

HARMER

DRAINAGE SYSTEMS

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April 2011

Harmer Shower Drains



Maintaining a Flow of Information

www.alumascdrainage.co.uk

The Alumasc drainage website provides a wealth of information on all aspects of Harmer Shower Drains and compatible products. Also included are FAQs, file downloads for NBS specification clauses, COSHH information, a CAD library, and much more.



Technical Support

Alumasc drainage products are backed-up by comprehensive technical literature and by hands-on project support starting with technical and design advice, and extending through site installation to recommendation of appropriate maintenance regimes. Implementation is led by the Alumasc Drainage Manager appointed to the project.

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Alumasc - An Introduction

Alumasc Exterior Building Products is part of the Alumasc Group plc. The Group has over 800 employees, generating turnover of around £110 million. The aim is to focus on high quality, environmentally responsible building products within the construction arena in order to deliver first class customer service, long-term solutions and lasting relationships.

About Alumasc

Alumasc Exterior Building Products (Alumasc) is a leading supplier of premium products and systems for specification, generating an annual turnover in excess of £26 million. The Company has been a major force in the UK construction industry for over 30 years, during which time Alumasc products and systems have been used on some of Europe's most prestigious buildings.

Alumasc ensures a high quality of product specification and installation, delivering risk-free, zero-defect solutions. The Company's commitment to making ongoing improvements is demonstrated through its accreditation to the ISO 14001: 2004 Environmental Management Standard.

By pursuing sustainable building products, systems and manufacturing processes, Alumasc aims to offer specifiers a wide choice of design alternatives, with long-term peace of mind. Recognised brands such as Harmer, Apex, Derbigum, ZinCo, Hydrotech, Firestone, Armaseam and M.R., together with Alumasc's well-known architectural rainwater range have been independently certified, and in some cases have a lifespan in excess of 60 years or for the life of the building.

Alumasc brands are divided into distinct but interrelated groups:

- Rainwater
- Drainage
- Waterproofing
- Façades

Services and Support

Alumasc leads the way in the field of construction product and system manufacture and the delivery of proven solutions. This success is founded on four key areas:

Premium Products

A constantly evolving range of quality proven, world class products and systems, fully accredited to UK, European and North American Standards.

Technical Support

Comprehensive data for specification and use of all products and systems is available in published form, and on the company website. This is backed up by proactive support on a project basis, led by specialist area managers and using the latest CAD and calculation technology.

Approved Stockists

Delivery of Alumasc products is controlled through a network of approved suppliers. This allows close control over all matters to ensure first class customer service.

Warranties

All Alumasc products come with a company backed assurance as to their quality, life expectancy and suitability for purpose ensuring specifiers and end users long-term peace of mind.



Quality & Sustainability

In addition to complying with environmental legislation, Alumasc is committed to developing its own measures to limit the adverse effects of its activities on the environment. To this end, Alumasc operates an environmental policy that fully integrates all aspects of company activities.



Quality

Alumasc operates a quality assurance management system which is independently audited to BS EN ISO 9001: 2000. Alumasc extends this quality management to its network of Stockists, for single source accountability and peace of mind.

Individual products and systems are certified by the British Board of Agrément.



ISO 9001: 2000

The ISO 9001 framework governs the management of many aspects of Alumasc support services, manufacturing and transport operations.

Alumasc is committed to continual development and, along with the ISO 14001: 2004 Environmental Management Standard, ISO 9001 provides the tools to monitor and feed back information from all areas of the business to ensure a first class service is maintained.

Sustainability

Alumasc actively pursues sustainability in the full range of products and systems the company offers through its accreditation to the ISO 14001: 2004 Environmental Management Standard. Alumasc, its partners and its suppliers are committed to putting consideration for the built and wider environment at the core of all aspects of their current business and future development.

ISO 14001: 2004

Alumasc's manufacturing sites at St Helens and Burton Latimer are independently audited to the ISO 14001: 2004 Environmental Management Standard.

Alumasc is committed to achieving improvements, not only as a good neighbour to the surroundings of their manufacturing plants, but in the responsible sourcing of raw materials and monitoring of the impact on the environment as a whole.

Development

Alumasc has within its portfolio a bedrock of environmentally sound products.

Development of these existing products and good practices is central to the success of Alumasc and key to the way in which it provides its proven solutions. Equally, the basis for any new and innovative development is grounded in the knowledge and experience Alumasc has of its core manufacturing materials.

BRE Green Guide to Specification

Ratings for building materials given in the BRE Green Guide to Specification allow designers to choose those products or construction methods with the least environmental impact.

High quality, long lasting products reduce the significant environmental and monetary cost of replacement during service life. Alumasc goods are able to contribute fully to achieving BREEAM credits for responsible sourcing of materials and as part of an overall water management scheme.

Harmer Shower Drains - Overview

Alumasc has been providing leading edge drainage solutions for over 25 years, combining quality materials and finishes with meticulous attention to detail. The Harmer Shower range offers an uncompromising blend of imaginative design, high performance materials and innovative engineering.



Introduction

Today's contemporary shower and wet rooms have set new standards for quality, versatility and performance across the whole spectrum of building sectors.

Alumasc has met this ever-critical demand with the introduction of the new Harmer range of aluminium and ABS antimicrobial trapped shower drains.

Specifiers, installers and users can be confident that the Harmer range, combining elegance with advanced engineering, will successfully manage the high flow output of modern showers.

Enhanced design features also bring many other benefits, including corrosion resistance, durability, and attractive finishes that are tough and hygienic.

The wide choice of caps and grates available in stainless steel, nickel bronze, chromium plate and polyester powder coated aluminium, will complement and enhance any shower or wet room design.

With caps and grates located fully flush with adjacent tiled or flexible sheet floor finishes, thereby removing the need for conventional shower trays, the Harmer range of shower drains is ideal for achieving a sleek, contemporary style as well as maximising access for people with impaired mobility.

If minimising inherent complexity is the hallmark of sophisticated design, then the process of assembling and installing Harmer Shower Drains is simplicity itself.

Harmer Shower Drains - Overview

Harmer Shower Drains offer great flexibility of choice. The standard range of combinations is extremely versatile and is ideal for many different applications.

Domestic Use

Harmer Shower Drains deliver fast and efficient drainage capable of managing high output flow rates within suspended concrete and timber floor construction. The extensive range of high quality gulley tops complements and enhances the interior finishes of any contemporary shower or wet room, be it a tiled or modern sheet vinyl floor.

Commercial Use

Durability and ease of maintenance are key considerations when specifying high-use drainage in buildings such as hotels, MoD establishments, school and leisure facilities. The Harmer Shower range offers accessibility and ease of maintenance, along with highly engineered aluminium, stainless steel and nickel bronze caps and grates that provide attractive finishes and long life for the most demanding applications.

Healthcare Use

Cleanliness and hygiene are paramount in the NHS, nursing and residential care sectors. The choice of Harmer Shower Drains incorporating the use of antimicrobials caters for these needs, following extensive research into the cleaning and maintenance regimes of such environments. The unobtrusive water ways and unique cap design allow maximum flow, with minimal risk of dirt build-up. Drain blockages are easily dealt with due to a removable trap. In addition, the Harmer Shower Drain range, with its wide choice of materials and finishes, can be tailored to the cost parameters of the build.

Local Authority and Housing Association Use

Level access showers provide a safe and attractive solution for people of all ages and mobilities. The Lifetime Homes Standard sets out key design criteria for the provision of level access wet rooms. The Harmer Shower ABS range incorporating antimicrobial compounds is the ideal choice for practical, cost effective and attractive solutions for these installations.

Secure Accommodation Use

For those situations that require high security, such as prisons and other secure units, Harmer Shower Drains are available with a security fixing option to prevent tampering and the unauthorised removal of caps, grates and traps.



Harmer Shower Drains The Aluminium Range

The premium, high performance Aluminium Shower Drain range,
with BBA approved polyester powder coated drain bodies,
and a choice of attractive caps and grates.



Aluminium Shower Drains - Benefits

Harmer Aluminium Shower Drains are precision engineered to establish the highest possible performance standards for versatility, choice and durability offering architects, specifiers and consultants exceptional benefits.

Compliances

- Harmer Shower Drains fully meet the requirements of BS EN 1253 for general design, flow performance and load testing

High Flow Performance

- In independent tests, flow performances of up to 1.3 litres per second (80 litres per minute) have been recorded

Robust and Secure

- The drain bodies and fittings are lightweight, durable and strong, and when tested in accordance with BS EN 1253, the load class designation is K3, meaning that the drain can withstand a 300 kg vertical load
- Security fixings are also available to prevent unauthorised removal of caps and grates

A Choice of Caps and Grates

- The range of top accessible caps and grates is suitable for both tiled or sheet floor applications
- The range includes powder coated aluminium, chrome-plated aluminium, stainless steel and nickel bronze to co-ordinate and harmonise with the wetroom environment

Low Maintenance and Hygienic

- The easy clean cap design with fast flow 50mm trap affords unrestricted waterways, reduced hair snagging and dirt build up
- The top access trap, for use with both the vertical and horizontal drain bodies, is simple to remove and replace

Easy and Quick to Install

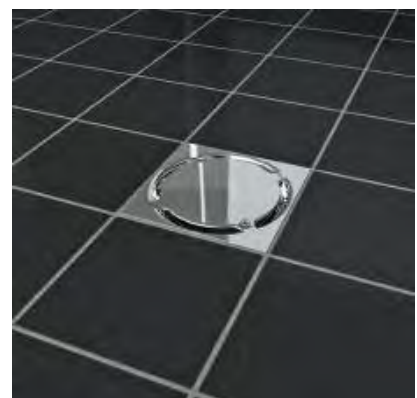
- Compact vertical and horizontal drain bodies install into timber and concrete floor construction
- Drain bodies easily connect to other materials, including the Harmer SML lightweight cast iron soil and waste system, HDPE, PVC-U and polypropylene
- Fully compatible with UK pipe sizes, where 43mm (1½"), 56mm (2") and 110mm (4") connections are required

Value for Money

- High-pressure die-cast drain bodies are manufactured from LM6 aluminium alloy which has excellent resistance to corrosion under both atmospheric and marine conditions
- Drain bodies are polyester powder coated to BBA-approved standard to further increase protection and extend product life

Sustainable

- Aluminium is 100% recyclable making it a cost effective and sustainable material
- End of life Harmer Shower Drains can be recast into new aluminium products



Aluminium Shower Drains - Product Range Summary

The Harmer Aluminium Shower Drain range offers a mix of precision engineered metal components chosen for their durability and aesthetic characteristics. The range is available with a choice of vertical or horizontal outlets and is suitable for both tiled and flexible sheet flooring applications.

Drain Bodies

Use of materials and smooth flow ensures reliable installation and service life. Ideal for all types of solid and suspended concrete floor construction including installations where shallow invert pipework is essential, e.g. joisted timber floor construction.

- Top accessible for quick and easy maintenance
- 56mm (2") pipe outlet for increased flow performance. Proprietary fittings adapt to 43mm (1 1/2") pipework
- Connections to cast iron, HDPE and most PVC-U and Polypropylene plastic pipes and fittings
- Vertical Drain Bodies push fit into 110mm ring seal pipe sockets
- Horizontal Drain Bodies have an integral fall in the sump that eliminates silt collection
- All Shower Drains are supplied with a removable 50mm smooth flow foul air trap

Harmer Level Access Former

Installation of Harmer Shower Drains is made easier with preformed level access formers designed to simplify the process of creating drainage falls in joisted floor construction. Ideal for use with tiled and flexible sheet flooring.

Benefits of Harmer Level Access Former:

- No need for flooring overlay
- No firrings on joists
- No alterations to joists
- No trip risk from stepped threshold
- No bathroom door alteration

Harmer Level Access Formers are made from 22mm thick, high quality birch plywood in a variety of sizes and outlet positions. They are load safe to 380 kg and very easy to fit.

For further advice about this product, contact Alumasc Technical Services on 01744 648400.



Vertical Drain Body

Horizontal Drain Body

Aluminium Shower Drains - Product Range Summary

Harmer Shower Drains are available with an extensive choice of caps and grates in a variety of metals and finishes for complete co-ordination with tiled or flexible sheet flooring, adding quality and style to the wetroom experience.

Flexible Sheet Flooring

Caps, Grates and Clamps

The cap, grate and clamp components are for sheet flooring applications and combine with both vertical and horizontal outlet bodies.

Load Class K3 to BS EN 1253 applies.

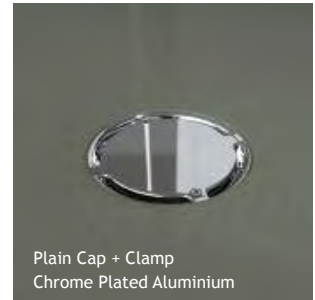
The components available are:

- Pebble Cap - in White polyester powder coated Aluminium (standard); also available in a choice of colours on request
- Plain Cap - in Chrome Plated Aluminium, Stainless Steel, Nickel Bronze
- Star Grate - in Stainless Steel, Nickel Bronze
- Concentric Ring Grate - in Stainless Steel, Nickel Bronze
- The Clamps match the colours and materials of the Caps and Grates

The combinations of components and materials offered by Alumasc are shown in the tables on pages 14 and 18.



Pebble Cap + Clamp
White Aluminium



Plain Cap + Clamp
Chrome Plated Aluminium



Star Grate + Clamp
Stainless Steel



Concentric Ring Grate + Clamp
Nickel Bronze

Tiled Floors

Caps, Grates and Tile Frames

The cap, grate and tile frame components are for tiled floor applications and combine with both vertical and horizontal outlet bodies. The tile frames are available in sizes 150mm x 150mm or 200mm x 200mm.

Load Class K3 to BS EN 1253 applies.

