Gutters and downspouts work hard to protect your property from moisture damage. If gutters leak or downspouts are clogged, water can spill out eroding brickwork and pointing, discolouring and degrading paintwork, causing rot in timber doors and windows and accumulate near foundations, soaking the soil and causing foundation walls to settle.

Helpful Advice

- ☑ Understanding and identifying your rainwater goods
- ☑ Cleaning and basic inspection
- ☑ Repairing and replacing
- ☑ Health and Safety

S.J. Gartside Property Management Services.

☑Understanding and identifying your rainwater goods

Guttering

Type.

Broadly speaking you will almost certainly have **eaves guttering** fixed to your property, this is fixed to an outside wall at the bottom of the roof slope (eaves).

Where your property is adjoined to another and either or both of the roofs slope toward the party wall you will find **valley guttering**, (Technically speaking a valley gutter is found where two roofs slope toward each other, but for the purposes of providing advice we can ignore this technical point)

Eaves guttering usually requires fall, for gutters of up to 6" a fall of 1" in every 20' is sufficient, larger section will require less fall and very large box guttering and valley guttering may require no fall at all.

Materials.

Eaves guttering will be constructed of either uPVC, fibre cement or galvanised steel and in most cases, but not always will be semi-circular in profile. Valley gutters will be either fibre cement or galvanised steel, but not uPVC.

Whilst it will be reasonably easy to recognise each construction type, it should be remembered that there are different grades and types of each, and each is likely to be jointed or sealed and supported in differing ways.

uPVC guttering is exceptionally flexible, but lower quality guttering will tend to become brittle after only a short period of time and flexing the guttering in this condition will result in breakage.

Galvanised steel guttering can come in different gauges (thickness'), when used for eaves gutter it is likely to incorporate a plastisol or powder coated decorative wrap.

Fibre cement is simply cement which has been reinforced with a fibrous material to give it strength. Different fibres can be utilised, although it is often quite difficult to tell which type of fibre has been used in a product. What needs to be remembered here is that asbestos may be used in the manufacture of these products. Advice about asbestos is given in the Health & Safety section.

Construction.

Depending somewhat on the type of material used in manufacture and whether the gutter is an eaves gutter or valley gutter, the construction of guttering systems can vary substantially.

At this point it is important to understand the difference in construction between an eaves gutter and a valley gutter and the probable long and short term effects of the failure to maintain each.

Eaves guttering by its very nature is fixed to the outside of a property and any spillage or leakage in the short term has minimal effects. In the long term it can be extremely detrimental to the building and consequentially your landlord will invariably pay more attention to ensuring you maintain the eaves guttering to your property.

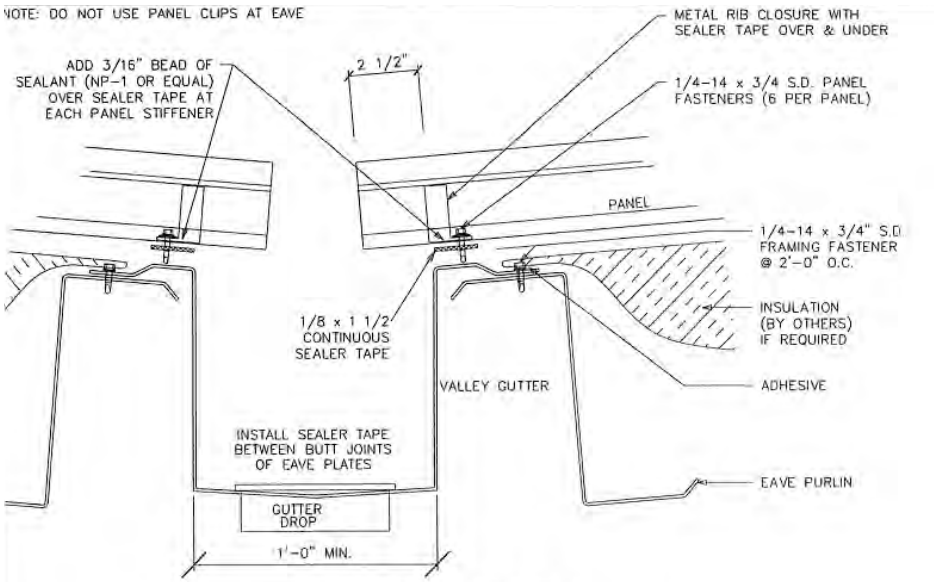
Valley guttering in many ways respects presents a reversal of the above situation. The long term effects of poor maintenance are likely minimal, although this is not always the case. Spillage or leakage is likely to be far less frequent and on the occasions it does occur is likely to result in little more damage to the property itself than the discolouration of the painted surfaces of internal walls for which the tenant is responsible.

