

A complete fire detection solution.

Building fires can be as the result of fires started outside of the building, and this makes it difficult for the internal fire detection system to offer early warning of these fires. Often the result is both costly in repairs and loss of trade.



Patol's Linear Heat Detection Cable (LHDC) can be used on the outside of buildings and on the inside of Bund walls to detect excess temperature associated with Fire conditions.

While buildings have a Fire Alarm system to detect the internal smoke and/or fires and protect Life & Property, very little if any thought is given to early detection of fires that are started outside of the building. Some of these fires are classed as non-accidental, commonly using rubbish bins or similar. Other fires are due to leaks in flammable storage devices located on the premises. All of the fires have the potential to generate intense fires that generate very high temperatures. Once a fire has started they often rapidly spread to the buildings or other adjacent structures.

Fire detection systems need to be able to detect quickly and reliably, with minimum long term maintenance and crucially without causing unwanted alarms. Fire detection systems not only have to protect life, but also the building and infrastructure.

Fast, reliable detection can reduce damage and the high cost of repair or replacement, minimise disruption to businesses or schools and lessen the impact for potential pollution and the possible inhalation of toxic fumes.

Patol is a global leader in the design and manufacture of specialist fire detection products for Industrial applications.

Risk

The nature of outdoor fires and the installation requirements limits the use of conventional smoke detectors. LHDC is not affected by these conditions. Similarly it is also unaffected by environments that are prone to damp and high humidity.

The suitability of LHDC to work effectively in this environment means that it is not prone to generating false alarms, which is an issue caused by traditional smoke detectors.

Application

The flexibility of LHDC means that it can be installed on the outside wall of a building, under the eaves or roof structure. It is also possible to mount the LHDC around the inside of the bund wall which surrounds oil or fuel storage using specialist clips and fixings. The small bend radius means that it is capable of providing total area coverage, even for the most difficult layouts.

The discreet nature of LHDC ensures that it is less likely to suffer from vandalism. Patol's LHDC is chemical and UV resistant. It is also possible for Patol to supply armoured LHDC, to offer additional mechanical strength.

Digital - Linear Heat Detection Cable

Extensive single zonal lengths of the Digital LHDC may be installed with the ability to trigger alarms for hot spots occurring on very small sections of the overall cable. The Digital LHDC may be employed in a wide variety of applications but is particularly suited where there are harsh environmental conditions.

The DDL controller is used in conjunction with Digital LHDC where a distance locator is required for the fire condition. It has a 4 digit display which activates on fire condition and displays the distance into the zone the alarm has occurred. Digital LHDC may be employed in lengths up to 2km (1999m). The unit has an adjustment to accommodate interposing cables. This is a loop powered controller which can be fully integrated on either a conventional fire panel or an analogue addressable system.

The Patol Digital LHDC can also be connected directly to an existing Fire Alarm Panel or used to operate a beacon or sounder.

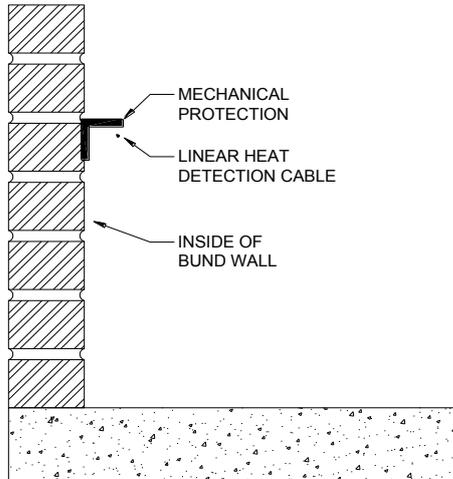
Installation

The flexibility of Patol's LHDC ensures that it will meet the installation requirements and offer the best protection possible.

Installation of the LHDC is by using specialist clips and fixings, refer to Application Fixings D1183. It is to be installed so that there is an air gap between the ceiling or the wall to take advantage of the 'spreading effect'. It is important that the correct fixings are used to ensure that they do not act as a heat sink towards the heat sensitive cable.

Bund Wall Installation

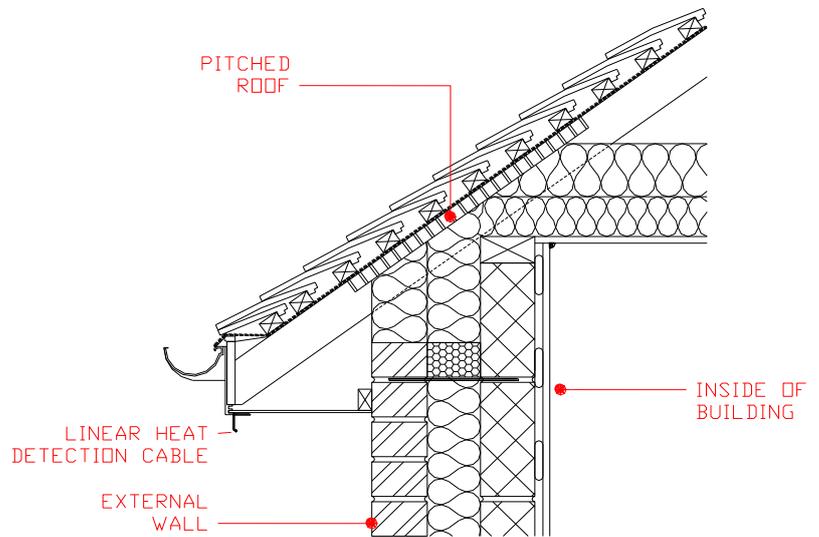
The photo and drawing to the right are representative of how the LHDC would be installed within the inside of a Bund Wall. The Angle Iron is used to offer mechanical protection of the LHDC. The LHDC is then fixed to the angle iron using our 'P' clip and Neoprene Sleeve.



Bund Wall Installation

External Building Installation

The photo and drawing to the right and below are representative of how the LHDC would be installed under the eaves or guttering of a Building. Angle brackets are fixed to the underside and the LHDC is fixed to the angle using Neoprene Sleeves. This gives the required air gap required.



External Building Installation

Contact Details:

Patol Limited
 Archway House
 Bath Road
 Padworth, Reading,
 Berkshire.
 RG7 5HR
 Tel: +44 (0)1189 701 701
 Fax: +44 (0)1189 701 700
 Email: info@patol.co.uk
 Web: www.Patol.co.uk