



VESDA®

Very Early Warning
Smoke Detection

Correctional Facilities

How do you keep inmates
secure and under control
while allowing them to
safely escape a fire?

Protection for:

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.¹

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.

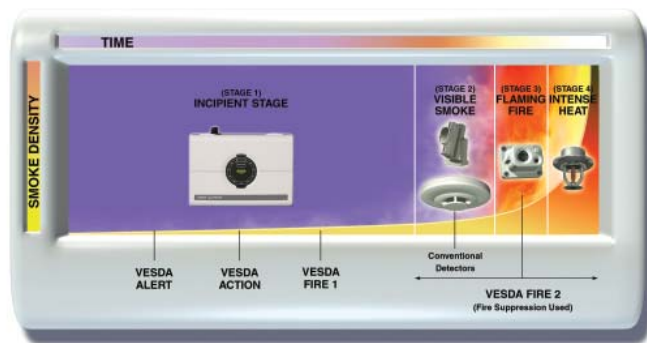
Dilution - Smoke tends to dilute in large open spaces, challenging the poor sensitivity of conventional spot-type detectors.

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.



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.

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:

- **Disguised** and/or **tamper-proof** sampling grilles 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.

¹ National Fire Incident Reporting System,

The responsible choice for community and facility security and inmate safety.



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.



Flexible sampling

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



Hidden sampling

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



Easy maintenance

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



Application-specific sampling

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



Tamper-proof sampling

Use a VESDA tamper-proof sampling grille to minimize vandalism. If the grille is blocked the detector will alert staff to an airflow fault.

Our global network of offices and representatives means that help is always at hand



Correctional facilities that are protected by VESDA smoke detectors

Pennsylvania Correctional Facility, USA	Fort Dodge Correctional Facility, USA	Allen Hall Youth Detection Centres, USA
Life Detox Centre, Australia	Numinbah Women's Prison, Australia	Melbourne Remand Centre, Australia
Hemel Hempstead Police Station, UK	Glenholme Youth Training Centre, UK	West Bridgeford Police Station, UK
Waikeria Prison, New Zealand	Mount Eden Prison, New Zealand	Manukau District Court Cells, New Zealand

Global Approvals



CCC

УП 001

Need more information?

Contact our nearest office or visit our website at www.xtralis.com.

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Document: 13721 Version:01