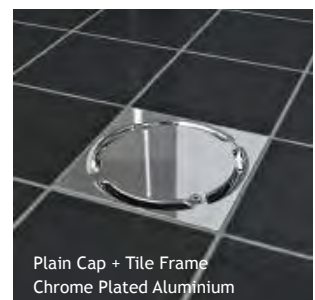
The components available are:

- Pebble Cap - in White polyester powder coated Aluminium (standard), also available in a choice of colours on request
- Plain Cap - in Chrome Plated Aluminium, Stainless Steel, Nickel Bronze
- Star Grate - in Stainless Steel, Nickel Bronze
- Concentric Ring Grate - in Stainless Steel, Nickel Bronze
- The Tile Frames match the colours and materials of the Caps and Grates

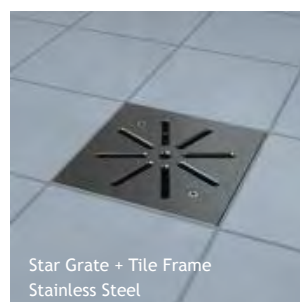
The combinations of components and materials offered by Alumasc are shown in the tables on pages 15 and 19.



Pebble Cap + Tile Frame
White Aluminium



Plain Cap + Tile Frame
Chrome Plated Aluminium

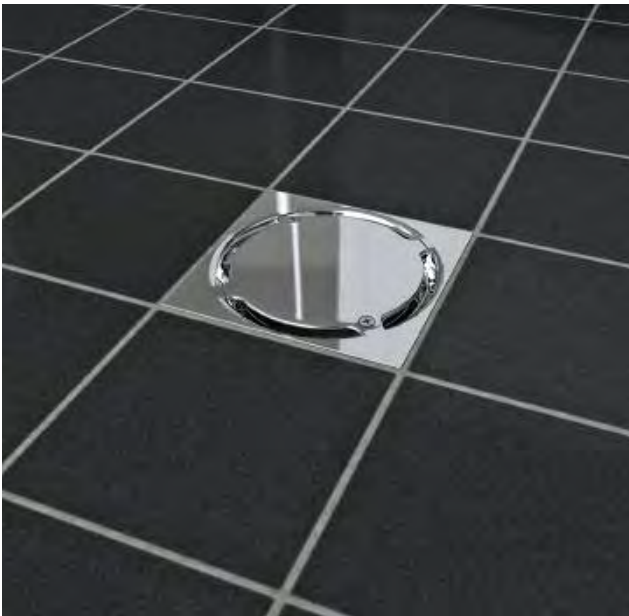


Star Grate + Tile Frame
Stainless Steel



Concentric Ring Grate + Tile Frame
Nickel Bronze

Aluminium Shower Drains - Vertical Outlet



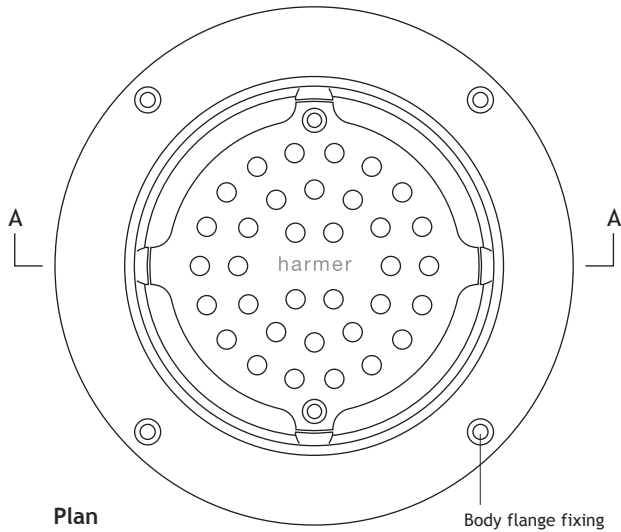
Vertical Outlet Components

- 1 Stainless Steel screws (provided) for securing Caps and Grates. Anti-tamper security fixings are also available
- 2 White polyester powder coated Aluminium Pebble Cap; also available in Plain Chrome, Stainless Steel or Nickel Bronze
- 3 Nickel Bronze Concentric Ring Grate; also available in Stainless Steel
- 4 Stainless Steel Star Grate; also available in Nickel Bronze
- 5 150mm x 150mm Tile Frame (also 200mm x 200mm) to match Cap and Grate selections
- 6 Stainless Steel clamp screws (provided) for securing Clamp to Drain Body
- 7 Clamp for securing flexible sheet flooring or under-tile waterproof membrane to match Cap and Grate selections
- 8 50mm Foul Air Trap push fits into Drain Body. Crossbar allows easy removal
- 9 Vertical Drain Body with 56mm (2") outlet. Main part of Drain Body also push-fits into 110mm ring seal socket

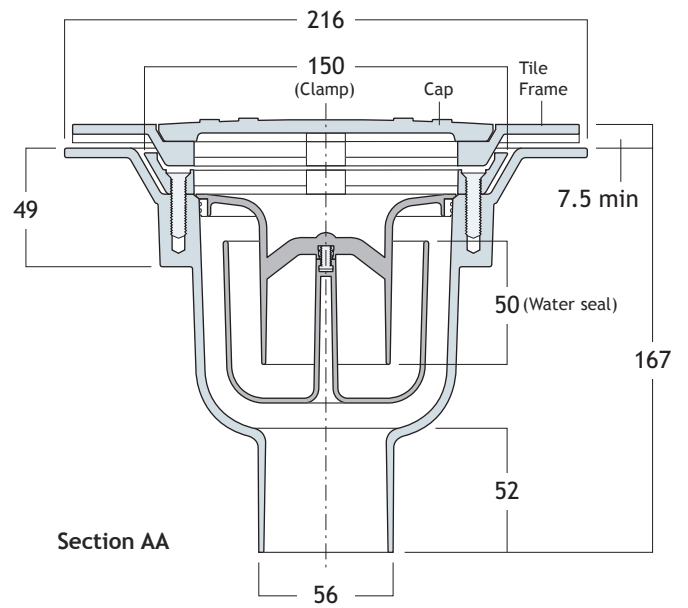
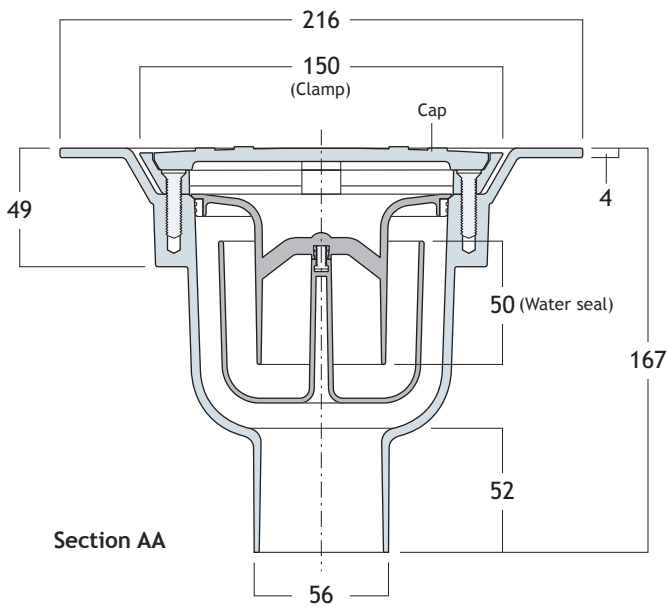
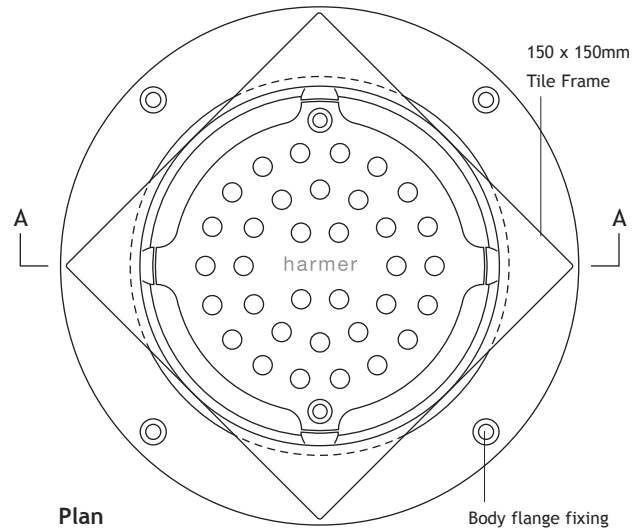


Aluminium Shower Drains - Vertical Outlet

**Drain Body Dimensions
(Flexible Sheet Flooring)**



**Drain Body Dimensions
(Tiled Flooring)**



Note: All dimensions are shown in millimetres

Aluminium Shower Drains - Product Tables

Vertical Outlet Combinations for Flexible Sheet Flooring

Note: Add suffix /LC to product codes if anti-tamper security screws are required

Note: Nickel bronze is a copper-based alloy and may tarnish with time

White PPC Aluminium Clamp and Pebble Cap



Product Code	Flow Rate	Load Class	Weight
AVS/WH	1.3 l/s	K3	1.1 kg

Note: Also available in a choice of colours on request. Surcharges may apply.

Chrome Plated Aluminium Clamp and Plain Cap



Product Code	Flow Rate	Load Class	Weight
AVS/CH	1.3 l/s	K3	1.1 kg

Stainless Steel Clamp and Plain Cap



Product Code	Flow Rate	Load Class	Weight
AVS/CS	1.3 l/s	K3	1.7 kg

Nickel Bronze Clamp and Plain Cap



Product Code	Flow Rate	Load Class	Weight
AVS/CN	1.3 l/s	K3	1.7 kg

Stainless Steel Clamp and Star Grate



Product Code	Flow Rate	Load Class	Weight
AVS/SS	0.8 l/s	K3	1.8 kg

Nickel Bronze Clamp and Star Grate



Product Code	Flow Rate	Load Class	Weight
AVS/SN	0.8 l/s	K3	1.8 kg

Stainless Steel Clamp and Concentric Ring Grate



Product Code	Flow Rate	Load Class	Weight
AVS/RS	0.8 l/s	K3	1.6 kg

Nickel Bronze Clamp and Concentric Ring Grate



Product Code	Flow Rate	Load Class	Weight
AVS/RN	0.8 l/s	K3	1.6 kg

Aluminium Shower Drains - Product Tables

Vertical Outlet Combinations for Tiled Flooring

Note: Add suffix /LC to product codes if anti-tamper security screws are required

Note: Nickel bronze is a copper-based alloy and may tarnish with time

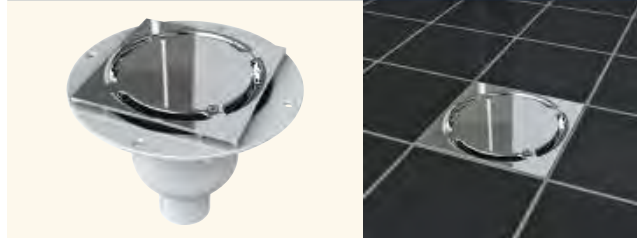
White PPC Aluminium Tile Frame and Pebble Cap



Product Code	Size	Flow Rate	Load Class	Weight
AVS/WH/T15	150x150mm	1.3 l/s	K3	1.3 kg
AVS/WH/T20	200x200mm	1.3 l/s	K3	1.5 kg

Note: Also available in a choice of colours on request. Surcharges may apply.

Chrome Plated Aluminium Tile Frame and Plain Cap



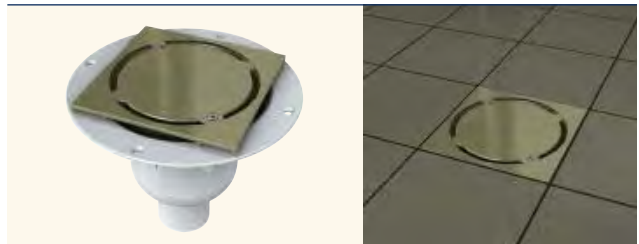
Product Code	Size	Flow Rate	Load Class	Weight
AVS/CH/T15	150x150mm	1.3 l/s	K3	1.3 kg
AVS/CH/T20	200x200mm	1.3 l/s	K3	1.5 kg

Stainless Steel Tile Frame and Plain Cap



Product Code	Size	Flow Rate	Load Class	Weight
AVS/CS/T15	150x150mm	1.3 l/s	K3	2.0 kg
AVS/CS/T20	200x200mm	1.3 l/s	K3	2.7 kg

Nickel Bronze Tile Frame and Plain Cap



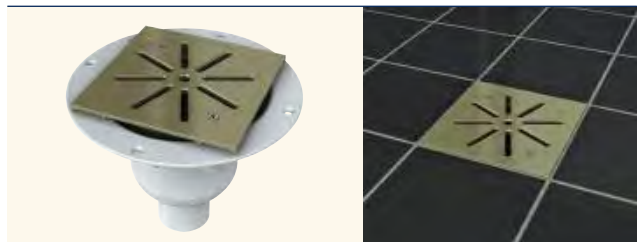
Product Code	Size	Flow Rate	Load Class	Weight
AVS/CN/T15	150x150mm	1.3 l/s	K3	2.0 kg
AVS/CN/T20	200x200mm	1.3 l/s	K3	2.7 kg

Stainless Steel Tile Frame and Star Grate



Product Code	Size	Flow Rate	Load Class	Weight
AVS/SS/T15	150x150mm	0.8 l/s	K3	2.1 kg
AVS/SS/T20	200x200mm	0.8 l/s	K3	2.8 kg

Nickel Bronze Tile Frame and Star Grate



Product Code	Size	Flow Rate	Load Class	Weight
AVS/SN/T15	150x150mm	0.8 l/s	K3	2.1 kg
AVS/SN/T20	200x200mm	0.8 l/s	K3	2.8 kg

Stainless Steel Tile Frame and Concentric Ring Grate



Product Code	Size	Flow Rate	Load Class	Weight
AVS/RS/T15	150x150mm	0.8 l/s	K3	2.0 kg
AVS/RS/T20	200x200mm	0.8 l/s	K3	2.6 kg

Nickel Bronze Tile Frame and Concentric Ring Grate



Product Code	Size	Flow Rate	Load Class	Weight
AVS/RN/T15	150x150mm	0.8 l/s	K3	2.0 kg
AVS/RN/T20	200x200mm	0.8 l/s	K3	2.6 kg

