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POLYSTYRENE INSULATED PANEL (PIP)

How the insurance companies treat this building material

Over the last 30 years there has been a rapid growth in the use of PIP, with its core of expanded polystyrene foam (EPS), used in cold storage facilities. PIP is light, cheap, easy to assemble and easy to maintain.

However, in recent years there have been a number of major fires globally, some accompanied by loss of life. In the last 24 months there have been two multi million dollar fires in Australia and a number of significant fires in New Zealand involving this type of material.

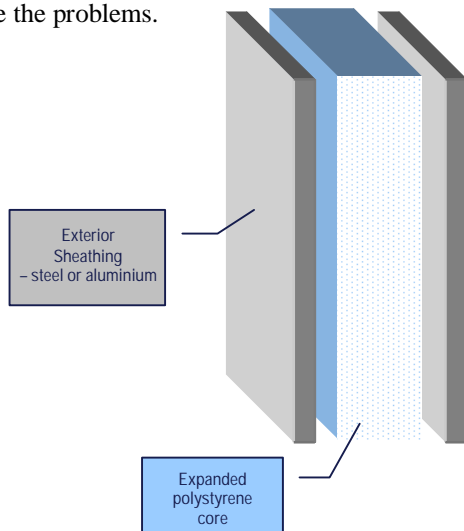
Needless to say this has made the insurance industry nervous. We first experienced this reaction in 2001 after some massive fires in Europe. The result

of this nervousness is a shrinkage of insurance underwriting capacity with some insurers pulling out of the market. Those that remain have re-focused their attentions to the so called 'EPS risk'.

Most insurers have recently announced their intention to increase rates and link their acceptance of EPS risks to first class risk control standards by users of these types of facilities.

It is worth noting that insurance underwriters focus on both potential sources of ignition and fuel for a fire such as all manner of combustibles. The issue of concern for EPS revolves around the ability to fight or control a fire where EPS has become a fuel, and the ease with which the structure collapses and is destroyed.

Whether or not one agrees with the insurance industry in their reactions, this is the current reality. The purpose of this article is to assist owners of buildings using EPS insulation, and those thinking of constructing new facilities, to minimise the problems.



EXISTING BUILDINGS

It is easy to say “fit sprinklers” but this is not an easy solution. If sprinklers can be fitted that is ideal, but there are usually issues of cost and the impracticality of retrofitting with sprinkler systems.

The major influence on an insurer is a recognition that the Insured is proactive in minimising their own risks; not solely relying on an insurance company if anything goes wrong. Every operator with this type of building material should have a dedicated risk management plan for the building and the associated operations.

This programme should include:

- hot work controls;
- ‘cold work’ controls for work carried out on insulation;
- electrical installation and maintenance programmes including thermographic imaging;
- dedicated fork lift charging areas outside the insulation envelope;
- management of cooking equipment;
- housekeeping practices including not storing combustibles against the outside of the building;
- regular building inspections and prompt repair of damaged insulation panels;
- when cutting holes in panels for services ensuring the exposed EPS is ‘sheathed’ or a collar is fitted;
- plant maintenance, and where ammonia is used, providing gas detection;
- site and premises security;
- general awareness amongst staff and management of the potential problems, and how to action risk improvement.

CONTACT

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NEW BUILDINGS

The first advice is to install an approved sprinkler system, even avoid EPS if possible, although we recognise the overall value in it that users of EPS find, despite insurance difficulties.

The fact that it may be described as ‘fire resistant’ in fact gives small comfort only. The material is fire resistant to the extent that if an ignition source is applied and then removed the material will usually self extinguish.

However if the heat source is applied continuously the EPS will burn and give off dense and toxic smoke. If EPS has to be used, then the facility should be sprinkler protected.

There are now alternatives to EPS that could be considered. There are totally non-combustible panels such as those made from fibre glass ‘wool’. Alternatively a polyisocyanurate insulation foam can be used that has been subjected to large scale fire tests and certified by either the Factory Mutual (USA) or the Loss Prevention Council (LPC).

As part of your planning, we suggest that you consult with your Willis Client Advocate® before making a decision. In this way you will avoid unpleasant insurance surprises down the track.

Willis is more than happy to offer advice to owners of existing facilities and to those developing new buildings. In particular we can help you put in place a customised risk management programme that meets the needs of your business.

