ALTERNATIVE MATERIALS FOLLOWING LEAD THEFT

INTRODUCTION

Given the frequency of repeated thefts, or attempted thefts, of lead roofing on churches, the DAC is now regularly approached for its view on the replacement of sheet lead and lead flashings with alternative products like terne-coated stainless steel or felt based systems. The Committee will usually consider supporting a change from lead to another appropriate material in the following circumstances:-

- When such a change will have no detrimental historic or aesthetic impact
- In visually discreet areas, like flat or shallow-pitched roofs concealed behind parapets
- On ancillary structures of less significance than the main body of the church fabric; for example, on more recent modest vestry or porch additions
- Where there have been multiple thefts within a short period of time
- Where security measures have been implemented but have not deterred theft of lead

WHY LEAD IS BEST

Lead is a traditional material with proven longevity on historic buildings (aside from theft) often lasting up to 100 years or more, due to its resistance to atmospheric and bi-metallic corrosion. Moreover, as it is so malleable it is more easy to fit on complex roof structures than modern equivalents, and easier to repair when necessary. It can be tightly fitted to avoid the risk of water ingress which could result in further moisture damage to the building. It is also worth noting that lead is fully recyclable and therefore environmentally friendly!

In an ideal world, the DAC favours like-for-like replacement of lead where this is possible, however the Committee appreciates that churches are becoming more and more vulnerable and certain circumstances make like-for-like replacement an impractical option.

If a theft occurs, PCCs and their architects should consider the environmental and conservation benefits of replacing the lead before considering other materials less attractive to thieves.

ALTERNATIVE MATERIALS

Terne-coated stainless steel

Where replacing lead is not possible, or would leave the building very vulnerable to repeated attacks, the Committee is strongly of the opinion that terne-coated stainless steel is by far the best alternative roofing material on shallow-pitched or flat roofs. Stainless steel can look extremely good, can be as long lasting as lead or slate, is almost impossible to remove, and has negligible scrap value. The cons of stainless steel are that:-

- it can sometimes be noisy in inclement weather
- it may be subject to technical problems concerning underside corrosion.

Felt based systems

Felt-based roofing systems are short-lived and can be subject to maintenance problems. They may sometimes be acceptable on fairly modern or unlisted structures, but are completely unsuitable for historic buildings and extremely unlikely to receive recommendation from the DAC

or the support of English Heritage, local authorities or the Amenity Societies. As a replacement for more traditional materials they are a very poor false economy.

Slate, tiles, and non-metallic materials
Churches roofed in slate, tiles or other non-metallic materials are still likely to have large areas of lead flashings which can be very vulnerable. In some cases it may be appropriate to replace stolen flashings with new reinforced mineral- or plastic-based materials which can be dressed like lead, are suitably coloured and recyclable, and have no scrap value.

RAINWATER GOODS

It is not just lead roofs that are vulnerable to theft. The DAC have been seeing more and more applications for the repair or replacement of metal rainwater goods too, such as lead and cast iron. There are alternatives that can be considered if your church is vulnerable to metal theft. The most popular alternative is **powder-coated cast aluminium** which looks very similar to cast iron, however is cheaper to install and less attractive to thieves. There are also some very good **plastic alternatives** that simulate the look of cast iron appearing on the market which could also be considered if they are of a suitable quality and in keeping with the aesthetic appearance of the church.

WHAT TO DO IF YOUR LEAD IS STOLEN

As soon as a theft occurs, contact your insurance company and Inspecting Architect immediately, and arrange to have the damaged area sheeted to prevent water ingress. Your architect will probably be able to suggest suitable people to do this. If you have the opportunity to take photographs of the damaged areas, these may prove useful later when making faculty applications and insurance claims. Information and advice on procedure, and all necessary forms, can be obtained from the DAC Secretary. You will also need to report the crime to the Police.

When stolen metals are to be replaced like-for-like in the same materials, **a faculty will still be required**. However, the Chancellor may be content to permit a change of materials when the area concerned is not generally visible, and sufficient justification for a change in material is submitted (i.e. outlining how the church is particularly vulnerable and where security measures have failed).

Following cases of theft of roofing metals, flashings or guttering, an **Emergency Licence to Proceed in Advance of Faculty** can only be issued if the building cannot effectively be protected (albeit only temporarily) from water ingress which will compromise the structure of the building, or immovable contents like major electrical components or a pipe organ, whilst the proper faculty procedure is followed.

On all Grade I and Grade II* churches such changes will certainly require the support of English Heritage, and possibly the local authority. Some local authorities may require **Planning Permission** for any change of roof covering.

The DAC, English Heritage and local authorities consider each individual case on its merits, and have recently supported changing from lead to terne-coated stainless steel on churches within the Dioceses. If sheet lead roofing is to be put back, architects should consider specifying that it be fixed using hollow rolls rather than wood-core rolls if the pitch of the roof allows. The copper fixings used to secure hollow rolled sheet lead make it more difficult to remove. Parishes should

also give very serious consideration to putting **effective security measures** in place to reduce the risk of future attacks.

FURTHER INFORMATION

English Heritage have also produced a useful and comprehensive guidance note on metal theft, alternative materials and effective security systems which can be found at http://www.english-heritage.org.uk/about/news/lead-theft-guidance/

The Ecclesiastical Insurance Group (EIG) issues an extremely useful Guidance Note on **Theft of Metal** which can be found at: https://www.ecclesiastical.com/churchmatters/churchguidance/index.aspx . This contains lots of useful advice on preventing metal theft at your church.

For further information on the Faculty Process please contact the DAC Office at 1 Hill Top, Coventry, CV1 5AB or 02476 521312