In the short term of course the premises are likely to be flooded, causing damage to the tenants stock and fixtures and an unwelcome disruption to the running of the tenants business for which the landlord has no responsibility.

Valley gutters are supported on straps between the lower purlins of each roof or on the purlins themselves, unlike eaves guttering each tenant has a joint liability to maintain valley guttering, which by its very nature can become a source of poor maintenance when each tenant relies on the other to maintain the guttering system.

Although sealants, flashings and mastics are used to close the gap between the roof and the gutter, this is merely a measure against wind blown rain and snow entering the property and cannot be relied upon to prevent spillage.

A typical valley gutter construction is shown on the following page.



uPVC is utilised only for eaves guttering and is usually supported by uPVc brackets and jointed with rubber seals. Two types of jointing systems are commonly used.

The first type is where the end of one section of gutter fits into a specially moulded collar on the next piece of guttering and is retained by a uPVC clip.

The second system involves the use of a union. Gutter sections do not have a collar and are plain ended, two ends are clipped into the union which can be thought of as a double collar in many respects. Some unions simply join the gutter sections together, while others are fixed to the wall and also act as a gutter bracket.

Galvanised steel guttering is used for both eaves and valley gutter systems, they can be jointed with either rubber seals or with sealants and will be bolted togethher.

Eaves gutters will usually be of square section, be fixed directly to the face of the building and be wrapped with another section of steel with a decorative finish.

Steel valley gutters will usually be fixed on the top of the roof purlins, some steel valley gutters may extend up the roof towards the second row of purlins, this will help protect against spillage during times of heavy rainfall.

Fibre cement guttering can be jointed in a variety of ways. Rubber seals are uncommon, but can be found. So far the term sealant has been used to refer to gun applied sealants produced specifically for guttering. Fibre cement gutters are often jointed with trowel applied sealants such as bituminous fibre mastics and even putty, but gun applied sealants are commonly used. These types of gutters are bolted together.

Eaves guttering is usually semi-circular and is fixed to the eaves with either brackets or straps. Brackets are usually galvanised steel and are fixed to the face of the building, straps are fixed to the last roof purlin or on top of the wall plate.

Valley gutters are usually 'V' shaped, but with a wide flat bottom, they are supported by straps between the bottom purlin of each roof or sometimes directly by a party wall. The gap between the roof and the gutter is covered with a flashing, this can be made of a variety of materials such as roofing felt, but more commonly polymer based DPM is used. (This is the same material used as a damp proof course at the base of your brickwork)

Downspouts

Generally, the construction of your downspout system will be much the same as mentioned above in the guttering section. Galvanised steel is rarely used, except to provide a protective wrap around the downspouts themselves. Your downspouts may well be constructed of different materials to your gutters.

Water is collected in the gutter and directed into your downspout by an outlet, some downspouts may be made of more than one section, joints to fibre cement downspouts are unlikely to be sealed, instead relying on gravity to avoid spillage at the joints.

Downspouts to eaves guttering will usually end at a gully, on smaller downspouts there may well be a shoe to direct water away from the wall of the property. Downspouts that are situated within the property, such as those associated with a valley gutter system are likely to connected directly to the drainage system with no gully.

