

Loss prevention standards

Security: Metal Theft

Providing general security guidance on
measures to protect against the theft of
metals



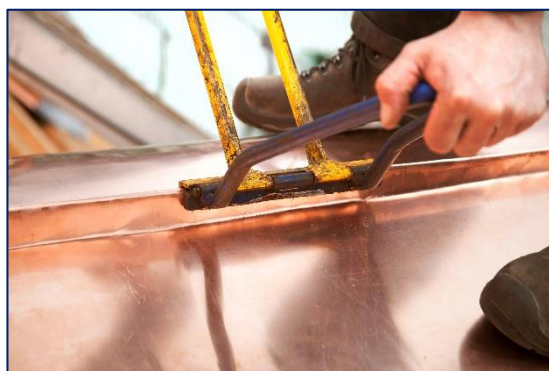
Metal Theft



Introduction

Metal theft has been an ever-present security risk, with the rate of incidents increasing in reaction to factors such as scrap metal prices, recession cycles, the prevalence of metal within the built-environment and focussed attention from organised criminal gangs.

However, the introduction of the 'Scrap Metal Dealers Act 2013', which introduced laws to restrict cash purchases of scrap metal and the requirement for personal identification for sellers, as well as creating greater awareness amongst property owners to implement improved security, has made an impact on metal theft since the early 2000's, when theft of metal had become a significant issue.



Whilst thieves traditionally targeted Non-Ferrous Metals (NFM) such as copper, lead, tin and related alloys, e.g., brass and bronze, higher values mean that traditionally less attractive NFM such as aluminium and ferrous metals, such as iron and steel (stainless and mild) can now be a target.

With metal theft still affecting many business/community premises and even homes, this Loss Prevention Standard outlines the problem and considers measures that can be taken to reduce the risk.

What is at risk?

Metal theft is no longer confined to the contents of buildings and yards, as was often the case in the past, but now extends to include parts of premises, e.g., building roof coverings, roof flashings, door hardware, boilers and plumbing, electric cables/sub-station components; plus, premises gates, fencing, sculptures/statues, highway signs and drain/manhole covers.

Empty buildings and construction sites are at increased risk by their very nature. With many empty buildings not being visited regularly and typically also lacking remote monitored intruder alarm protection, they can be prone to a 'strip out' - where nearly all metal is removed by thieves, e.g., electrical cable/switchgear, pipework, radiators, flashings, and even structural steelwork. Such an event often results in massive collateral property damage, and in extreme cases the building may be rendered unsafe or be deemed beyond economic repair and will need to be demolished.

Historic buildings can also be at particular risk, as they often incorporate considerable amounts of lead and copper roofing. When part of a building's roof is stolen the costs of repairing consequent damage, e.g., following ingress of rainwater, plus coping with the disruption caused, can far exceed the cost of the stolen metal itself.

Note: Signs of damp or water ingress may provide an early indication of otherwise un-noticed theft of roofing or roof flashings, and so should always be promptly investigated.

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Risk Assessment

As a first step, premises should be inspected and a note taken of what metals are present, where they are located, their likely values/attraction to thieves and the possible impact of their loss. It should then be considered how they currently are, or might better be, protected, and a checklist is provided within this loss prevention standard to assist you. It is important to remember that you may have features specific to your own property which should also be included.

When considering current or future security, it can be helpful to think of 'layers' of protection, each layer needing to be overcome by thieves before they achieve their aim. Good security is usually achieved by having a complementary range of security measures in place at each 'layer', adopting a principle of;

- Deter – the most effective measure as this removes the issue at source.
- Detect – identifying criminals and ensuring an early intervention.
- Delay – ensuring that criminals must overcome a series of security measures.
- Defend – once detected, that criminal activity generates a prompt intervention.

Note: In the event of metal theft, careful consideration needs to be given as to whether it is replaced at all, replaced in smaller quantities, replaced with something less attractive/valuable or, if replaced like for like, is provided with enhanced security. If a replacement strategy is not considered in such terms, it is quite likely a repeat loss will occur.

Deterrence

Thieves can't steal what **isn't** there, so the following should be considered:

- Reducing the level of metal stock held.
- Where possible, keeping metal stock out of sight from the public and legitimate visitors.
- After any theft, or during refurbishment works, replacing metal roofing/flashing with materials unattractive to thieves, e.g. coated steel sheet, glass reinforced plastic (GRP), non-lead flashing or flexible (bitumised) felt.

