

The Lead Sheet



Solutions for Environmental Concerns

Over the centuries concerns have been raised about the effects on health and exposure to different metals.

With lead sheet in the modern world, the stringent health and safety legislation throughout the European Union has been set to protect lead workers and the users of lead, from products containing lead, and as such the risks to health are relatively small. Furthermore

recent studies carried out have also shown that the general population has decreasing levels of lead within the human body.

Even with this ever improving situation there are still perceived minor risks and areas of concern where lead sheet is used for certain

applications that can be easily accessed by house owners or members of the public. This information sheet looks to help allay some of those concerns and provide simple solutions to reduce risks even further.

LEAD SHEET in Public Spaces



Lead sheet installed as a building and construction product represents negligible, (or virtually no) risk to the public. Even to casual visitors inadvertently touching the surface of lead sheet the risk to health may be, in principle, ruled out. Poisoning from lead is a very rare event these days and is only possible in the unusual situations where hands are not washed after being in contact with lead before eating, drinking or smoking. Even then it would only occur after regular contact without taking precautions and possibly in addition to exposure to lead from

other sources. Lead can only be absorbed by ingestion or inhalation and the main sources of this could only occur via lead dust or vapour. Lead is not absorbed through the pores of the skin, and the amount picked up on the skin through occasional or regular contact with lead sheet has been proven to have little or no impact on health, during independent investigation carried out by the Institute of Occupational Medicine (IOM) in Edinburgh.

In situations where, lead sheet is within reach and could be touched then it may be possible for some lead oxide to be picked up on the hands or fingers if the surface is rubbed very vigorously or handled daily. However, to avoid any unnecessary concerns from anxious members of the public, we have suggested in the past that the surface is coated with two coats of patination oil or a clear matt finish lacquer or varnish. This treatment may have to be repeated

at some stage so ensuring a continuous a barrier between the surface of the lead and the straying hands of visitors, particularly young children. It will then be seen that reasonable precautions against any risk whether likely or not have been taken.

In some previous cases where lead sheet has been used and fitted externally in schools at low level, and could be touched we have advised that the surface of the sheet is painted, normally with a gloss paint treatment, which would require repainting at the normal maintenance intervals for paint treatments.

Lead sheet which is pre-treated with a colour coating is now also available from lead sheet manufacturers, and this could be a further option that could be considered where touching the surface of lead sheet on a regular basis is a concern.

HISTORIC BUILDINGS

These can sometimes bring challenges to a more safety aware world. For example where historic detailing may have been seen as quite acceptable in the past, such as lead roofing draining onto surrounding soil, which could be handled, precautions may now have be considered to improve the rainwater collection system. These may include the introduction of eaves gutter where rainwater down pipes can be connected to suitable drainage system. It must be remembered however, that the regular handling of soil in these situations would be unlikely, as roofs of this type are often in remote locations. It also worth noting that recent studies have also shown that lead in soil is not taken up by the root systems of any surrounding plant life.



Balcony AREAS

Where lead sheet is used for areas of roofing and balconies that is regularly used as an outside living space by occupants of a building, a timber deck system could be utilised to reduce the risk of direct contact and help eliminate trip hazards. The timber supports for the deck should run with the direction of fall to ensure drainage from the roof is not affected. Painting exposed flashings could also be considered particularly if there are concerns that children or small toddlers can touch the surface.

Rain Water HARVESTING



As conservation of water resources has become increasingly important, changes in rainwater collection systems are considered with stored rainwater being used for flushing toilets. This concept is not new for lead sheet, as many historic country estate houses had rainwater collection systems where the water from the roof

was stored in large lead lined timber storage tanks. With the advent of more regular and reliable mains water supplies these collection systems were often dispensed with. Using water from a lead roof or gutter system for rainwater harvesting will not cause any risks to health where it is being used for flushing toilets. Rainwater harvested from any roof area would not be suitable for potable / drinking water due to the risk of pollution from all types of roofing materials and local atmospheric conditions. If a drainage soak away has been installed they must be closed to ensure roof drainage is to a buried cavity.

For further information and to get your **FREE** copy of **Everyday Installation Details** please contact:



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