Underground

The underground drainage of rainwater is often considered a separate system from the rainwater goods. However a poorly maintained underground drainage system, will likely undo all your efforts to maintain your gutters and downspouts and result in many of the same problems as poorly maintained rainwater goods.

Type.

Rainwater drainage is usually installed as a separate system from the underground soil drainage. (WC and sink waste)

Combined drainage systems will dispose of both rainwater and soil waste through one system

Materials.

uPVC drainage is likely the system used on most modern properties. It is easily identified by looking into inspection chambers, although it is usually (but not always) a good indication that uPVC has been used for drainage pipes if gullies are made of uPVC. Whereas above ground many colours are used for drainage, below ground pipes and fittings will always be brown/orange in colour.

Jointing of uPVC systems is made with rubber seals

Clay drainage systems are likely to have been used on older properties or even on modern properties where it is preferred to uPVC at depth or in areas with heavy traffic. Clay systems are easily identified by their stone like texture, although there are a vaiety of differing finishes available.

Jointing of clay systems is usually with sand and cement, although often a rubber or hesian rope is used to ensure the correct alignment of the pipes.

Pitch fibre drainage systems are no longer used, but properties built as late as the 1970's may have been built using pitch fibre systems. The construction may vary, but identification is made easy as the pipes are black with a tar or bituminous surface.

Jointing of pitch fibre systems usually involved no sealing materials, one end of a pipe was cut and tapered and knocked into a pre-formed collar on the next section of pipe.

Construction.

Underground drainage should always be laid with fall, the fall for rainwater only systems needs generally to be less than that of soil or combined systems, but will vary depending on the diameter of the piping.

Inspection chambers (formerly known as manholes) allow access for inspection and maintenance and are generally positioned at junctions, bends or at regular intervals along a long straight.

Gullies are found at the foot of downspouts and come in two popular types, which allow access for cleaning. A standard gully consists of a chamber with a deep bottom which collects heavier and larger debris, preventing it passing into the underground drainage system. Back inlet gullies follow much the same principle, but the downspout enters the gully at the side and underground rather than ending just above the gully.

It should be remembered that with rainwater only systems, piping may have been joined without sealing, or the rubber seals removed. This is not an accepted practice generally, but is often carried out to assist with field drainage. Generally this will present few problems, but flushing these systems should be undertaken more often. Occasionally at shallow depths roots from vegetation may extend into the pipework feeding from the nutrient rich water supply.

☑ Cleaning and basic inspection

Generally speaking cleaning should be undertaken on a regular basis, either annually or more regularly and at specific times of the year if appropriate. If undertaken regularly cleaning will be a relatively simple task, it will avoid short and long term problems and allow an opportunity to inspect for damage or inherent problems.

Although an annual cleaning schedule is often sufficient, you may want to consider more regular cleaning if you feel any of the following considerations apply to you.

Generally wind blown debris can quickly block any part of your rainwater system. If you are located in an area where plastic bags and the like are regularly blown around, you might consider checking your rainwater system more regularly. Balls often pose a particular problem to guttering systems causing an instant and severe blockage.

Spring is likely to present problems from wind blown blossoms being shed from nearby trees, if you are located near to such trees you may want to consider checking your rainwater system at this time.

Summer brings the most regular and severe short term problems of spillage and flooding. Your rainwater systems will be designed to cope with at least a one in fifty year storm or better, unfortunately and confusingly these intense storms defined as a one in so many year storms now occur much more often as we are all aware. If your rainwater system is not clean, heavy rainfall experienced during the summer months will likely cause problems, which particularly in the case of valley guttering may result in the flooding of your property. Regular checks of your rainwater system are recommended over the summer months, you may want to keep an eye on weather forecasts and schedule cleaning and inspection accordingly.