Aluminium Shower Drains - Horizontal Outlet



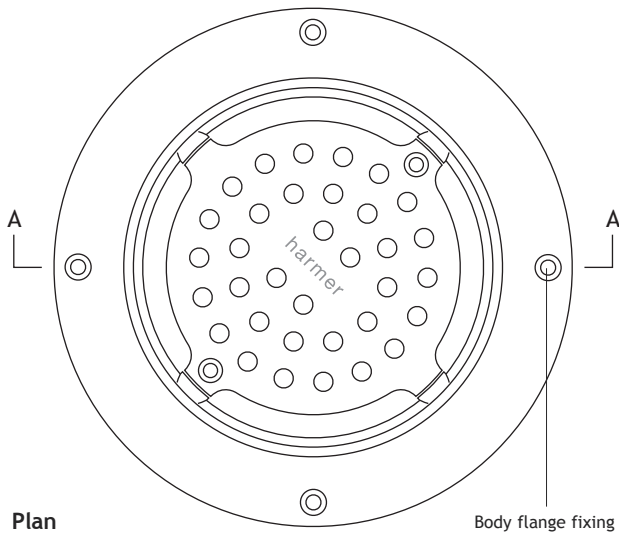
Horizontal Outlet Components



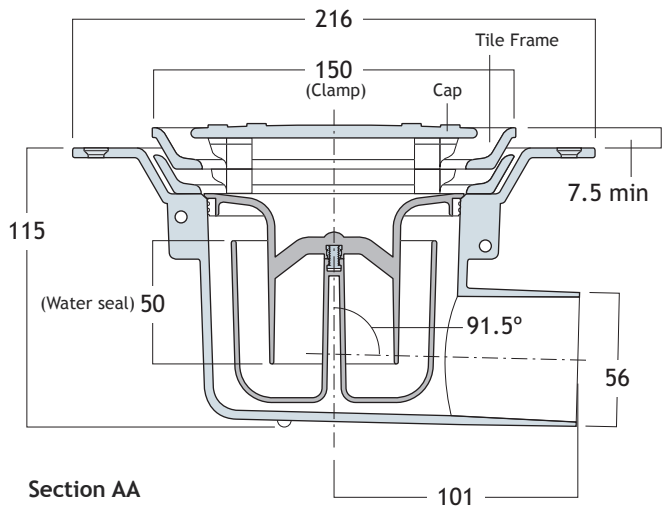
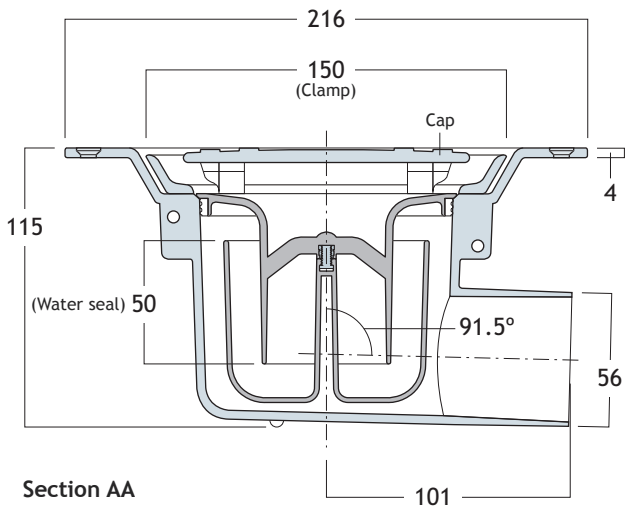
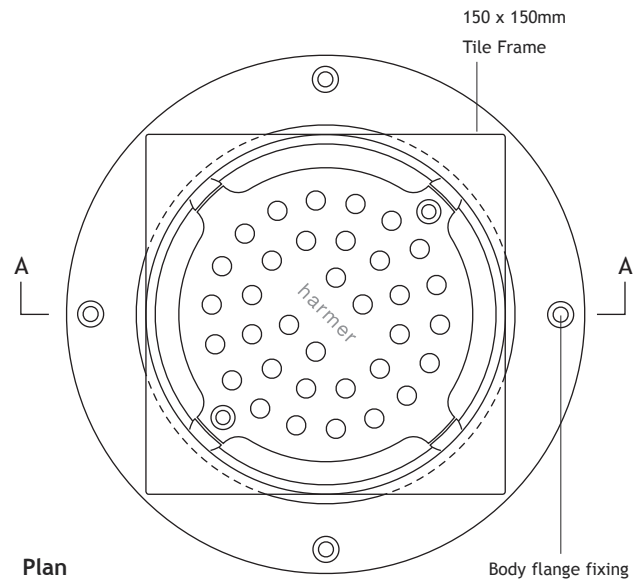
- 1 Stainless Steel screws (provided) for securing Caps and Grates. Anti-tamper security fixings are also available
- 2 White polyester powder coated Aluminium Pebble Cap; also available in Plain Chrome, Stainless Steel or Nickel Bronze
- 3 Nickel Bronze Concentric Ring Grate; also available in Stainless Steel
- 4 Stainless Steel Star Grate; also available in Nickel Bronze
- 5 150mm x 150mm Tile Frame (also 200mm x 200mm) to match Cap and Grate selections
- 6 Stainless Steel clamp screws (provided) for securing Clamp to Drain Body
- 7 Clamp for securing flexible sheet flooring or under-tile waterproof membrane to match Cap and Grate selections
- 8 50mm Foul Air Trap push fits into Drain Body. Crossbar allows easy removal
- 9 Horizontal Drain Body with 56mm (2") outlet

Aluminium Shower Drains - Horizontal Outlet

**Drain Body Dimensions
(Flexible Sheet Flooring)**



**Drain Body Dimensions
(Tiled Flooring)**



Note: All dimensions are shown in millimetres

Aluminium Shower Drains - Product Tables

Horizontal Outlet Combinations for Flexible Sheet Flooring

Note: Add suffix /LC to product codes if anti-tamper security screws are required

Note: Nickel bronze is a copper-based alloy and may tarnish with time

White PPC Aluminium Clamp and Pebble Cap



Product Code	Flow Rate	Load Class	Weight
AHS/WH	0.8 l/s	K3	1.1 kg

Note: Also available in a choice of colours on request. Surcharges may apply.

Chrome Plated Aluminium Clamp and Plain Cap



Product Code	Flow Rate	Load Class	Weight
AHS/CH	0.8 l/s	K3	1.1 kg

Stainless Steel Clamp and Plain Cap



Product Code	Flow Rate	Load Class	Weight
AHS/CS	0.8 l/s	K3	1.7 kg

Nickel Bronze Clamp and Plain Cap



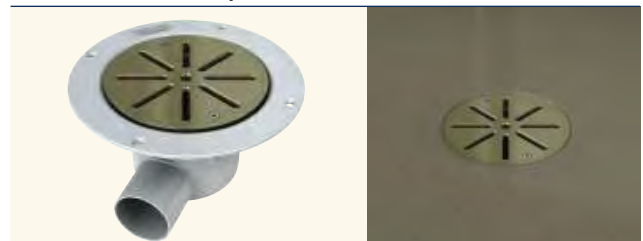
Product Code	Flow Rate	Load Class	Weight
AHS/CN	0.8 l/s	K3	1.7 kg

Stainless Steel Clamp and Star Grate



Product Code	Flow Rate	Load Class	Weight
AHS/SS	0.8 l/s	K3	1.8 kg

Nickel Bronze Clamp and Star Grate



Product Code	Flow Rate	Load Class	Weight
AHS/SN	0.8 l/s	K3	1.8 kg

Stainless Steel Clamp and Concentric Ring Grate



Product Code	Flow Rate	Load Class	Weight
AHS/RS	0.8 l/s	K3	1.6 kg

Nickel Bronze Clamp and Concentric Ring Grate



Product Code	Flow Rate	Load Class	Weight
AHS/RN	0.8 l/s	K3	1.6 kg

Aluminium Shower Drains - Product Tables

Horizontal Outlet Combinations for Tiled Flooring

Note: Add suffix /LC to product codes if anti-tamper security screws are required

Note: Nickel bronze is a copper-based alloy and may tarnish with time

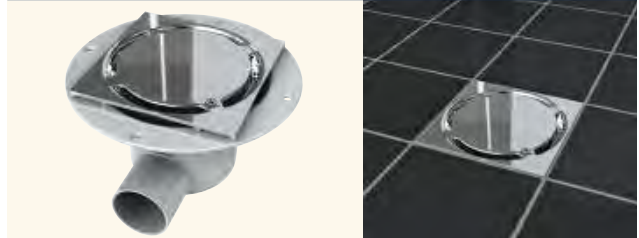
White PPC Aluminium Tile Frame and Pebble Cap



Product Code	Size	Flow Rate	Load Class	Weight
AHS/WH/T15	150x150mm	0.8 l/s	K3	1.3 kg
AHS/WH/T20	200x200mm	0.8 l/s	K3	1.5 kg

Note: Also available in a choice of colours on request. Surcharges may apply.

Chrome Plated Aluminium Tile Frame and Plain Cap



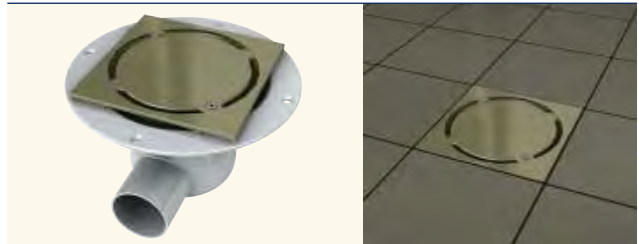
Product Code	Size	Flow Rate	Load Class	Weight
AHS/CH/T15	150x150mm	0.8 l/s	K3	1.3 kg
AHS/CH/T20	200x200mm	0.8 l/s	K3	1.5 kg

Stainless Steel Tile Frame and Plain Cap



Product Code	Size	Flow Rate	Load Class	Weight
AHS/CS/T15	150x150mm	0.8 l/s	K3	2.0 kg
AHS/CS/T20	200x200mm	0.8 l/s	K3	2.7 kg

Nickel Bronze Tile Frame and Plain Cap



Product Code	Size	Flow Rate	Load Class	Weight
AHS/CN/T15	150x150mm	0.8 l/s	K3	2.0 kg
AHS/CN/T20	200x200mm	0.8 l/s	K3	2.7 kg

Stainless Steel Tile Frame and Star Grate



Product Code	Size	Flow Rate	Load Class	Weight
AHS/SS/T15	150x150mm	0.8 l/s	K3	2.1 kg
AHS/SS/T20	200x200mm	0.8 l/s	K3	2.8 kg

Nickel Bronze Tile Frame and Star Grate



Product Code	Size	Flow Rate	Load Class	Weight
AHS/SN/T15	150x150mm	0.8 l/s	K3	2.1 kg
AHS/SN/T20	200x200mm	0.8 l/s	K3	2.8 kg

Stainless Steel Tile Frame and Concentric Ring Grate



Product Code	Size	Flow Rate	Load Class	Weight
AHS/RS/T15	150x150mm	0.8 l/s	K3	2.0 kg
AHS/RS/T20	200x200mm	0.8 l/s	K3	2.6 kg

Nickel Bronze Tile Frame and Concentric Ring Grate



Product Code	Size	Flow Rate	Load Class	Weight
AHS/RN/T15	150x150mm	0.8 l/s	K3	2.0 kg
AHS/RN/T20	200x200mm	0.8 l/s	K3	2.6 kg

Aluminium Shower Drains - Specification & Installation

Standard specification guidelines for the Harmer Aluminium Shower Drain are set out below. Full NBS format specifications (R11 Above-Ground Foul Drainage systems) are available for download from the Alumasc website.

NBS Specification

Standards:

To BS EN 12056-1:2000 and BS EN 12056-2:2000, in accordance with BS EN 12056-2:2000 National Annexes NA-NG.

Harmer Shower Drain Products

Manufacturer:

Alumasc Exterior Building Products Ltd,
White House Works,
Bold Road, Sutton,
St Helens,
Merseyside WA9 4JG.

Tel: +44 (0) 1744 648400

Fax: +44 (0) 1744 648401

Email: info@alumasc-exteriors.co.uk

Aluminium Drain Bodies:

Horizontal Outlet or Vertical Outlet

Caps and Grates - Flexible Sheet Flooring

For use on a timber or suspended concrete floor, choose one of the following:

- White Polyester Powder Coated Aluminium - Pebble Cap
- Chrome Plated Aluminium - Plain Cap
- Stainless Steel - Plain Cap; Concentric Ring Grate; Star Grate
- Nickel Bronze - Plain Cap; Concentric Ring Grate; Star Grate

Caps and Grates - Tiled Flooring

For use on a timber or suspended concrete floor, choose one of the following:

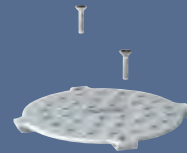
- 150 x 150mm or 200 x 200mm Tile Frame
- White Polyester Powder Coated Aluminium - Pebble Cap
- Chrome Plated Aluminium - Plain Cap
- Stainless Steel - Plain Cap; Concentric Ring Grate; Star Grate
- Nickel Bronze - Plain Cap; Concentric Ring Grate; Star Grate

Installation

Installation notes for each component of the Harmer Aluminium Shower Drain are detailed below (not shown in the actual installation sequence that would be undertaken on site). Additional, explanatory isometric illustrations and sectional drawings are given on pages 22 to 25.

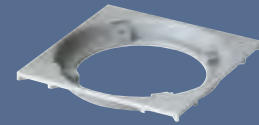
Caps/Grates

Fix into the tile frame or clamp using two stainless steel screws (provided).



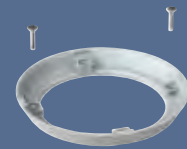
Tile Frames

For tiled floor applications, bed the 150mm x 150mm or 200mm x 200mm tile frame into tile adhesive. Apply flexible sealant around edge to prevent cracking.



Clamp Ring

Fix using two M5 x 25mm stainless steel screws (provided) to secure flexible sheet flooring and undertile waterproofing membranes to the drain body.



Foul Air Trap

Push fit the trap with 50mm seal into the drain body. The cross bar allows easy removal.



Vertical Drain Body

Install into plywood flooring or concrete deck construction.