Note: Your property insurer(s) should be consulted before replacing any metal roofing with felt or other combustible materials. Also, consider any restrictions imposed by the Planning (Listed Buildings and Conservation Area) Act, 1990.

For all remaining metal fixtures, it is also worth considering:

- Use of a forensic marking compound, e.g. those available from Selectamark. These products are easily applied and bond to the metal surface. They are hard to remove and readily detected under ultraviolet (UV) light. They can then be analysed to reveal a suitably registered source address and can aid police forces.
- Displaying notices or window stickers in prominent areas, such as site entrances, to widely advertise that items are 'security marked'.

Physical Security

Physical security should be reviewed from the viewpoint of a potential criminal, starting at the boundary perimeter and working inwards, considering the potential for metal theft at each stage. Overlapping layers of security will build increased resilience into your protections, using the deter, detect, delay, and defend principle mentioned earlier.

Perimeter Security

Undertake a review of your perimeter, identifying what protection is already in place, its effectiveness and where improvement could be made.

Consider areas such as:

- Avoid external storage, and where unavoidable, locate away from where it is easily visible.
- Ensure boundary walls, fences and gates are in good order and that there are means of safely securing entrances when not in use.
- Remove or relocate any items that may aid opportunistic scaling of walls and fences.
- Cut back overgrown vegetation so any potentially criminal behaviour is more visible.
- Consider additional measures to restrict vehicular access, such as telescopic security bollards.

External Building Security

Lead/copper roofs, flashing, lightning conductor systems, gutters and down pipes are common targets, whilst buildings are often targeted when construction work is taking place.

The following should be considered:

- Portable ladders should be removed from sight and secured against criminal use.
- Fixed ladders and any scaffolding are secured from unauthorised use, e.g. use of ladder guards.
- Hindering access to the roof by installing barbed/razor wire along roof edges &/or anti climb spikes to down pipes, etc.
Note: To help avoid any legal liability issues that may otherwise arise, such security measures should be installed above 2.5 m in height with suitable warning signs displayed.
- Painting down pipes and roofing with non-setting paint, sometimes called 'anti climb' paint to deter/hinder access, and potentially aid the identification of criminals.

Internal Building Security

Metals should be stored in areas of robust construction, with access doors and windows kept in good condition and suitably secured. **Aviva's** Loss Prevention Standard - *Door & Window Security*, gives further advice on physical security, but if in doubt the advice of a competent locksmith, e.g. a member of the Master Locksmiths Association should be sought.

Further restricting access to items in the building can be achieved by:

- Locking internal doors.
- Reviewing window security, including whether these can be permanently secured if not necessary.
- Creating a particularly secure inner area, e.g. stockroom, store or cage and limiting the number of entry points which serve it.

Electronic Security

There are a variety of electronic security systems available to detect criminal activity, which can cover both external and internal areas. You should seek the advice from local Police crime prevention team or your property insurer before proceeding with any security enhancements.

External

- An external remotely monitored, detector-activated CCTV system can be particularly effective outside business hours in detecting potential intruders whilst they are still outside the premises, i.e. before a break-in is attempted or occurs. The nature of such systems requires careful attention to system design and operating procedures if they are to be effective. Additional guidance is provided in the Aviva Loss Prevention Standard: *Security - An Introduction to Closed Circuit Television (CCTV) Systems*.
- External intruder alarm systems, designed for building exteriors, roof areas and open spaces.

Internal

- Monitored intruder alarm and hold-up systems to notify building owners that an intruder has been detected. Additional guidance is provided in the Aviva Loss Prevention Standard: *Security – Intruder Alarms: Guidance for Customers*.
- A security-fogging device operated by alarm sensors. When activated, these rapidly fill an area with a dense, non-harmful fog which obscures vision, and may prevent potential intruders from clearly seeing theft-attractive items (such as metal stocks) whilst hindering their movement within the premises. Additional information on this topic is provided by the RISC Authority via their publication: *S7 Security Guidance for Fog Devices*

Human Surveillance

Depending on the size of the site, and the metal values at risk, manned guarding may be warranted, particularly if there has been a spate of such thefts in the local area. Areas to consider are:

- Outside of working hours manned guarding should incorporate security patrols with designated routes with a means of tracking and Proof of Presence Reporting.
- Temporary manned guarding should also be considered where the site is to be shut for holidays or extended periods.

Security companies should be selected from:

- SIA (Security Industry Authority) approved contractors (www.sia.homeoffice.gov.uk) or;
- NSI (National Security Inspectorate) www.nsi.org.uk Gold/Silver approved contractors.