Long dry periods produce airborne dusts, which without frequent rainfall build up on roof surfaces and within rainwater systems, in many cases this build up is enough to cause a problem when heavy rainfall occurs. Moreover though, heavy rainfall will merely consolidate these dusts in certain problem areas, which will then be dried by a further dry period to create substantial blockages, which then become a cause of problems with a second or subsequent heavy rainfall.

Autumn leaves are an obvious source of problems, if you are located near to deciduous trees you should consider regular cleaning during the leaf fall period.

Winter brings with it freezing conditions, you should be aware that any trapped water can freeze, expand and damage your rainwater system, additionally any small blockage can trap water, which in turn may freeze and become the source of a substantial blockage itself. Issues arising during the winter months usually occur within the guttering only.

Guttering

Generally guttering is quite easily cleaned with either a purposely constructed gutter scoop, garden trowel or gloved hand. Often a gloved hand can be much more effective, but you should ensure the glove is able to withstand sharp glass and discarded syringes which unfortunately are often discarded in such places.

Once the majority of debris is cleared, a hose pipe can be used to make a final clearance and check for leaks.

Avoid using a pressure washer as this will result in debris over near by cars and the like, as well as staining the wall surface, it may damage the seals or joints on the gutter, as well as the paintwork to any fascia board, on valley gutters it will almost certainly end up causing spillage within the building.

Some valley gutters are wide enough to be swept clear, but you must collect the debris not sweep it into the downspout. Often a valley gutter will hold water, this is quite normal, but debris will accumulate in these areas. If this is the case remove the larger debris by hand and sweep away the water into the downspout.

Cages may have been inserted into the outlets to avoid larger debris from entering the downspouts, these will also require cleaning. The use of these cages can be beneficial in many cases, they are excellent at stopping balls entering or blocking the downspout, but can be a problem if they are quickly blocked by falling leaves.

Cleaning guttering should be carried out in a safe manner, in brief you should use scaffolding not ladders and appropriate roof boarding if you need to go onto the roof surface, do not walk in valley guttering. Please refer to the health & safety section for more information.

Downspouts

Downspouts are often forgotten during the cleaning and inspection of your rainwater system. Although they are less frequently the cause of problems there is little point ensuring clean guttering if the water it collects is unable to get away.

Straight downspouts can be cleaned with a hose pipe and drainage rods, however the inclusion of a bend or swan neck will inhibit the use of drainage rods. Generally connecting a spray attachment to your hose pipe will suffice for scheduled cleaning, but may not clear severe blockages.

As a last resort a pressure washer can be used to clear difficult blockages, but prolonged use will damage any joints in the downspout.

Collect any debris washed from the downspout where possible, either directly from the outlet or from the gully beneath.

It is possible to clean downspouts from ground level, however in most cases they will be cleaned from a height. You should ensure you apply the same safety precautions to cleaning your downspouts as you do to clean the gutters.

Cleaning downspouts from valley gutters which are located within a building, requires a slightly different approach. The use of drainage rods and hose pipe is still the way forward, but you will need to clean from both sides. This is achieved by removing the appropriate inspection chamber cover and cleaning upstream, as well as downstream from the gutter itself. Debris from this process should be collected from the inspection chamber. The nearest inspection chamber may be located some distance away and sufficient equipment should be arranged to ensure proper cleaning. Improper cleaning may actually create a blockage that was not there prior to cleaning.

Please refer to the health & safety section before opening inspection chambers.

Underground

Cleaning your underground rainwater system should be part of your general rainwater cleaning schedule, blocked drains may cause much the same effects as blocked gutters and downspouts.

Where the drains are connected to a valley gutter, they may back-up and spill into your property from joints in the downspouts or between the downspout and the guttering. If you are connected to a combined drainage system rainwater may back up and spill from your WC.

Regularly clearing away any debris from the gully grate, will lessen the possibility that the downspout will become blocked, the gully will become full, the underground pipes will become blocked or rainwater will spill into your yard area.