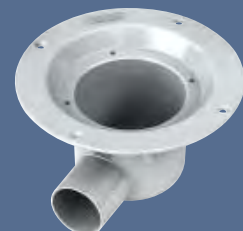
Fix through the 4 no. countersunk holes in the top flange of the body.



Horizontal Drain Body

Install into concrete and joisted timber floor construction.

Fix through the 4 no. countersunk holes in the top flange of the body.



Aluminium Shower Drains - Connection & Maintenance

The Harmer Shower Drain is highly versatile and can be connected to most types of pipework. The cap, clamp and trap have been designed to optimise efficient flow performance for self-cleaning and reduced maintenance.

Pipe Connection

Harmer Aluminium Shower Drain bodies have a nominal 56mm diameter spigot. They connect to lightweight cast iron, HDPE, PVC-U and Polypropylene pipe materials.



Connecting to 56mm (2") lightweight cast iron. Use Stainless Steel Harmer Duo Coupling.



Connecting to 56mm (2") ABS, HDPE, PVC-U or Polypropylene. Use proprietary compression coupling.



Connecting to 43mm (1 1/2") ABS or Polypropylene. Use proprietary reducing, compression coupling.



Connecting to 110mm HDPE/PVC-U (Vertical Drain Body only). Use ring seal pipe socket.

Drain Access

For tiled or flexible sheet flooring. The Harmer Shower Drain's removable trap is top accessible for ease of access and maintenance.



Remove 2 no. cap retaining screws. Do not remove clamp screws.



Lift aside Cap taking care not to lose screws. Do not remove Clamp.



Lift out Trap using cross bar and rinse thoroughly.



Wash internal surfaces with diluted disinfectant and soft sponge. Reverse process to re-assemble.

Care and Maintenance

The Harmer Shower Drain bodies are manufactured in corrosion resistant LM6 aluminium alloy with polyester powder coating to assist self-cleansing and smooth flow. A choice of Caps, Grates, Clamps and Tile Frames are manufactured in a variety of materials and finishes.

During site handling, installation and maintenance avoid damage to the coated surfaces. Any contamination arising from construction, such as concrete or cement, should be removed from surfaces using a soft cloth or sponge.

Cleaning solutions, such as those used to clean masonry and tiling must never be used with metals. If this happens, the acid solution must be diluted and rinsed away with clean water. When cleaning or wiping always use a soft cloth or sponge - do not use scourers or abrasive compounds.

Modern cleaning processes use sterilizers for hygiene purposes. Proprietary solutions, when used in accordance with the manufacturer's instructions, should be safe but if used incorrectly (e.g warm or concentrated), may cause discolouration or corrosion. NEVER USE BLEACH, CAUSTIC AGENTS OR SOLVENTS.

Cleaning Methods

Provide for the following items:

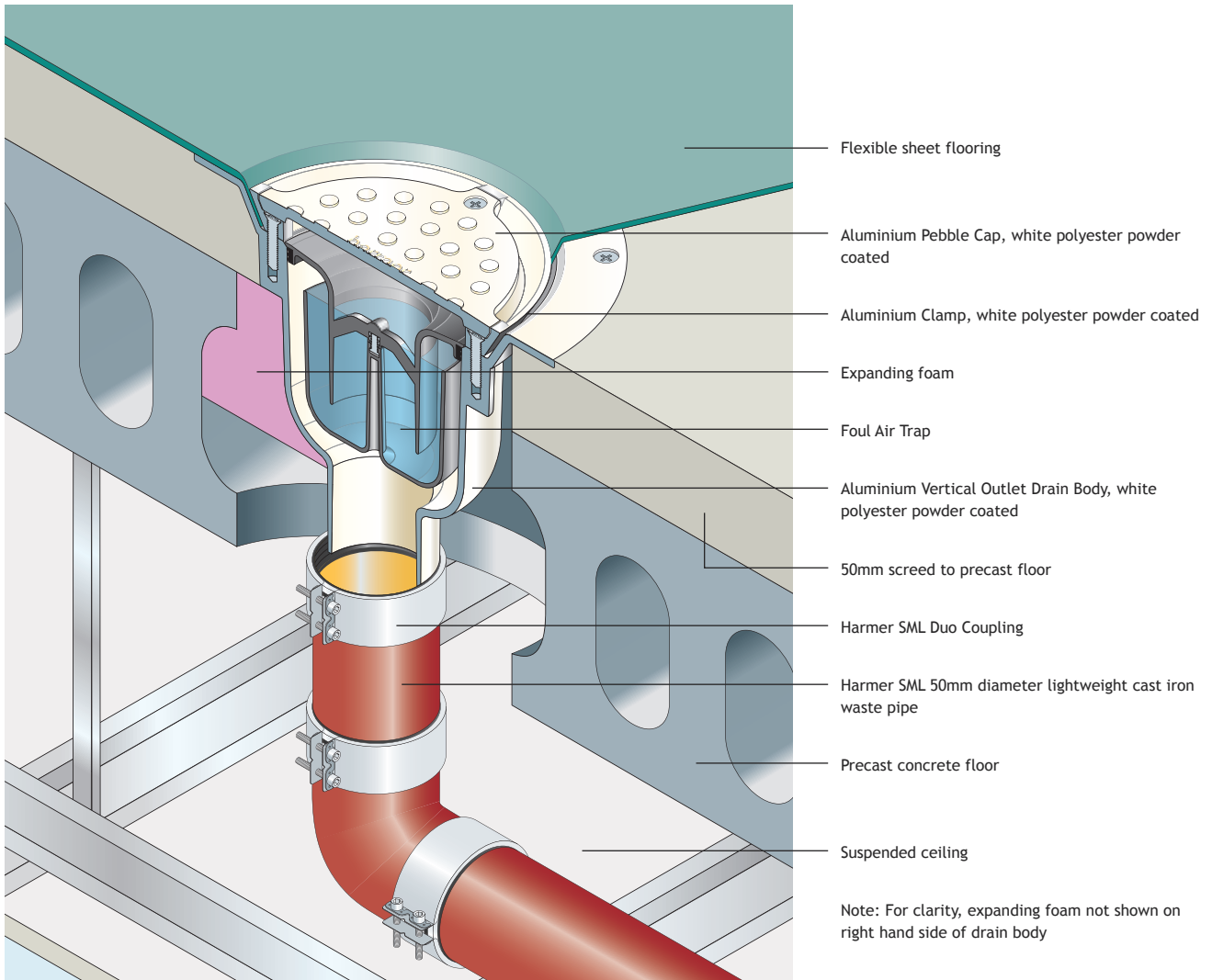
- Latex protective gloves
- Pozidrive screwdriver
- Bucket of clean water
- Sponge
- Household disinfectant

For polyester powder coated aluminium, chrome plated aluminium, stainless steel and nickel bronze caps, grates, clamps and tile frames, wash with soap or mild detergent applied with a clean sponge or soft clean cloth and rinse off with clean water.

Watermarks can be removed by lightly buffing with a soft clean cloth. For stainless steel, a soft-fibre brush may be used. NEVER USE STEEL WOOL.

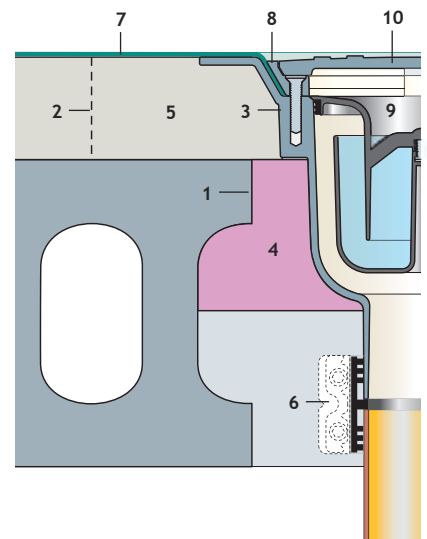
Aluminium Shower Drains - Application Details

Harmer Shower Drain with Vertical Outlet in suspended concrete floor with flexible sheet flooring



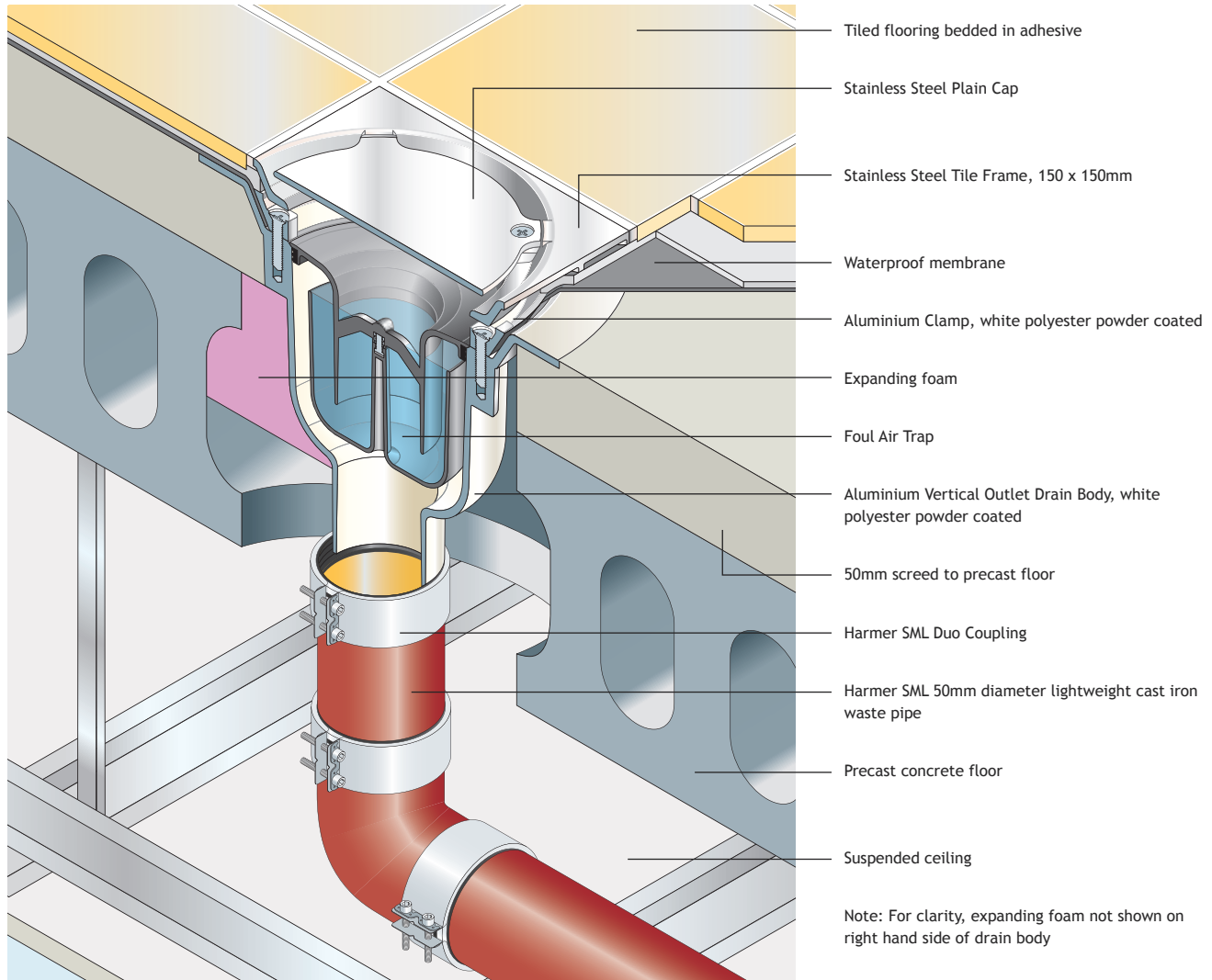
Sitework

1. Form hole in precast concrete floor to receive Drain Body.
2. Form shutter around hole and lay main area of screed, ensuring a fall of 1:40 towards the proposed drain position.
3. Remove shutter. Place, and temporarily support, Drain Body to the correct level.
4. Within precast concrete floor depth, seal space around Drain Body with expanding foam. Keep clear of outlet spigot.
5. Remove temporary support. Lay remaining screed so that Drain Body flange is flush with top of screed.
6. Connect Drain Body to Harmer SML waste pipe using Harmer SML Duo Coupling.
7. Lay flexible sheet flooring and dress over and seal to rim of Drain Body. Trim flooring to edge of screw pockets (optimum hole diameter is 122mm).
Do not cut into protective Drain Body coating.
8. Screw Clamp firmly in position to secure sheet flooring.
9. Insert Foul Air Trap into Drain Body and prime.
10. Screw Pebble Cap onto Clamp.



