Bellagio Hotel and Casino – Las Vegas, USA	Lulworth Castle – England
Birmingham Cathedral – Birmingham, England	Mappa Mundi – Hereford Cathedral
Bonneville City Museum – Utah, USA	Minnesota Institute of Arts – Minnesota, USA
Boston Symphony Hall – Boston USA	National Gallery – London, England
Burwell Historic Home – Minnetonka USA	Osbourne House – Isle of Wight
Chapel Royal – Dublin, Ireland	Prime Ministers Weekend Home – Chequers, England
Culzean Castle – Ayrshire, Scotland	Rycote Chapel – Oxford, England
Finland National Art Gallery – Helsinki, Finland	St James' Palace – London, England
Governor's Mansion – Texas, USA	St Paul's Cathedral – London, England
Hearst Castle – California, USA	Top Kapi Palace - Istanbul, Turkey
House of Lords – London, England	Truro Cathedral – Truro, England
Indiana Historical Society – Indianapolis, USA	Winchester Cathedral – Winchester, England

and many more...

Xtralis' global network of offices and representatives means that help is soon at hand

## When selecting a Very Early Warning Air Sampling Smoke Detector, insist on:

- World's widest sensitivity range
- Dynamic Sensitivity Range
- Most advanced and redundant peer to peer communication network (VESDAnet)
- Programmable alarm thresholds
- Advanced filter technology
- Comprehensive event log and reporting
- Comprehensive product range
- Absolute fixed calibration
- Worldwide-accredited global distribution and support network

## Global Approvals



[www.xtralis.com](http://www.xtralis.com)

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Document: 10441\_05

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