

# 1d

## Maintenance, Repair and Restoration

# Rainwater Goods



### The Conservation Value of Traditional Rainwater Goods

Often an overlooked building detail, most traditional rainwater disposal systems are made of locally available natural materials: timber or cast iron. Cast iron became widely available with the establishment of ironworks to the south of Bradford in the late 18th century, though the material remained more expensive than timber and is hence more likely to be found as a guttering, hopper and pipe material at houses of middle class occupants, whilst housing for the working classes would have timber gutters with cast iron restricted to the simple, mass produced pipes.

The style, type and materials of rainwater goods are a subtle indicator of the age, architectural style and status of the original occupant of a house. Plain timber and iron rainwater goods can be found on 17th and 18th century farmhouses, houses and cottages, often with discrete brackets supporting the gutters. From the late 18th century onwards the wide-scale adoption of Classical styles of

architecture in all types of building led to gutters being supported by stone corbels or brackets, often forming a decorative feature at the wall top, particularly at the houses of the wealthier classes, where the gutters would have a moulded (shaped) profile, while workers' cottages or houses would have a more simply moulded timber gutter. There are some examples of housing built for the middle classes with moulded stone gutters with a lead-lined channel, and others with decorative hoppers and rainwater pipes, sometimes bearing a date or initials. The Arts and Crafts style of the late 19th and early 20th century saw a revival of the use of decorative moulded timber guttering in middle class houses.



### The Maintenance, Repair and Restoration of Rainwater Goods: Best Practice

#### General Advice

- Clear any plants, leaves, silt and debris from gutters and hoppers at least once a year, preferably following the autumn leaf fall. This will prevent the system from blocking and leaking water damaging the building.
- Ensure vegetation growing behind the rainwater pipes or underneath or behind the gutters is cut back or removed altogether. The vegetation can help trap moisture against the rainwater goods and speed up their deterioration. Growing creepers can dislodge or damage gutters and pipes.
- In some cases it might be a good idea to fit leaf guards over gutters and the tops of pipes to prevent them being blocked.
- Check externally in wet weather for places where the wall of the building is getting saturated. This is a sign that the rainwater system is leaking. In dry weather,

there will be stains or marks left where water has been seeping into the wall. Rain leaking into the wall speeds up the deterioration of the mortar, can cause rot in internal timberwork, and can damage internal decoration and fittings.

- Always replace existing timber, lead or cast iron rainwater goods like for like. These materials are still commonly available. Never use a substitute material. uPVC cannot be repaired or renewed, has a comparatively short lifespan and is an inappropriate material for historic buildings. Extruded aluminium is another modern material and may in certain cases be a suitable alternative.

- If you are wanting to replace modern or inappropriate rainwater goods with traditional style ones, but are unsure of the detail, the Conservation Team would be happy to advise.



### Timber Rainwater Goods

- Ensure that timber gutters are regularly painted to prevent decay and damage from the elements.
- Elm is the most suitable type of timber for rainwater goods, as it swells rapidly when wet, preventing leakage at joints.
- Lining timber gutters with bitumen was a traditional method of making them last for longer, but other preservative treatments may be more appropriate today.



### Cast Iron Rainwater Goods

- Ensure that cast iron rainwater goods are regularly painted to prevent rusting. Particular rust spots are the undersides of gutters where they are supported by stone shelves, corbels or brackets, and the backs of rainwater pipes nearest the wall (check areas that are difficult to see with a hand mirror). Before repainting remove any loose rust with a metal brush.
- Cast aluminium can be an appropriate substitute for cast iron in cases where gutters and pipes are very high up and particularly difficult to access or paint.
- Rainwater pipes should be fitted on spacers far enough from the wall so that if there ever is a leak, it will run down the outside of the pipe and not down the wall. A wider distance between the pipe and the wall allows better air circulation and slows the development of rust.

### Lead-lined Stone Gutters

- Check the lining and particularly the joints for leakage regularly and replace sections like for like if necessary.



- Do not coat the lead lining with bitumen treatments or fabrics, as they can make later faults difficult to detect, can prevent future repairs, degrade quickly and reduce the scrap value of old lead.