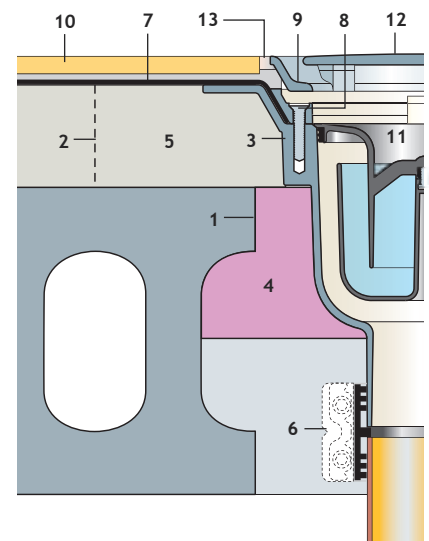
Aluminium Shower Drains - Application Details

Harmer Shower Drain with Vertical Outlet in suspended concrete floor with tiled flooring



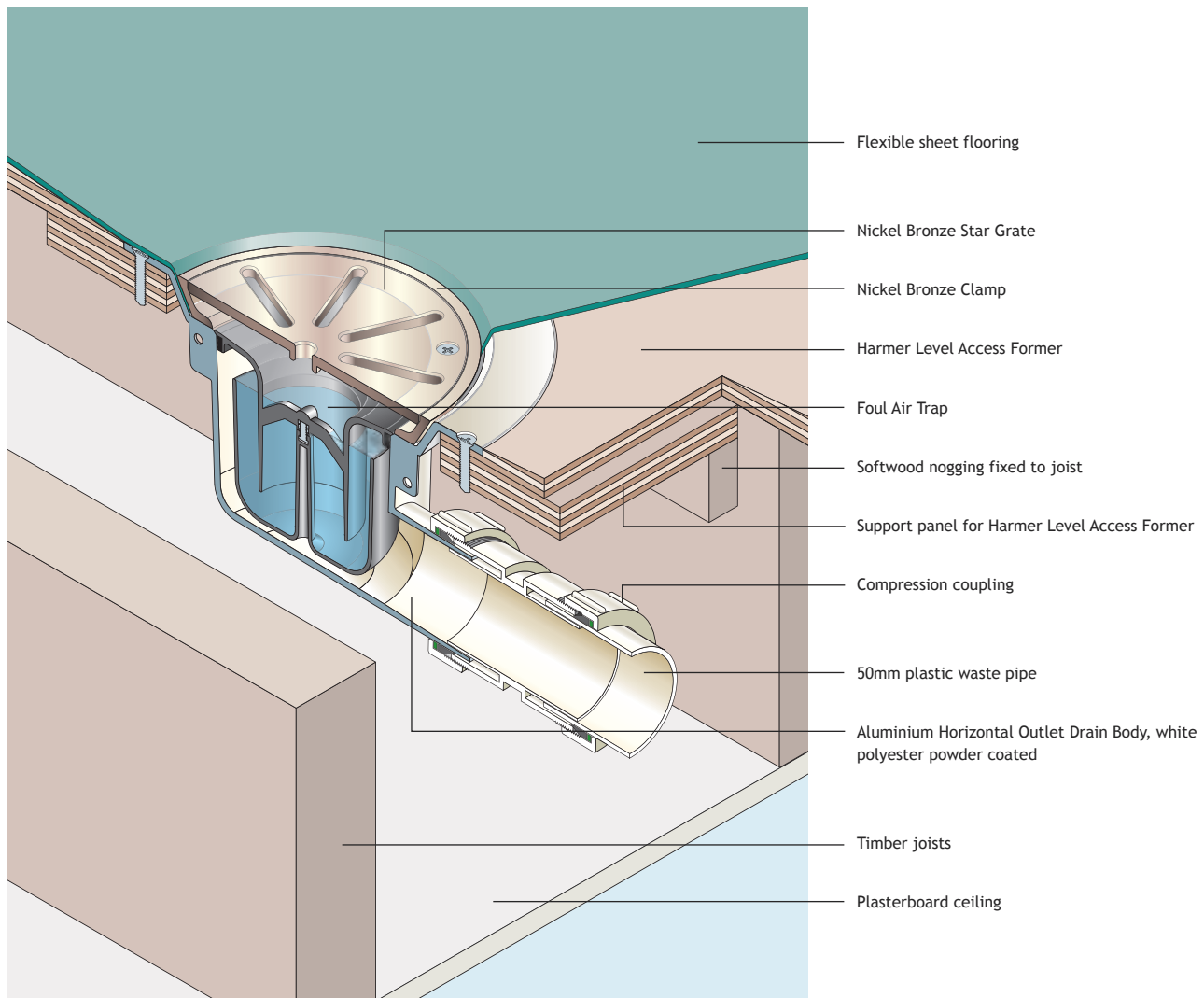
Sitework

1. Form hole in precast concrete floor to receive Drain Body.
2. Form shutter around hole and lay main area of screed, ensuring a fall of 1:40 towards the proposed drain position.
3. Remove shutter. Place, and temporarily support, Drain Body to the correct level.
4. Within precast concrete floor depth, seal space around Drain Body with expanding foam. Keep clear of outlet spigot.
5. Remove temporary support. Lay remaining screed so that Drain Body flange is flush with top of screed.
6. Connect Drain Body to Harmer SML waste pipe using Harmer SML Duo Coupling.
7. Apply waterproof membrane to manufacturers' instructions. Dress membrane over and seal to rim of Drain Body. Trim to edge of screw pockets (optimum hole diameter is 122mm). **Do not cut into protective Drain Body coating.**
8. Screw Clamp firmly in position to secure waterproof membrane.
9. Bed the Tile Frame over the Drain Body to the required level, using tile adhesive.
10. Bed tiles with tile adhesive, working away from the Tile Frame.
11. Insert Foul Air Trap into Drain Body and prime.
12. Screw Plain Cap onto Tile Frame.
13. Apply flexible sealant between tile and edge of Tile Frame, then apply grout conventionally to remainder of tile joints.



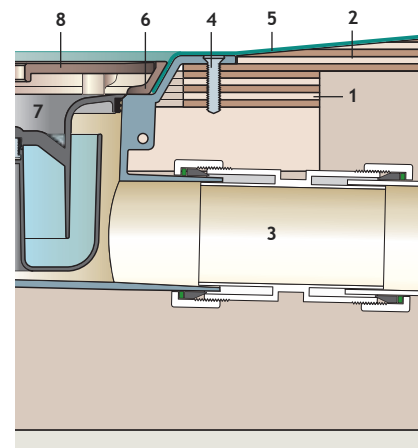
Aluminium Shower Drains - Application Details

Harmer Shower Drain with Horizontal Outlet in timber floor with flexible sheet flooring



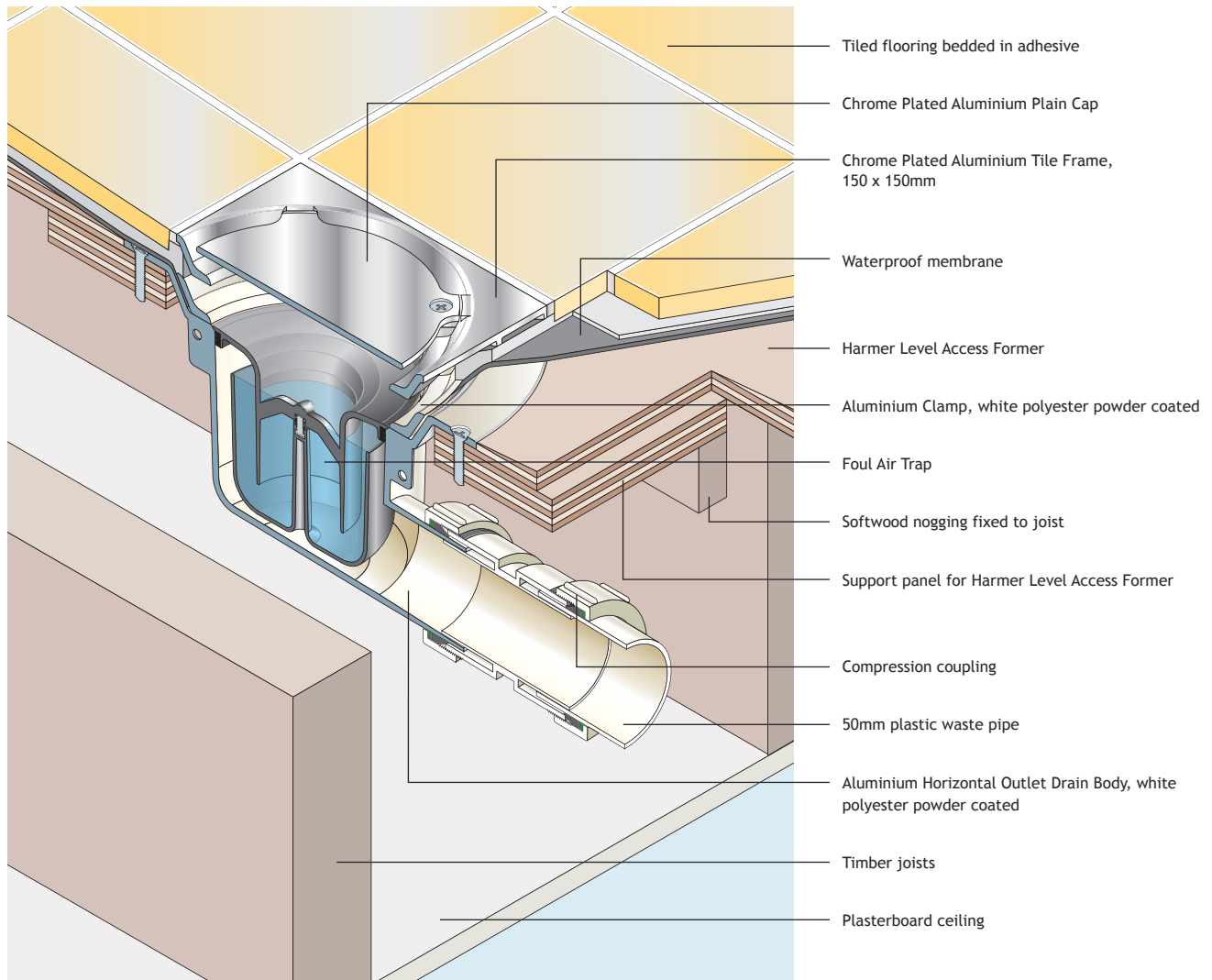
Sitework (using Harmer Level Access Former)

1. Fabricate 18mm (minimum) thick support panel (complete with hole for Drain Body) and softwood noggings, and fit flush with top of joists.
2. Fit Harmer Level Access Former (complete with integral falls and hole for Drain Body) over the ply support panel. Secure the Harmer Level Access Former to the joists using 50mm x No.8 countersunk screws at 225mm centres. Fill screw heads with filler flush to plywood surface.
Note: Harmer Level Access Former is available in various perimeter sizes and drain outlet positions to suit joist layout and site conditions.
3. Connect Drain Body to waste pipe using compression coupling.
4. Screw-fix Drain Body to Harmer Level Access Former using 25mm x No.8 countersunk screws. Then lay marine ply decking to remainder of floor, butting up to Harmer Level Access Former.
5. Lay the flexible sheet flooring and dress over and seal to rim of Drain Body. Trim flooring to edge of screw pockets (optimum hole diameter is 122mm).
Do not cut into protective Drain Body coating.
6. Screw Clamp firmly in position to secure sheet flooring.
7. Insert Foul Air Trap into Drain Body and prime.
8. Screw Star Grate onto Clamp.



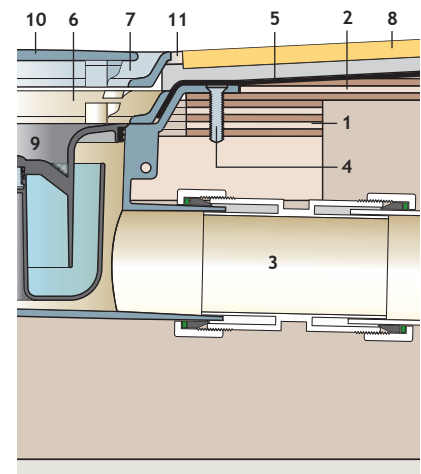
Aluminium Shower Drains - Application Details

Harmer Shower Drain with Horizontal Outlet in timber floor with tiled flooring



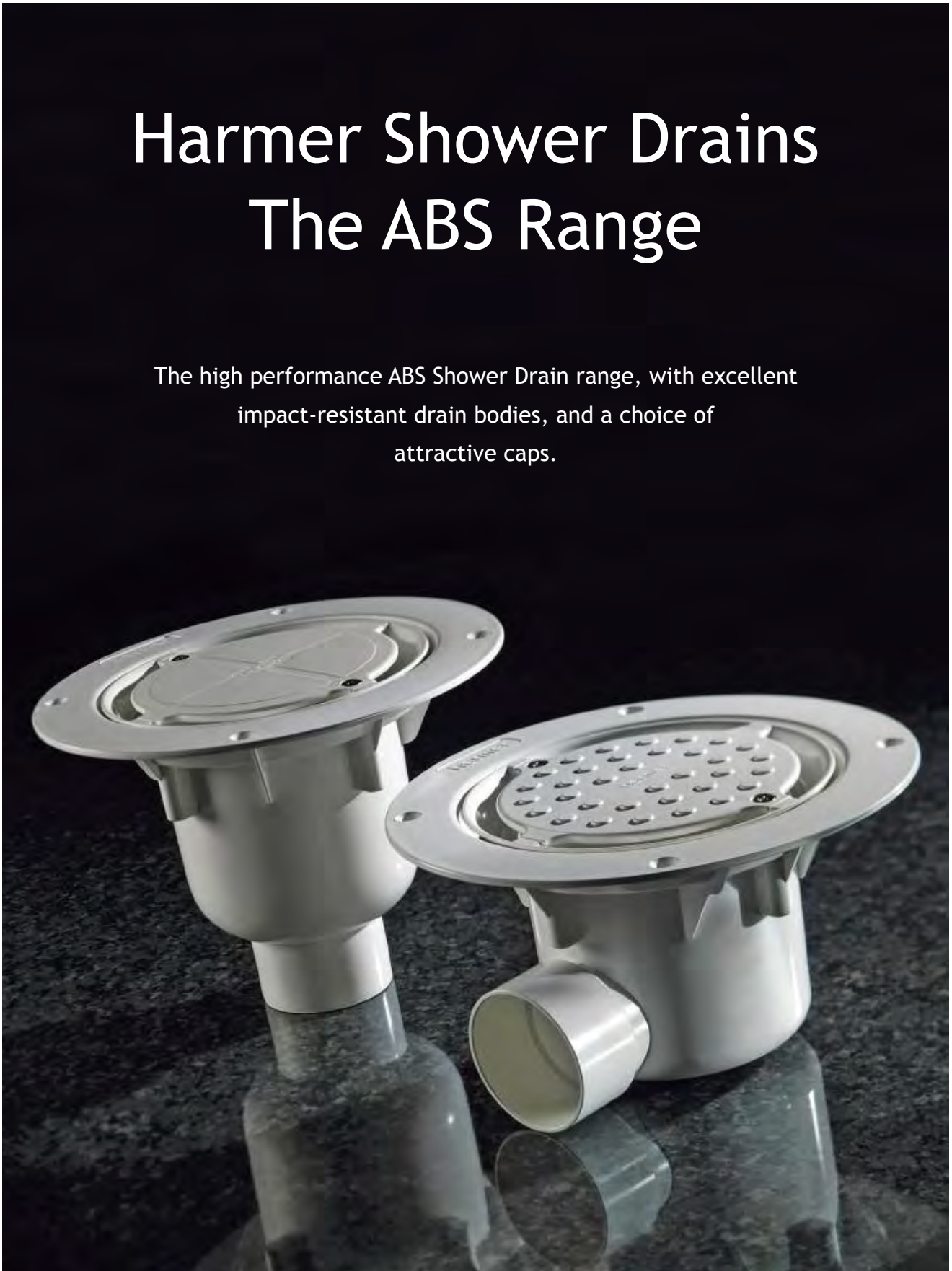
Sitework (using Harmer Level Access Former)

1. Fabricate 18mm (minimum) thick support panel (complete with hole for Outlet Drain Body) and softwood noggings, and fit flush with top of joists.
2. Fit Harmer Level Access Former (complete with integral falls and hole for Drain Body) over the ply support panel. Secure the Harmer Level Access Former to the joists using 50mm x No.8 countersunk screws at 225mm centres. Fill screw heads with filler flush to plywood surface.
Note: Harmer Level Access Former is available in various perimeter sizes and drain outlet positions to suit joist layout and site conditions.
3. Connect Drain Body to waste pipe using compression coupling.
4. Screw-fix Drain Body to Harmer Level Access Former using 25mm x No.8 countersunk screws. Then lay marine ply decking to remainder of floor, butting up to Harmer Level Access Former.
5. Apply waterproof membrane to manufacturers' instructions. Dress membrane over and seal to rim of Drain Body. Trim to edge of screw pockets (optimum hole diameter is 122mm). **Do not cut into protective Drain Body coating.**
6. Screw Clamp firmly in position to secure waterproof membrane.
7. Bed the Tile Frame over the Drain Body to the required level, using tile adhesive.
8. Bed tiles with tile adhesive, working away from the Tile Frame.
9. Insert Foul Air Trap into Drain Body and prime.
10. Screw Plain Cap onto Tile Frame.
11. Apply flexible sealant between tile and edge of Tile Frame, then apply grout conventionally to remainder of tile joints.



