

Building Products

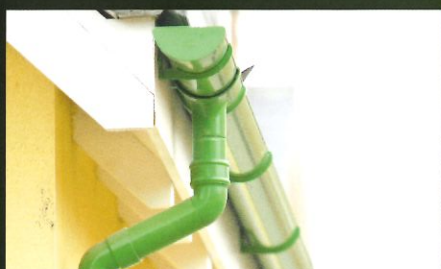
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DESIGN / INNOVATE / SPECIFY

Aluminium Rainwater Solutions to suit all styles of property



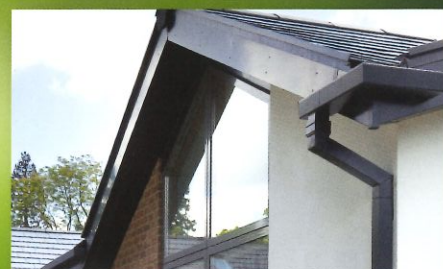
evolve

- As easy to install as PVC
- Industry leading flow rates reducing number of downpipes required
- Cost effective Heritage Black finish emulates appearance of cast iron



traditional

- Suitable for listed buildings and conservation areas
- Ideal for replacement of old cast iron system or reflect traditional styling of a new building
- Manufactured to original British Standard cast iron dimensions (BS 8530)



aligator

- Sleek and modern solution for rainwater disposal
- Snap fit boltless jointing systems reduces installation times by up to 40% compared to traditional bolted systems
- Manufactured using marine grade aluminium to withstand corrosion even in the harshest of environments



50-year functional life expectancy with minimal maintenance



LOW MAINTENANCE
Highly corrosion resistant



SUSTAINABLE
Infinitely recyclable

Available in 19 standard colours

MARKET LEADING TECHNICAL SUPPORT



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ALUTEC
ALUMINIUM RAINWATER SYSTEMS



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QUICK BRICKS
Saving time with factory-produced components

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LESS IS MORE
Maximising space and functionality in the UK bathroom

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DYNAMIC DUO
Why MMC and timber frame make the perfect couple

Liquid benefits

Mike Dunn, structural waterproofing specialist, **Triton Systems**, explores the advantages of liquid applied waterproofing for terraces, decks, podiums and balconies.

The design of structures with exposed terrace decks, green roofs and podiums requires care when specifying the external waterproofing. In the past many such substrates have not been given appropriate consideration, either to the build-up, i.e. green roof requirements, or insulation and screed depths, and how these come together to offer step-free thresholds or termination at parapets or rooflights.

Unlike internal basement waterproofing where it is usually possible and very much encouraged to include two forms (a combined system) of protection, a roof or terrace can rarely be treated with this strategy particularly if it already exists. Therefore the method and materials chosen must be as reliable as possible, dealing with the issues of substrate stability and overcoming the risk of defects by adopting a seamless multi-coat approach.

Liquid applied waterproof coatings offer distinct advantages in terms of reliability and detailing when compared to traditional sheet applied bonded or torch-on membranes. The key features and benefits of these coatings include their ease of seamless application to uneven, undulating or awkwardly shaped substrates, and how detailing to corners, upstands, rooflights, pipe penetrations, drainage gullies and terminations is straightforward and free of joints, overlaps or junctions. All of these benefits reduce the risk of defects that might occur during the application process.

The inclusion of chopped strand glass fibre or other reinforcing textile makes the coating layer robust and controls the application thickness. The optimum film build-up is therefore

achieved and allows the coating to fulfil its full performance capability. The inclusion of the reinforcing layer also reduces the chance of substrate cracking breaking through the membrane and, in some cases, can replace a root barrier as a separate layer.

UV resistance: many liquid applied flexible polymer coatings are resistant to UV degradation and as such can be left exposed to the weather. In general, polyurethane or PMMA based coatings are the most resistant. The inclusion of a fine aggregate dressing and a clear (aliphatic) sealer coat facilitates walkways for foot traffic.

Green roof

Any waterproofing layer used within a green roof build-up must be resistant to the compressive forces created by the insulation, drainage and reservoir layer, soil, retained water and planting laid on top. Also it must be capable of coping long term with a permanently wet environment.

Substrate requirements

Some flexible polyurethane coatings can be applied to existing roofing materials to upgrade and renovate without necessarily stripping off the original layers (if suitable). Where other types of roof or terrace already

exist, the main criteria are the checking of falls and the preparation of the substrate. Problems with podium waterproofing are often traced back to a lack of falls toward drain outlets or the edges of the deck. This has created problems with trapped water lying against insufficiently protected threshold upstands or the building line which causes leaking into the building. The correct detailing of the waterproofing at the building line is essential for the delivery of a robust waterproof solution. As in other types

of waterproofing, continuity of protection is essential, in these circumstances the waterproof coating should link with wall damp-proof course (DPC) and cavity tray.

In a new-build situation this means dressing the

coating across the wall cavity and bringing it up the face of the inner skin. On existing structures, the waterproofing will extend up to the DPC line. Substrate preparation can encompass the removal of old, loose and damaged bitumen coatings or sheet materials and poor or damaged concrete or screed. If the substrate does not run to a desired fall, the use of a screed, which also provides a good, sound base for the coating, may prove to be essential. This particularly applies to decks formed using block and beam method where the gaps between the components can seriously hamper the formation of a uniform and complete membrane layer.

In conclusion, external waterproofing places very high demands on the material to be used. Often it will be the only line of defence and when part of a paved or green roof specification will not be easily accessible for repair in the future. Therefore the use of a seamless, flexible and elastomeric liquid applied coating system offers the specifier a reliable and robust solution. Liquid applied coatings are adaptable to both new and existing waterproofing projects, offering the specification flexibility required to solve problems. ●

“Liquid applied waterproof coatings offer distinct advantages in terms of reliability and detailing”

The technically difficult waterproofing of a flat roof can be achieved with a liquid applied system



www.tritonsystems.co.uk