Periodic cleaning of gullies will reduce the frequency that underground pipes become blocked or need scheduled cleaning. Gullies can be cleaned with a purposely manufactured scoop or gloved hand. A gloved hand is more effective, but care should be taken that the glove will protect from sharp glass and syringes which unfortunately are often discarded in such places.

Cleaning underground pipes can be carried out effectively with drainage rods and a hose pipe. Generally speaking pipes should be cleaned upstream and debris collected from each inspection chamber, although it is appreciated this is not always possible. Care should be taken to avoid simply moving a blockage or any debris along into the next section of the system.

Pressure cleaners should be avoided for scheduled cleaning as they damage the joints of the underground pipes leading to long term problems. Even more difficult blockages can usually be cleared using drainage rods, unfortunately most contractors are unwilling to make the effort to do this and will almost always resort to using their pressure cleaning systems for any type of underground cleaning work

General

Poor maintenance of rainwater goods by other tenants can lead to problems for yourselves, ask your neighbours to ensure that their rainwater systems are maintained, if your neighbour persists in not maintaining their own systems, contact your landlords managing agent, he may be able to help.

This applies to all aspects of the rainwater system, but particularly were valley guttering is installed. If you have a joint responsibility with your neighbour to maintain any aspect of the rainwater system, do not assume they will carry it out. If need be, carry the work out yourself and sort the costs out later, while unwelcome it is often significantly less costly than enduring water damage to your fixtures and stock.

During periods of exceptionally high rainfall, even the best maintained systems may be unable cope. Gutters, downspouts and underground pipes may not be able to take the volume of water delivered by storm conditions.

Gutters and downspouts may become full and overflow. Generally with eaves guttering this is less of a problem, effects are likely to be limited to cleaning the wall surface when the rain has stopped. However ensure that if this occurs the water has somewhere to go.

Valley gutters have notches cut into the stop ends, which allow excessive rainwater to spill into the yard area rather than into the building. When this occurs it can lead to anything underneath them being soiled by dirty water washed from the gutters or splashing upward from the ground surface, however unwelcome this may be, do not be tempted to block up these notches, they are the last defence against flooding your property.

On occasions water may even fill the underground drainage system and emerge from your gullies and inspection chambers as well as those on the highway. Keep your yard tidy and do not block the path any excess water may take. If your yard slopes toward your building ensure water can escape and not run into your building, If you have a narrow pathway or fire escape adjoining your building, ensure it is not blocked so as to become a source of rising water likely to make its way into your building. Brickwork is not a barrier against standing water and will allow such water to pass into your building in a relatively short time.

☑ Repairing and replacing

Generally works to your rainwater systems will fall into three categories:

Basic repairs can be undertaken by yourself or your staff
Some replacement and more involved repairs will require a general builder
Your landlord will insist other works are carried out by approved specialist contractors.

The distinction between that which can be carried out yourselves and that which requires a general builder will depend on the level of skill and knowledge held by yourself and your staff.

Guttering

The majority of problems with your guttering will relate to **minor leakage** through deteriorating or damaged joints. Solutions involve either a temporary repair or a replacement of the seal or jointing material.

uPVC gutters may leak simply because a joint has become unclipped or a rubber seal has worked its way from its proper position because of continual expansion and contraction. This will be solved by repositioning the seal or refitting the clip.

If the clip has broken or the rubber seal become perished, each will require replacement. The type and make of guttering should be identified and the correct replacement part obtained. Care should be taken when refitting parts, uPVC guttering may have become brittle and excessive flexing can cause further damage.

Galvanised gutters rarely leak, but if this occurs a temporary repair should be considered, any other work to either galvanised eaves or valley guttering should only be undertaken by a specialised contractor approved by the landlord.

Temporary repairs include the application of a sealing tape such as a flashband or denso tape.

Fibre cement gutters are fairly prone to leakage when used as eaves guttering, but fortunately this is not the case when used as valley guttering. This is due to various effects of location, profile, quality and jointing material.

Temporary repairs include the application of a sealing tape such as a flashband or denso tape.