Harmer Shower Drains The ABS Range

The high performance ABS Shower Drain range, with excellent impact-resistant drain bodies, and a choice of attractive caps.



ABS Shower Drains - Benefits

Harmer ABS Shower Drains combine high performance, innovative design and value engineering to establish class-leading standards in drainage.

Compliances

- Harmer Shower Drains fully meet the requirements of BS EN 1253 for general design, flow performance and load testing

High Flow Performance

- Designed for high flow drainage with achievable flow rates of up to 1.3 litres per second (80 litres per minute)

Robust and Secure

- Manufactured in ABS plastic compound for corrosion resistance with under-ribbed flange for extra strength
- Security fixings are also available to prevent unauthorised removal of caps

A Choice of Caps

- The range of top accessible caps is suitable for both tiled or sheet floor applications
- Attractive chrome and ABS caps are available in practical plain, quadrant or pebble finishes

Low Maintenance and Hygienic

- The antimicrobial ABS compound enhances hygiene and control of bacteria
- The efficient Harmer Shower design ensures self-cleansing flow
- The top access trap, for use with both the vertical and horizontal drain bodies, is simple to remove and replace

Easy and Quick to Install

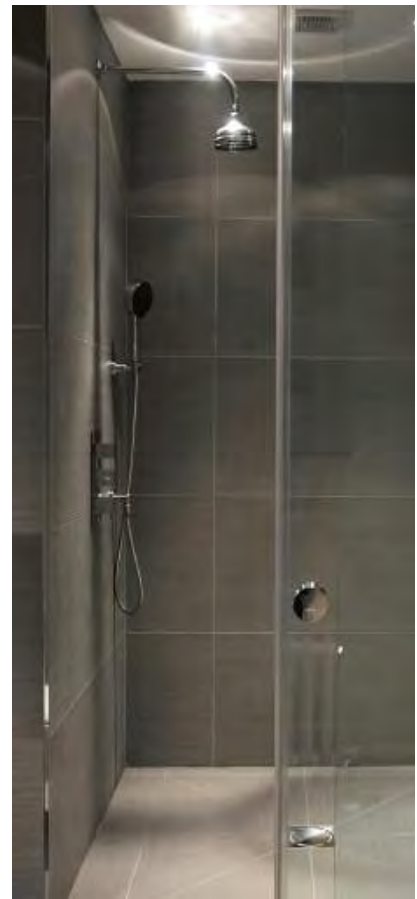
- Compact vertical and horizontal drain bodies install into timber and concrete floor construction
- Drain bodies are designed for direct connection to ABS solvent cement pipe systems
- Connections to PVC-U can be made using proprietary connectors
- Fully compatible with UK pipe sizes, where 43mm (1½"), 56mm (2") and 110mm (4") connections are required

Value for Money

- The use of the ABS plastic compound keeps material cost low while efficiency of design ensures premium performance

Sustainable

- ABS plastic is non toxic and 100% recyclable



ABS Shower Drains - Product Range Summary

Harmer ABS Shower Drains represent the perfect combination of plastic materials and good design brought together to provide practical function with efficient, low maintenance design. The use of ABS antimicrobial materials in conjunction with hard wearing and easy to clean surfaces results in a product range ideal for every application.

Drain Bodies

Efficient and compact design, ideal for all types of solid and suspended concrete floor construction including installations where shallow invert pipework is essential, e.g. joisted timber floor construction.

- Top accessible for quick and easy maintenance
- 56mm (2") solvent weld socket connects to plastic pipe. Also supplied with adaptor to 43mm (1 1/2") pipe
- Vertical drain body push fits into 110mm ring seal pipe socket
- Horizontal drain bodies have integral fall in sump to eliminate silt and sludge retention
- All Harmer ABS Shower Drains are antimicrobial
- ABS Shower Drains are supplied with a removable 50mm smooth flow foul air trap

Harmer Level Access Former

Installation of Harmer Shower Drains is made easier with preformed level access formers designed to simplify the process of creating drainage falls in joisted floor construction. Ideal for use with tiled and flexible sheet flooring.

Benefits of Harmer Level Access Former:

- No need for flooring overlay
- No firrings on joists
- No alterations to joists
- No trip risk from stepped threshold
- No bathroom door alteration

Harmer Level Access Formers are made from 22mm thick, high quality birch plywood in a variety of sizes and outlet positions. They are load safe to 380 kg and very easy to fit.

For further advice about this product, contact Alumasc Technical Services on 01744 648400.



Vertical Drain Body

Horizontal Drain Body

Harmer ABS Antimicrobial

Harmer ABS Antimicrobial allows the constant release of bacteriostats that work to provide improved hygiene through the control and elimination of bacteria from the drain body surfaces in typical wetroom and shower room environments.

Benefits of Harmer ABS Antimicrobial:

- Eliminates bacteria and mould growth
- Contributes to improved hygiene
- Reduces unpleasant odours caused by bacteria
- Prevents staining and discolouration
- Keeps surfaces clean

Harmer ABS Antimicrobial involves the use of additives to the basic ABS plastic compound. It is not a coating. It will never wear off. It does not require replacing and is harmless to humans.

ABS Shower Drains - Product Range Summary

All Harmer ABS Shower Drains are supplied with a choice of caps in antimicrobial plastic as well as high lustre chrome for added appeal. Harmer ABS Shower Drain is easily cast into concrete floor construction whilst optional Harmer Level Access Formers provide ready falls without the need for modifications to floor joists.

Flexible Sheet Flooring

Caps and Clamps

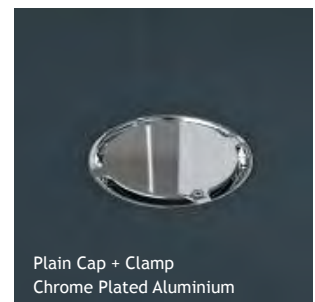
The cap and clamp components are for sheet flooring applications and combine with both vertical and horizontal outlet bodies.

Load Class K3 to BS EN 1253 applies.

The components available are:

- Pebble Cap - in White ABS
- Quadrant Cap - in White ABS
- Plain Cap - in Chrome Plated Aluminium
- The Clamps match the colours and materials of the Caps

The combinations of components and materials offered by Alumasc are shown in the tables on pages 31 and 33.



Tiled Floors

Caps and Tile Frames

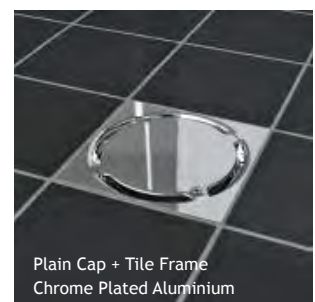
The assemblies are suitable for tiled floor applications and combine with both vertical and horizontal outlet bodies. They are available in 150mm x 150mm or 200mm x 200mm.

Load Class K3 to BS EN 1253 applies.

The components available are:

- Pebble Cap - in White ABS
- Quadrant Cap - in White ABS
- Plain Cap - in Chrome Plated Aluminium
- The Tile Frames match the colours and materials of the Caps

The combinations of components and materials offered by Alumasc are shown in the tables on pages 31 and 33.

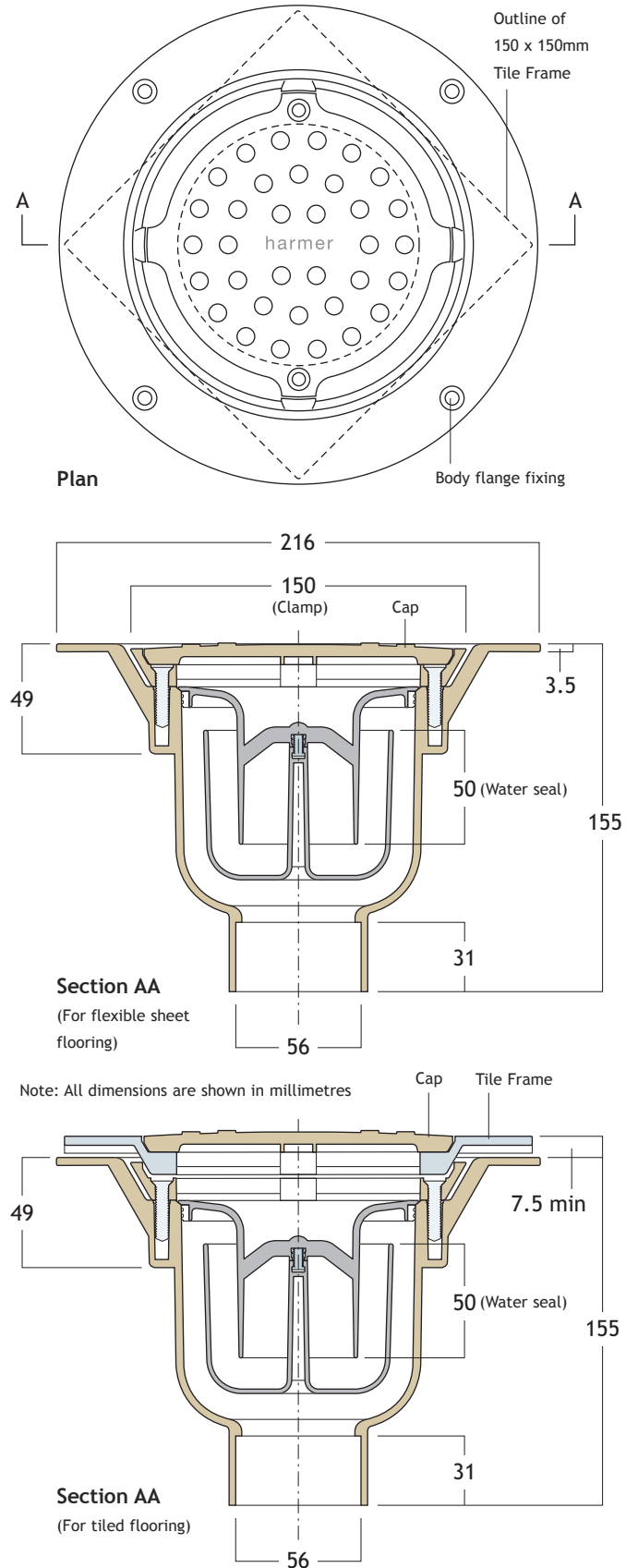


ABS Shower Drains - Vertical Outlet

Vertical Outlet Components



Drain Body Dimensions



ABS Shower Drains - Product Tables

Vertical Outlet Combinations for Flexible Sheet Flooring

Note: Add suffix /LC to product codes if anti-tamper security screws are required

White Clamp and ABS Pebble Cap



Product Code	Flow Rate	Load Class	Weight
CVS/CP	1.3 l/s	K3	0.5 kg

Vertical Outlet Combinations for Tiled Flooring

Note: Add suffix /LC to product codes if anti-tamper security screws are required

White Tile Frame and ABS Pebble Cap



Product Code	Size	Flow Rate	Load Class	Weight
CVS/CP/T15	150x150mm	1.3 l/s	K3	0.7 kg
CVS/CP/T20	200x200mm	1.3 l/s	K3	0.9 kg

White Clamp and ABS Quadrant Cap



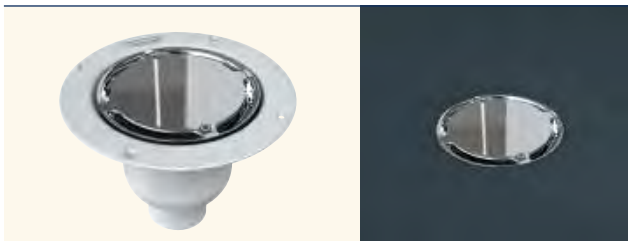
Product Code	Flow Rate	Load Class	Weight
CVS/CQ	1.3 l/s	K3	0.5 kg

White Tile Frame and ABS Quadrant Cap



Product Code	Size	Flow Rate	Load Class	Weight
CVS/CQ/T15	150x150mm	1.3 l/s	K3	0.7 kg
CVS/CQ/T20	200x200mm	1.3 l/s	K3	0.9 kg

Chrome Plated Aluminium Clamp and Plain Cap



Product Code	Flow Rate	Load Class	Weight
CVS/CH	1.3 l/s	K3	0.7 kg

Chrome Plated Aluminium Tile Frame and Plain Cap



Product Code	Size	Flow Rate	Load Class	Weight
CVS/CH/T15	150x150mm	1.3 l/s	K3	0.8 kg
CVS/CH/T20	200x200mm	1.3 l/s	K3	1.1 kg