In other cases, any surveillance may have to rely upon any 'neighbours', who should be asked to inform you or the Police of any unusual activity. In this regard it should be ensured that you:

- Provide suitable contact details.
- Inform them of times when the premises will usually be in use, or open to visitors and similarly, when you are/are not expecting contractors to be on site.

Note: Many thefts of roofing have taken place where neighbours have seen thieves in action and, in the absence of contact with/information provided by the property owner, have either assumed the thieves were contractors working at the premises, or have been told this by the thieves and accepted it.

Recovery

The Police are alert to the problem of metal theft, and many forces have special units/operations targeting metal theft, with many reputable scrap dealers actively looking to assist them, e.g. by using UV lights to check offered scrap metal for any forensic marking.

Even if stolen metal is recovered, the Police may be unable to successfully prosecute those in possession of it, or return it to the true owners without proof of ownership, so consideration should be given to:

- The use of non-drying forensic 'gels' or 'greases', as these transfer and stick to thieves handling marked items.
- Taking photographs of historic items.

Note: In the event of a loss, photographs can also assist in restoration or establishing the value of the claim.

Checklist

A '*Metal Theft Checklist*' is presented in Appendix 1, which can be tailored to your own property.

Specialist Partner Solutions

Aviva Risk Management Solutions can offer access to a wide range of risk management products and services at preferential rates via our network of Specialist Partners.

For more information please visit:

[Aviva Risk Management Solutions – Specialist Partners](#)

Sources and Useful Links

- Master Locksmiths Association (MLA) - Tel 01327 262255 or visit www.locksmiths.co.uk
- National Security Inspectorate (NSI) - Tel 01628 637512 or visit www.nsi.org.uk
- Security Systems and Alarms Inspection Board (SSAIB) - Tel 0191 296 3242 or visit www.ssaib.org

Additional Information

Relevant Loss Prevention Standards include:

- Security – Doors and Windows
- Intruder Alarms - Guidance for Customers
- Security - An Introduction to CCTV Systems - Loss Prevention Standards

To find out more, please visit [Aviva Risk Management Solutions](#) or speak to one of our advisors.

Email us at riskadvice@aviva.com or call 0345 366 6666.*

*The cost of calls to 03 prefixed numbers are charged at national call rates (charges may vary dependent on your network provider) and are usually included in inclusive minute plans from landlines and mobiles. For our joint protection telephone calls may be recorded and/or monitored.

LOSS PREVENTION STANDARDS

Appendix 1 – Theft of Metal Checklist



Appendix 1 – Metal Theft Checklist

Location	
Date	
Completed by	

	Metal Theft	Y/N	Comments
1.	Does the building roof have areas that are covered with lead or copper sheets, or other metal-based roof flashing / fixtures?		
2.	Are any yard areas enclosed by substantial fencing and locked gates?		
3.	Have you provided nearby neighbours with contact details for premises keyholders?		
4.	Are planned grounds maintenance arrangements in place to ensure that hedges/shrubs do not grow so that they block a neighbours' view and thus conceal thieves?		
5.	Have you determined what metal-based building components / services or other metal items are on the premises that may be at risk of theft?		
6.	Are doors and windows fitted with good quality locking devices that are secured whenever the premises are unattended?		
7.	If the premises contain stocks of metal used in a production process, are they retained within a secure store or cage?		
8.	Is theft attractive stock kept out of sight from the general public?		
9.	Have ladders and any other means of accessing upper storey heights been secured against unauthorised use?		

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	Metal Theft	Y/N	Comments
10.	Are the premises protected by a remotely monitored intruder alarm system? (internal and external)		
11.	Where there are items in the open, are these areas covered by CCTV which can be remotely monitored?		
12.	Are stock levels of metal used in any manufacturing process minimised i.e. ordered on a 'just in time' basis?		
13.	Is there a strategy for replacing any metal-based building fixtures with materials less likely to be of attraction to thieves?		
14.	For any metal fixtures, are surfaces applied with a forensic marking compound?		
15.	Are prominent warning notices displayed which advertise the security measures in place?		
16.	Have you sought independent crime prevention advice from the Police or your property insurer before proceeding with any security enhancements?		
17.	Have you sourced security devices and products from reputable organisations such as those accredited by the schemes mentioned in this guidance document?		
18.	Has security been reviewed after any theft or break-in to reduce the risk of a repeat incident?		
	Additional comments.		

Please Note

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