Temporary repairs are the only repairs you should consider where fibre cement valley guttering is concerned, any other work should only be undertaken by a specialised contractor approved by the landlord.

Where leaks have occurred in fibre cement eaves guttering, other options to a temporary repair might be considered.

With some jointing materials, shrinkage may occur which results in the break-down of the water-tight seal. Where that jointing material is flexible and non hardening, simply applying a small tightening turn to the guttering bolt may cure the leak. However do not try this to non flexible, harder materials such as old putty, you will cause the gutter to break.

If the joint needs to be remade, you will need to dismantle the joint, remove the old jointing material, clean and prime the surfaces to come into contact, re-apply a new jointing compound and re-fix and tighten the guttering bolt, trowel finish the internal surfaces and trim excess compound externally with a trowel.

The recommended jointing compound is bituminous fibre mastic, however this material is slightly less viscous than alternative materials and the gutter bolt should be retightened and any further excess material removed after about 24 hours.

Do not use silicone, even though it may have been used previously. If silicone has previously been used, you may find it difficult to separate the two parts without breaking either or both parts.

Where the problem relates to **broken guttering**, the proper repair would be one of replacement.

uPVC guttering should be identified by type and make and the correct replacement parts obtained. If a correct replacement cannot be secured a suitable alternative should be sought, if a suitable alternative does not provide a match of either profile or colour then the entire guttering system should be replaced.

Galvanised steel guttering should only be replaced by a specialised contractor approved by the landlord.

Fibre cement valley guttering should only be replaced by a specialised contractor approved by the landlord.

When replacing the eaves guttering or parts thereof, you may want to be aware of several issues which might affect your approach to the works.

Many, but not all installations of fibre cement guttering are made with supporting straps and not gutter brackets. Straps are fixed to the top of a wooden wall plate prior to the roof sheets being fixed. In order to successfully replace a strap it will be necessary not only to remove the outer roofing sheet, but also the inner sheet. You may want to consider having a one-off replacement wall bracket manufactured, but you will need to ensure the distance of the supported gutter from the wall is maintained.

The majority of Fibre cement eaves gutters were installed when the standard length of each section was six feet, whereas replacement sections are now manufactured at two metres, which unfortunately is about 1 ¼" shorter than the original. When planning replacement guttering you will need to allow one extra section. Additionally it would not be practical to insert a small section of gutter and the length of the replacement gutters should be adjusted to evenly distribute the new gutter within the space left after removal of the original section(s). Depending on how many sections you are replacing you will need to adjust the positions and numbers of the brackets or straps.

In general fibre cement guttering is more expensive than uPVC guttering even without the above considerations, if a number of sections need replacing then you may wish to consider whether a complete replacement in uPVC is more appropriate. Other factors will play apart in this decision and may in the end rule it out, in particular if your property is one of many in a terrace, it would not be practical without considerable agreement between you and your neighbours.

Downspouts.

Repair of downspouts is in the majority is not appropriate, replacement of either uPVC or fibre cement downspout is relatively straight forward and can be accomplished by a general builder or someone with a reasonable knowledge of what is required.

General principals to be followed should be the acquisition of matching materials. uPVC is a practical replacement for fibre cement and vice-versa, but care should be taken that replacement materials fit the existing systems. Flexible rubber jointing collars are available in a wide range of sizes where problems of this nature occur.

Underground.

Underground repairs and replacements should only be carried out by a specialised contractor approved by the landlord.

Health & Safety

Throughout the works described within this publication there are Health & Safety issues for yourself, your staff, the public and any contractors employed to carry out these works.

This is a general guide to health and safety, it should not be relied upon and if you are unsure about any of your responsibilities you should seek professional advice.

Working at height

Generally speaking you should be aware of and implement 'The Work at Height Regulations 2005' as well as 'The Management of Health and Safety at Work Regulations'

The later generally requires you to carry out a risk assessment and properly plan the works in a safe manner together with contingencies for possible emergencies.