ABS Shower Drains - Horizontal Outlet

Horizontal Outlet Components

Stainless Steel screws (provided) for securing Caps. Anti-tamper security fixings are also available

White ABS Quadrant Cap

White ABS Pebble Cap

Chrome Plated Aluminium Cap

150mm x 150mm Tile Frame (also 200mm x 200mm) to match Cap and Grate selections

Stainless Steel clamp screws (provided) for securing Clamp to Drain Body

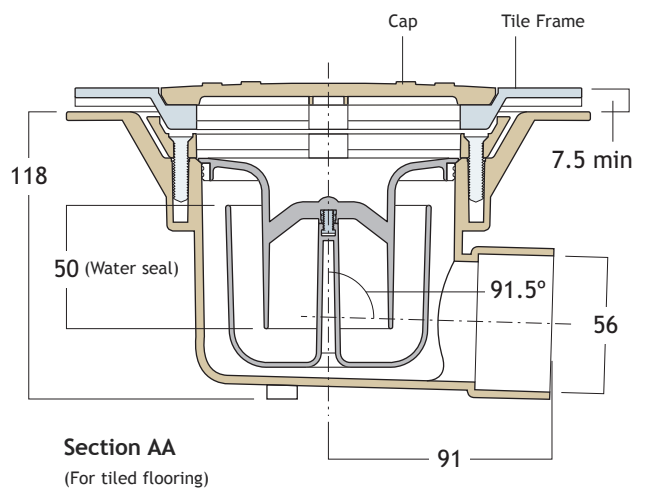
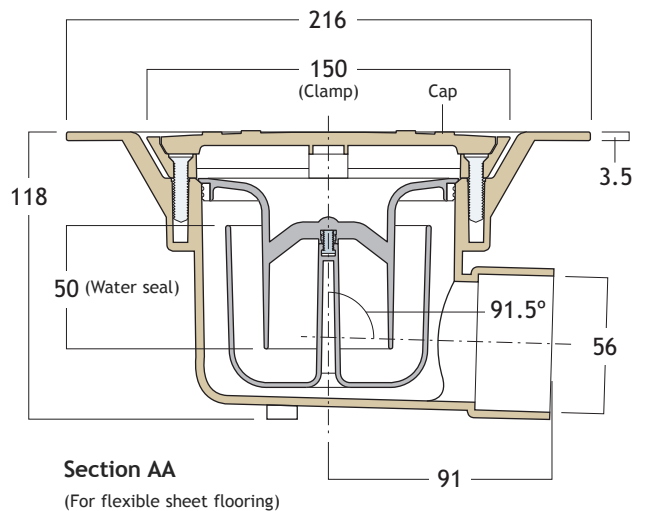
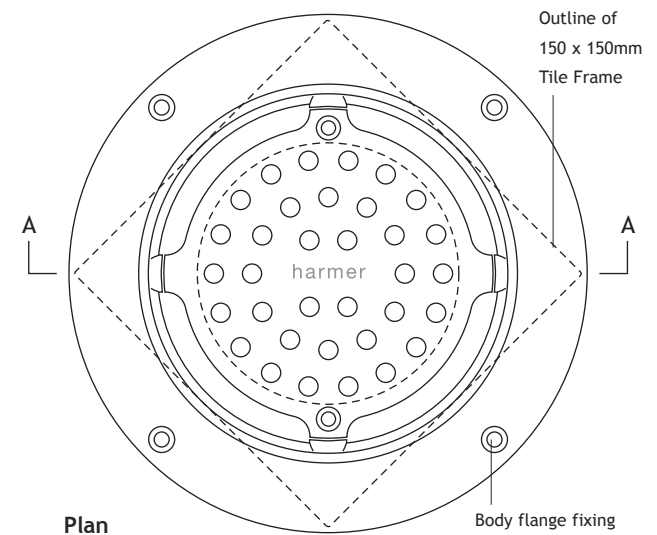
Clamp for securing flexible sheet flooring or under-tile waterproof membrane to match Cap and Grate selections

50mm Foul Air Trap push fits into Drain Body. Crossbar allows easy removal

Horizontal Drain Body with 56mm (2") outlet, connects directly to ABS pipework

Reducer (provided) for connecting to 43mm (1 1/2") ABS pipework

Drain Body Dimensions



Note: All dimensions are shown in millimetres

ABS Shower Drains - Product Tables

Horizontal Outlet Combinations for Flexible Sheet Flooring

Note: Add suffix /LC to product codes if anti-tamper security screws are required

White Clamp and ABS Pebble Cap



Product Code	Flow Rate	Load Class	Weight
CHS/CP	0.8 l/s	K3	0.5 kg

Horizontal Outlet Combinations for Tiled Flooring

Note: Add suffix /LC to product codes if anti-tamper security screws are required

White Tile Frame and ABS Pebble Cap



Product Code	Size	Flow Rate	Load Class	Weight
CHS/CP/T15	150x150mm	0.8 l/s	K3	0.7 kg
CHS/CP/T20	200x200mm	0.8 l/s	K3	1.0 kg

White Clamp and ABS Quadrant Cap



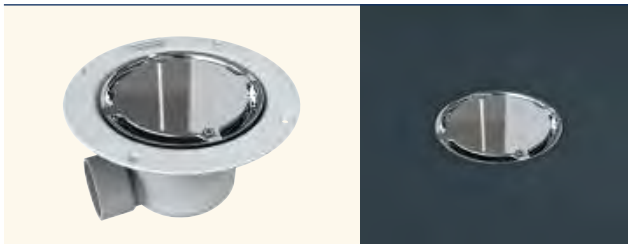
Product Code	Flow Rate	Load Class	Weight
CHS/CQ	0.8 l/s	K3	0.5 kg

White Tile Frame and ABS Quadrant Cap



Product Code	Size	Flow Rate	Load Class	Weight
CHS/CQ/T15	150x150mm	0.8 l/s	K3	0.7 kg
CHS/CQ/T20	200x200mm	0.8 l/s	K3	1.0 kg

Chrome Plated Aluminium Clamp and Plain Cap



Product Code	Flow Rate	Load Class	Weight
CHS/CH	0.8 l/s	K3	0.7 kg

Chrome Plated Aluminium Tile Frame and Plain Cap



Product Code	Size	Flow Rate	Load Class	Weight
CHS/CH/T15	150x150mm	0.8 l/s	K3	0.8 kg
CHS/CH/T20	200x200mm	0.8 l/s	K3	1.1 kg

ABS Shower Drains - Specification & Installation

Standard specification guidelines for the Harmer ABS Shower Drain are set out below. Full NBS format specifications (R11 Above-Ground Foul Drainage systems) are available for download from the Alumasc website.

NBS Specification

Standards:

To BS EN 12056-1:2000 and BS EN 12056-2:2000, in accordance with BS EN 12056-2:2000 National Annexes NA-NG.

Harmer Shower Drain Products

Manufacturer:

Alumasc Exterior Building Products Ltd,
White House Works,
Bold Road, Sutton,
St Helens,
Merseyside WA9 4JG.

Tel: +44 (0) 1744 648400

Fax: +44 (0) 1744 648401

Email: info@alumasc-exteriors.co.uk

ABS Antimicrobial Drain Bodies:

Horizontal Outlet or Vertical Outlet

Caps - Flexible Sheet Flooring

For use on a timber or suspended concrete floor, choose one of the following:

- White ABS - Pebble Cap
- White ABS - Quadrant Cap
- Chrome Plated Aluminium - Plain Cap

Caps - Tiled Flooring

For use on a timber or suspended concrete floor, choose one of the following:

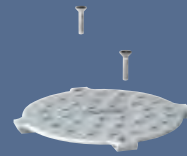
- 150 x 150mm or 200 x 200mm Tile Frame
- White ABS - Pebble Cap
- White ABS - Quadrant Cap
- Chrome Plated Aluminium - Plain Cap

Installation

Installation notes for each component of the Harmer ABS Shower Drain are detailed below (not shown in the actual installation sequence that would be undertaken on site). Additional, explanatory isometric illustrations and sectional drawings are given on pages 36 to 39.

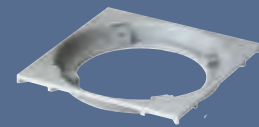
Caps/Grates

Fix into the tile frame or clamp using two stainless steel screws (provided).



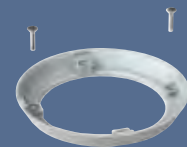
Tile Frames

For tiled floor applications, bed the 150mm x 150mm or 200mm x 200mm tile frame into tile adhesive. Apply flexible sealant around edge to prevent cracking.



Clamp Ring

Fix using two M5 x 25mm stainless steel screws (provided) to secure flexible sheet flooring and undertile waterproofing membranes to the drain body.



Foul Air Trap

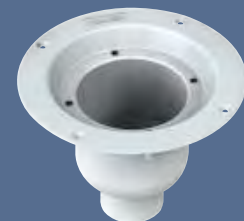
Push fit the trap with 50mm seal into the drain body. The cross bar allows easy removal.



Vertical Drain Body

Install into plywood flooring or concrete deck construction.

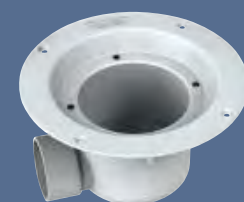
Fix through the 4 no. countersunk holes in the top flange of the body.



Horizontal Drain Body

Install into concrete and joisted timber floor construction.

Fix through the 4 no. countersunk holes in the top flange of the body.



ABS Shower Drains - Connection & Maintenance

The Harmer Shower Drain is highly versatile and can be connected to most types of pipework. The cap, clamp and trap have been designed to optimise efficient flow performance for self-cleaning and reduced maintenance.

Pipe Connection

Harmer ABS Shower Drain bodies have a nominal 56mm diameter spigot. They connect to ABS, PVC-U and Polypropylene pipe materials.



Connecting to 56mm (2") ABS. Use solvent cement pipe joint.



Connecting to 43mm (1 1/2") ABS. Use 50mm (2") to 43mm (1 1/2") solvent cement reducer (provided).



Connecting to 43mm (1 1/2") Polypropylene. Use 50mm to 43mm (1 1/2") proprietary solvent cement/compression reducer.



Connecting to all 110mm plastic pipes (vertical Drain Body only). Use ring seal pipe socket.

Drain Access

For tiled or flexible sheet flooring. The Harmer Shower Drain's removable trap is top accessible for ease of access and maintenance.



Remove 2 no. cap retaining screws. Do not remove clamp screws.



Lift aside cap taking care not to lose screws. Do not remove Clamp.



Lift out Trap using cross bar and rinse thoroughly.



Wash internal surfaces with diluted disinfectant and soft sponge. Reverse process to re-assemble.

Care and Maintenance

The Harmer Shower Drain bodies are manufactured in an antimicrobial ABS plastic compound to assist hygiene and the reduction in bacteria as well as self-cleansing and smooth flow. A choice of Caps is manufactured in the same ABS compound with the exception of the chrome plated cap which is aluminium.

ABS is a durable plastic. However, during site handling, installation and maintenance, avoid dropping or impact especially in cold weather. Any contamination arising from construction, such as concrete or cement, should be removed from surfaces using a soft cloth or sponge.

ABS resists corrosion and chemical attack, however cleaning solutions, such as those used to clean masonry and tiling must never be used with Chrome Plated parts.

When cleaning or wiping always use a soft cloth or sponge - do not use scourers or abrasive compounds.

Modern cleaning processes use sterilizers for hygiene purposes. Proprietary solutions, when used in accordance with the manufacturer's instructions, should be safe. NEVER USE BLEACH, CAUSTIC AGENTS OR SOLVENTS.

Cleaning Methods

Provide for the following items:

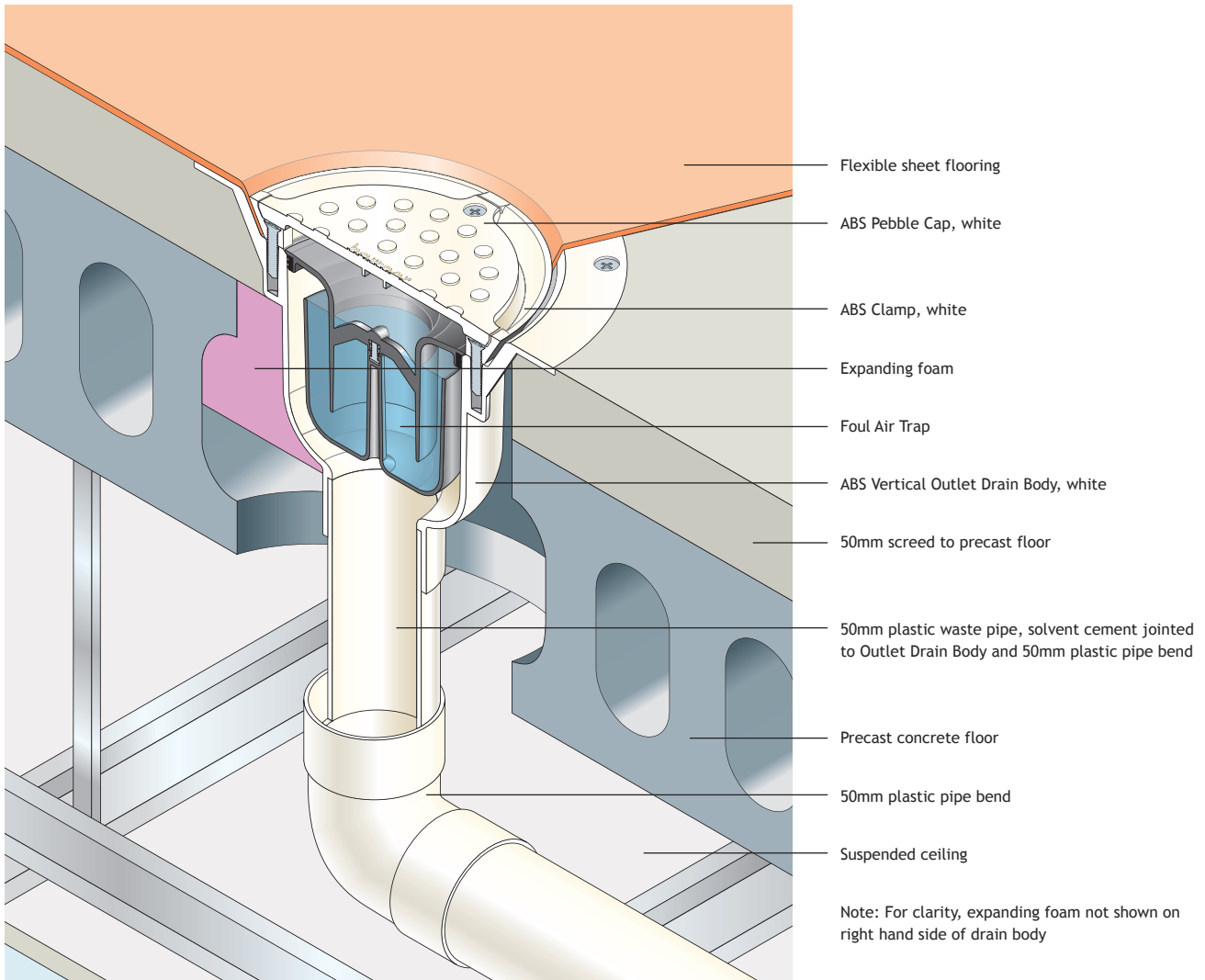
- Latex protective gloves
- Pozidrive screwdriver
- Bucket of clean water
- Sponge
- Household disinfectant

For ABS plastic and aluminium items, wash with soap or mild detergent applied with a clean sponge or soft clean cloth and rinse off with clean water.

