

VESDA

CORRECTIONAL FACILITIES



VESDA HELPS KEEP
INMATES SECURE AND
UNDER CONTROL WHILE
ALLOWING THEM TO
SAFELY ESCAPE A FIRE

- PRISONS
- JAILS
- HOLDING AREAS
- COMMUNITY RESIDENTIAL CAMPS
- WORK CAMPS
- SUBSTANCE ABUSE CENTERS
- LOCK DOWN FACILITIES
- DETENTION CENTERS

U.S. Correctional facilities suffered on average 5,400 fires between 1998 - 2002, with property damage of USD \$24 million. Over 50% of those fires were intentionally started by inmates.

THE CAUSES

- Intentional lighting of clothing, mattresses and trash
- Faults with electrical equipment
- Cigarette smoking in cells

In Korea in 2007 nine detainees died and 18 others were injured when a detainee started a fire within the cell block area. The fire sprinkler system failed to operate and guards were unable to contain the fast moving fire with extinguishers.

THE CHALLENGES

Vandalism - Detectors that are visible and accessible invite vandalism and tampering.

Maintenance - Accessing secure and restricted areas to test and maintain detectors is costly and challenging.

Nuisance Alarms - Dust, dirt or other airborne contaminants affect detector reliability and performance.

Dilution - Smoke tends to dilute in large open spaces, challenging the poor sensitivity of conventional spot-type detectors.

Evacuation - Orchestrating a controlled and secure evacuation during a fire event requires sufficient time and planning.

Monitoring - Obtaining accurate and useful information about smoke levels can be a challenge.

Stratification - In areas with high ceilings smoke can stratify and fail to reach conventional detectors.

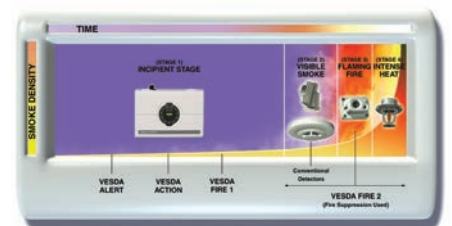
Clearly, the **BEST** time for detection is at the incipient stage of a fire, the point where damage is minimized and response options are maximized. It is at this point where VESDA systems afford you a critical advantage, **TIME**.

WHY USE A VESDA ASD SYSTEM?

VESDA detectors buy time. Time to respond to a fire threat, minimizing damage and maximizing the time available for a safe and orderly evacuation. The key advantages are:

- **Tamper-proof** sampling points which deter vandalism.
- Sampling pipe can be located behind vents, **invisible to inmates**.
- The ability to locate sampling holes where smoke will travel and to position the detector in a location that has **easy access for maintenance**.
- The high sensitivity range of a VESDA detector allows alarm thresholds to be set for the **earliest possible warning of a fire** in a large open space.
- Multiple configurable alarms provide, for example, very early warning allowing **time for investigation, security management** and subsequent warnings to initiate automated fire department **notification, evacuation and suppression**.

- **Remote monitoring** and configuration of detectors improves control and cost of ownership in unmanned or secured areas.
- VESDA systems maintain an event log which allows analysis of smoke and detector response trends for forensic incident analysis.



VESDA uniquely monitors the entire progression of a fire - easily detecting smoke long before it is visible and long before any other form of smoke detection.

APPROVALS

- VdS
- UL
- ULC
- LPCB
- FM
- ActivFire
- NF
- CE
- EN 54-20



VESDA DETECTION MEETS THE UNIQUE CHALLENGES OF YOUR FACILITY



Application-Specific Sampling

VESDA sampling pipe is located below ceiling level to detect smoke that may stratify.



Hidden Sampling

A tiny VESDA sampling capillary is hidden behind a light fitting, invisible to unsuspecting occupants.



Various variants are available
VSP-610 for Metric Pipe
VSP-610-US for Imperial Pipe
VSP-620-01 for 6mm Capillary
VSP-620-02 for 8mm Capillary
VSP-620-03 for 10 mm Capillary



Tamper-Proof Sampling

Use a VESDA tamper-proof sampling point to safeguard against vandalism. If the mesh is blocked the detector will alert staff to an airflow fault.

Flexible Sampling

VESDA sampling pipe is located on the prison door hidden from inmates.



Application-Specific Sampling

VESDA sampling pipe is located across return air vents to detect smoke as it is drawn into the duct.



Easy Maintenance

A VESDA detector can be positioned in a secure utility cupboard or in another location that has easy access for maintenance.



CORRECTIONAL FACILITIES THAT ARE PROTECTED BY VESDA SMOKE DETECTORS

THE AMERICAS

- Allen Hall Youth Detection Centers, USA
- Baton Rouge Jail, USA
- Baymon Jail, Puerto Rico
- Brazos County Juvenile Justice, Texas USA
- Carteret County Jail, North Carolina USA
- Corcoran State Prison, California USA
- Denton County Juvenile Detention, Texas USA
- Fort Dodge Correctional Facility, USA
- Georgia Department of Corrections, USA
- Grateford Prison, Pennsylvania USA (Largest walled prison in the USA)
- Idaho State Prison, Idaho USA
- Kern Valley State Prison, California USA
- Pennsylvania Correctional Facility, USA
- Peripheral Project, LA Baton Rouge USA
- Rikers Island, New York USA
- Texas City Criminal Justice Centre, USA
- Ventura Youth Authority, California USA

- Volusia County Jail, Florida USA
- Wake County Detention Center, North Carolina USA
- WBR Jail, LA Baton Rouge USA

EUROPE / MIDDLE EAST

- Bedfordshire Police Station, UK
- Bishops Gate Police Station, UK
- Glenhome Youth Training Centre, UK
- Hemel Hempstead Police Station, UK
- HM Prison, Stafford
- Holloway Prison, UK
- Northern Irish Prisons, Belfast Ireland
- Nottingham Police Station, UK
- Old Street Police Station, London
- Strathclyde Prison, Scotland
- Wandsworth Prison, London
- West Bridgeford Police Station, UK
- Young Offenders Centre, Dublin Ireland
- Young Offenders Prison, West Midlands

ASIA-PACIFIC

- Barwon Prison, VIC Australia
- Dame Phyllis Frost Centre, VIC Australia
- Dhurringile Prison, VIC Australia
- Goulburn Correctional Centre, NSW Australia
- Hopkins Correctional Centre, VIC Australia
- Loddon Prison, VIC Australia
- Long Bay Correctional Centre, NSW Australia
- Malmsbury Youth Justice Centre, VIC Australia
- Melbourne Remand Center, VIC Australia
- Numinbah Women's Prison, QLD Australia
- Port Phillip Prison, VIC Australia
- Silverwater Correctional Complex, NSW Australia
- Tarrengower Prison, VIC Australia
- Manukau District Court Cells, New Zealand
- Mount Eden Prison, New Zealand
- Waikeria Prison, New Zealand



ABOUT XTRALIS



Xtralis is a leading global provider of powerful solutions for the very early & reliable detection of smoke, fire, and gas threats. Our technologies prevent disasters by giving users time to respond before life, critical infrastructure or business continuity is compromised.

We protect highly-valued and irreplaceable assets and infrastructure belonging to the world's top governments and businesses.

To learn more, please visit us at www.xtralis.com