In view of the nature of the works, working at height is unavoidable and as such there is a liability to implement anything that is reasonably practical to prevent a fall and to further minimise the consequence of any fall that might occur.

The main points you should consider:

- ✓ When working at height no-one should be on their own at any time.
- ✓ All workers involved at height should be trained and competent
- ✓ Ladders (with few exceptions) should be used for access only.
- ✓ Platforms should be used for working from.
- ✓ Workers should not climb onto the roof.
- ✓ When working on roofs suitable platforms, coverings and hand rails must be fitted.
- ✓ Ensure that no-one can be injured by falling objects
- ✓ Prepare to stop work if weather conditions make the work unsafe

✓When working at height no-one should be on their own at any time.

Besides being a common sense approach to working at heights, ensuring that no-one works on their own at any time and that access to call emergency services is available if it becomes necessary, will fulfil your obligation to plan for emergencies.

✓All workers involved at height should be trained and competent.

Workers should be adequately trained and competent to work at height, safely use and properly assemble any safety equipment in use. Training should include how to minimise injury from a fall and what to do in an emergency. Any trainees should be supervised by such a competent person at all times.

✓Ladders (with few exceptions) should be used for access only.

Generally speaking ladders under proper conditions can be used to work from, amongst other criteria if the length of the proposed work if less than 15-30 minutes a ladder can be used. In our opinion this is far too long and unless a ladder is used for simply inspecting your gutters or removing a tennis ball from the top of a downspout, a properly erected platform should be used instead wherever it is practical.

When using a ladder ensure it is placed on a firm, flat and non-slip surface, inclined at an angle of 1 in 4 and where practical, secured firmly near to the top. Do not use the top 3-4 rungs of the ladder to ensure your hand-hold.

Before using any ladder inspect it, do not use a wooden ladder if it has paint on it. Use the ladder only if it is in good condition and every rung is properly fixed to the stiles.

Where a ladder is used for access, it should not be secured in such a way as a worker needs to climb over the top of the ladder or any other safety railings to step onto a working platform. Do not carry heavy items up the ladder.

Do not lean ladders against guttering, use a properly constructed stand-off device. If it does become necessary to work from the ladder, keep one hand to hold the ladder, place both feet on the same rung, keep your centre of gravity between the stiles of the ladder, always face the work you are doing and take breaks every 15 minutes.

✓Platforms should be used for working from.

Where practical use a platform to work from, in the majority of cases a working height of 6-8 feet will suffice for gutter maintenance, the time taken to erect a platform to this height will be more than repaid through increased productivity. At greater working height, not only will the need for a platform increase, but so will the return on time invested in its erection.

When hiring a platform ensure it is delivered with all the required parts as well as a copy of its safety inspection in accordance with 'The Work at Height Regulations 2005'

Ensure the platform is erected according to the manufacturers instructions, and that a further check is carried out once it is in position and before it is used to ensure it is correctly assembled, safe to use and at an appropriate height to undertake the work.

Ensure all hand rails and toe-boards are assembled properly, if out-riggers are required make sure they are properly fixed. If a platform is to be sited on uneven ground, ensure the platform feet are adjusted to ensure the platform is level, do not use blocks and bricks for this purpose,

When moving a platform, do not do so with anyone or anything upon or within the platform, if necessary reduce the platform below 13 feet before moving it, do not manoeuvre the platform near power lines. Once it has been repositioned, check that the working height is still appropriate for the new location and the platform is still stable, reassembling the platform or adjusting the feet if necessary.

Do not fix any sheeting, waste chutes or hoist equipment to the platform and do not overload it.

Take the platform down at the end of each working day, you should also fix warning notices to the platform and remove any removable access if you are going to leave it unattended at anytime while it is erected.

Platforms should generally be cordoned off so staff and public cannot walk into them.

Hard hats should be worn while working with platforms.

✓Workers should not climb onto the roof.

Unless the work involves work to, or the inspection of valley guttering there will be no need to climb onto the roof surfaces, under these circumstances no-one should do so and workers should be instructed to that effect.

✓When working on roofs suitable platforms, coverings and hand rails must be fitted.

Work on roof surfaces should only be carried out by competent, trained contractors, Generally we do not expect tenants to have the required level of competence or training and would expect them to employ specialist contractors for such work.

In order to ensure the contractors are carrying out the work safely and in accordance with regulations the following limited guidance is provided,

Workers should never walk across fibre cement roofs, solid roofs may be walked on but precautions are necessary if this is the case. Unless absolutely sure of the construction and condition of the roof, it should be regarded as fragile.

Fragile roofs should generally be covered by suitable coverings or access boards fitted with handrails on both sides. It should be noted that it is not acceptable to leapfrog these boards by repeatedly placing the same two boards one in front of the other.

Difficulties arise when working on valley gutters because of the orientation of the access required. Specialised access boarding is available, but this usually covers the gutter where work is intended. If the section of guttering where work is to take place is some way along the roof structure, this type of boarding can be utilised, but where the work is to be carried out a different approach has to be taken.

The problem to overcome is that access boarding should span at least 3 purlins, (about 10 feet) but purlins are aligned in the same direction as the access board will need to be laid for the purposes of progressing access along the valley gutter.

This can be overcome by positioning scaffolding poles of 10 feet or more at regular intervals in the direction of the slope of the roof and fixing the access boarding across them. Handrails will prevent any access from the boards onto the roof. Access to the roof from ground level can be provided by a secure ladder, but a platform may be more appropriate.

Where the roof is of solid construction boarding can be omitted, but a physical barrier needs to be installed to prevent access to skylights, these barriers should be a minimum of 6 feet away from these hazards. Additionally handrails will need to be provided at the ends of the roof where access to the roof has been gained.

✓Ensure that no-one can be injured by falling objects

Do not throw any objects from the roof, a platform or a ladder, however to ensure against injury to the public or other staff from unintended falling objects a cordon should be erected around the work area, workers within the cordon should wear hard hats.

✓Prepare to stop work if weather conditions make the work unsafe

Wind and rain will make working at heights unsafe, in such circumstances provision should be made to stop work on short notice and be prepared to dismantle any platforms and take down any ladders leaving the site in a safe condition.

Hazards from materials,

Take note and implement any manufacturers safety precautions when using sealants.

Guttering and downspouts may contain **asbestos**, it is more often than not impossible to tell the difference between fibre cement containing asbestos and that which does not. When working with fibre cement, unless you are absolutely sure it does not, regard it as containing asbestos.

In comparison to other asbestos products fibre cement presents a much lower risk, you do not need a licence to work with it, but precautions as set out in the 'Control of Asbestos at Work Regulations 2002' should be taken when you do. As a tenant who has full responsibility for the repair and maintenance of your property, you should already be familiar with these regulations and your duties under s4 of that act.

Any workers that will come into contact with asbestos will need to be trained and competent, you will need to advise any member of staff or contractor working on your premises of the location and the condition of any asbestos.

Use a disposable FFP3 mask and carry out the work in a manner that will cause as little dust as possible, dismantle any guttering in full pieces, do not use power tools to work on or around asbestos, dampen any surfaces that will be worked on, this applies to sweeping of guttering etc.

When cleaning guttering prior to the application of sealant, use a wet cleaning process such as a biocide, never use a wire brush.

After completion of any works, wash hands and clothing as soon as possible, dispose of all masks used. Disposal of any waste materials should be achieved by taking the waste in a suitable container to the nearest site authorised to accept asbestos waste.

Working below ground.

It is assumed that entry to the inspection chamber will not be necessary for the regular maintenance of rainwater systems and that any manhole will be less than 3 feet in depth.

Even so, before removing the cover of any inspection chamber, cordon it off to a distance of at least 6 feet and re-cover the chamber with either the cover or suitable boarding if access is not immediately needed, this includes a visit to your vehicle for tools or any other such short period.