Watermarks can be removed by lightly buffing with a soft clean cloth. NEVER USE STEEL WOOL.

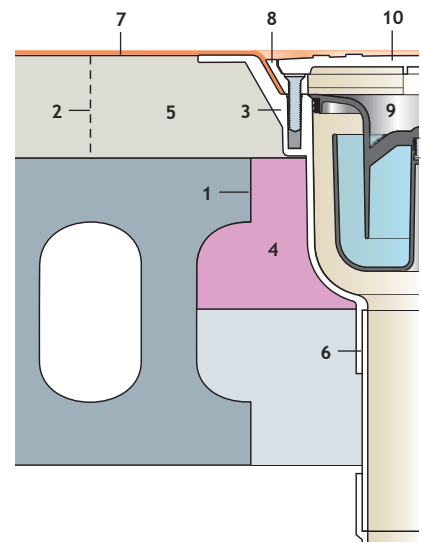
ABS Shower Drains - Application Details

Harmer Shower Drain with Vertical Outlet in suspended concrete floor with flexible sheet flooring



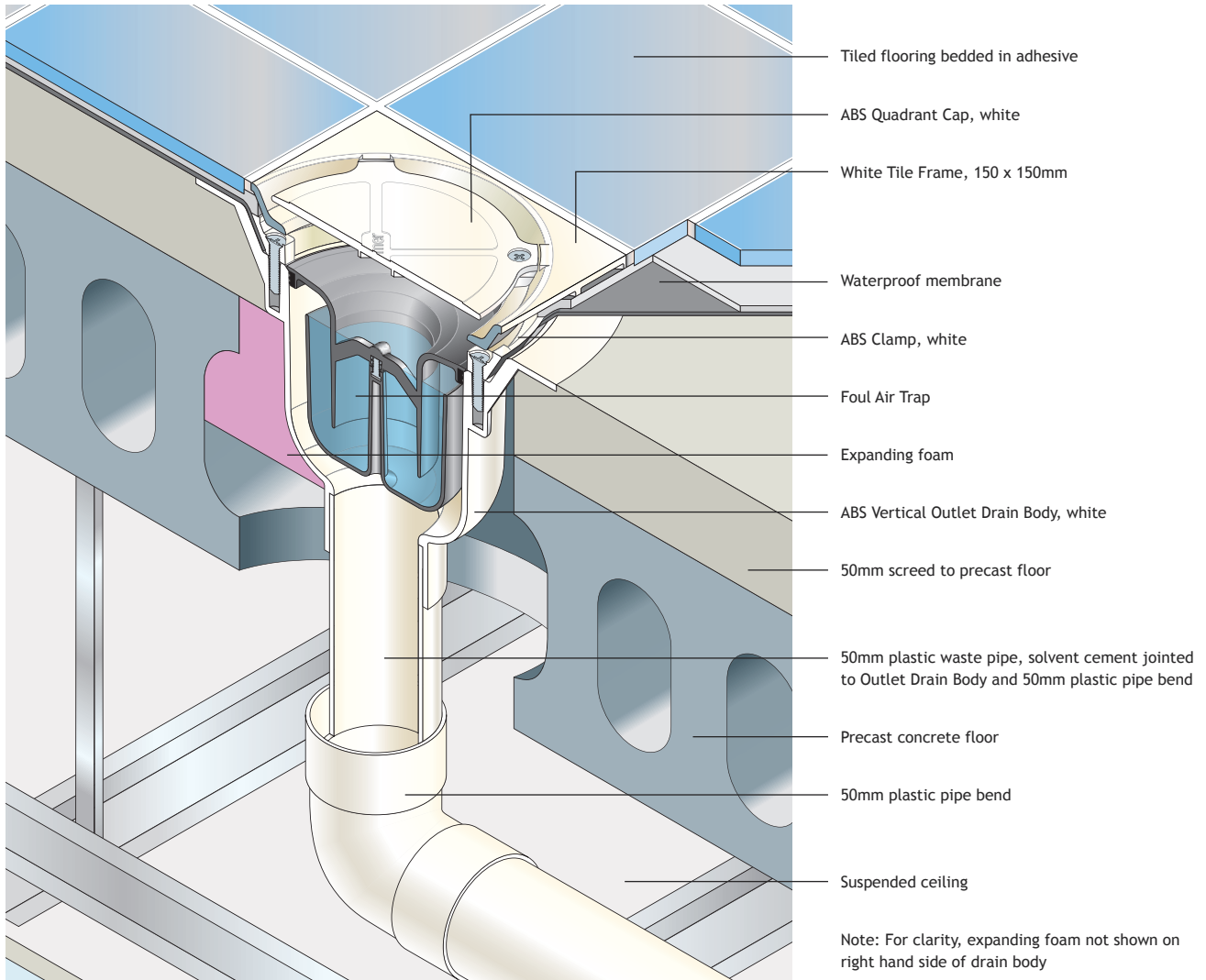
Sitework

1. Form hole in precast concrete floor to receive Drain Body.
2. Form shutter around hole and lay main area of screed, ensuring a fall of 1:40 towards the proposed drain position.
3. Remove shutter. Place, and temporarily support, Drain Body to the correct level.
4. Within precast concrete floor depth, seal space around Drain Body with expanding foam. Keep clear of outlet spigot.
5. Remove temporary support. Lay remaining screed so that Drain Body flange is flush with top of screed.
6. Connect Drain Body to plastic waste pipe using solvent cement joint.
7. Lay flexible sheet flooring and dress over and seal to rim of Drain Body. Trim flooring to edge of screw pockets (optimum hole diameter is 122mm).
Do not cut into ABS Drain Body.
8. Screw Clamp firmly in position to secure sheet flooring.
9. Insert Foul Air Trap into Drain Body and prime.
10. Screw Pebble Cap onto Clamp.



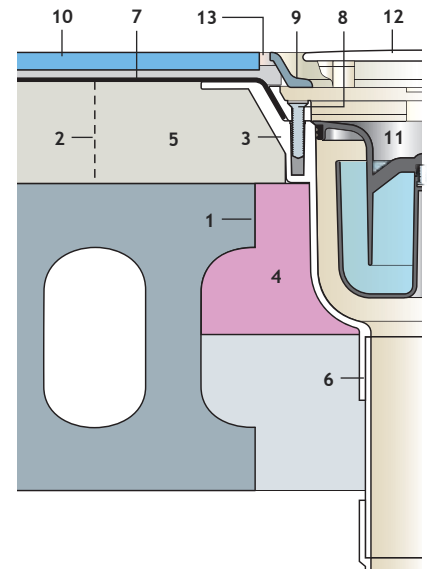
ABS Shower Drains - Application Details

Harmer Shower Drain with Vertical Outlet in suspended concrete floor with tiled flooring



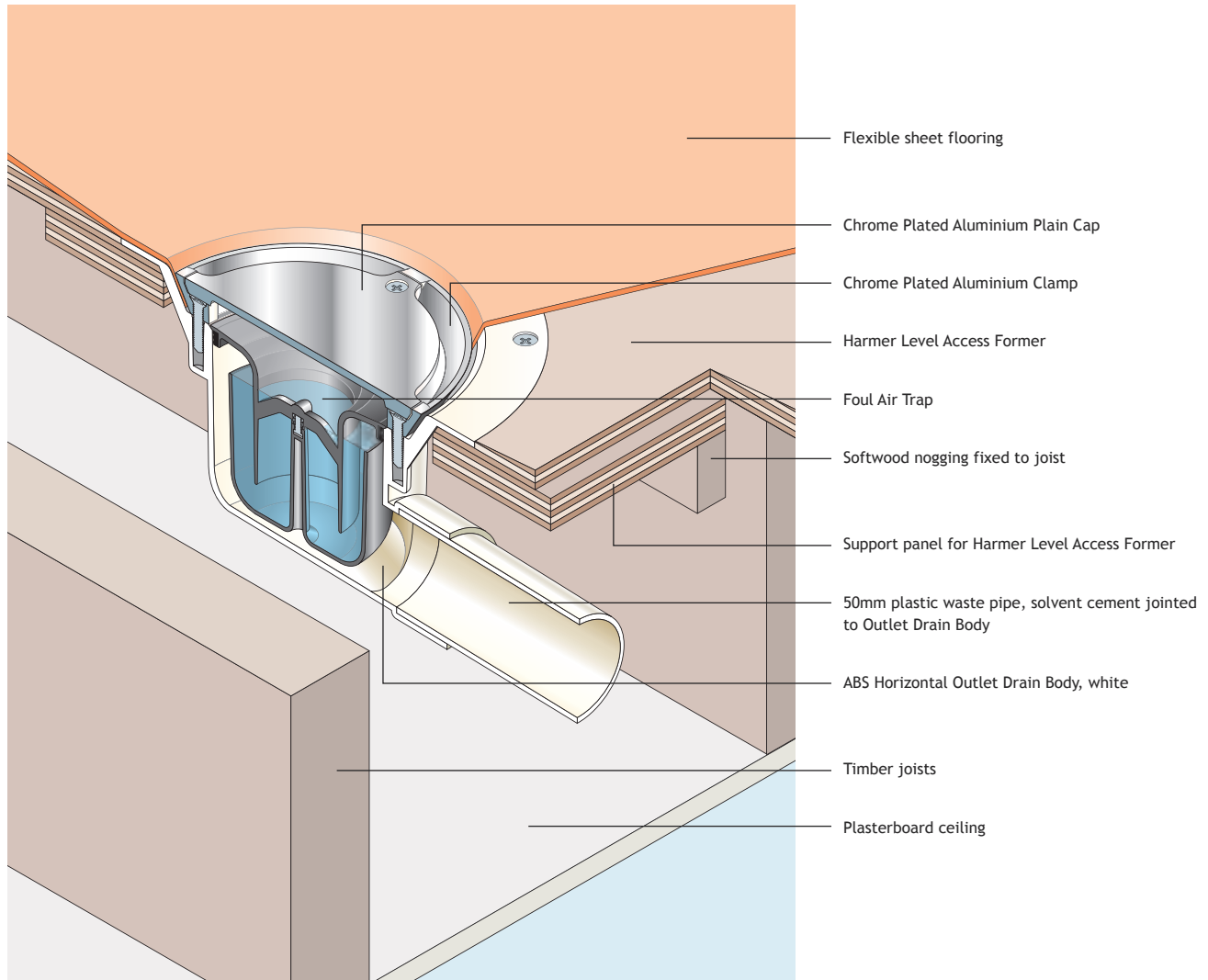
Sitework

1. Form hole in precast concrete floor to receive Drain Body.
2. Form shutter around hole and lay main area of screed, ensuring a fall of 1:40 towards the proposed drain position.
3. Remove shutter. Place, and temporarily support, Drain Body to the correct level.
4. Within precast concrete floor depth, seal space around Drain Body with expanding foam. Keep clear of outlet spigot.
5. Remove temporary support. Lay remaining screed so that Drain Body flange is flush with top of screed.
6. Connect Drain Body to plastic waste pipe using solvent cement joint.
7. Apply waterproof membrane to manufacturers' instructions. Dress membrane over and seal to rim of Drain Body. Trim to edge of screw pockets (optimum hole diameter is 122mm). **Do not cut into ABS Drain Body.**
8. Screw Clamp firmly in position to secure waterproof membrane.
9. Bed the Tile Frame over the Drain Body to the required level, using the adhesive.
10. Bed tiles with tile adhesive, working away from the Tile Frame.
11. Insert Foul Air Trap into Drain Body and prime.
12. Screw Quadrant Cap onto Tile Frame.
13. Apply flexible sealant between tile and edge of Tile Frame, then apply grout conventionally to remainder of tile joints.



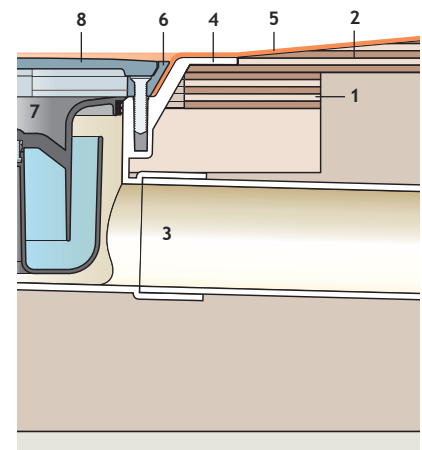
ABS Shower Drains - Application Details

Harmer Shower Drain with Horizontal Outlet in timber floor with flexible sheet flooring



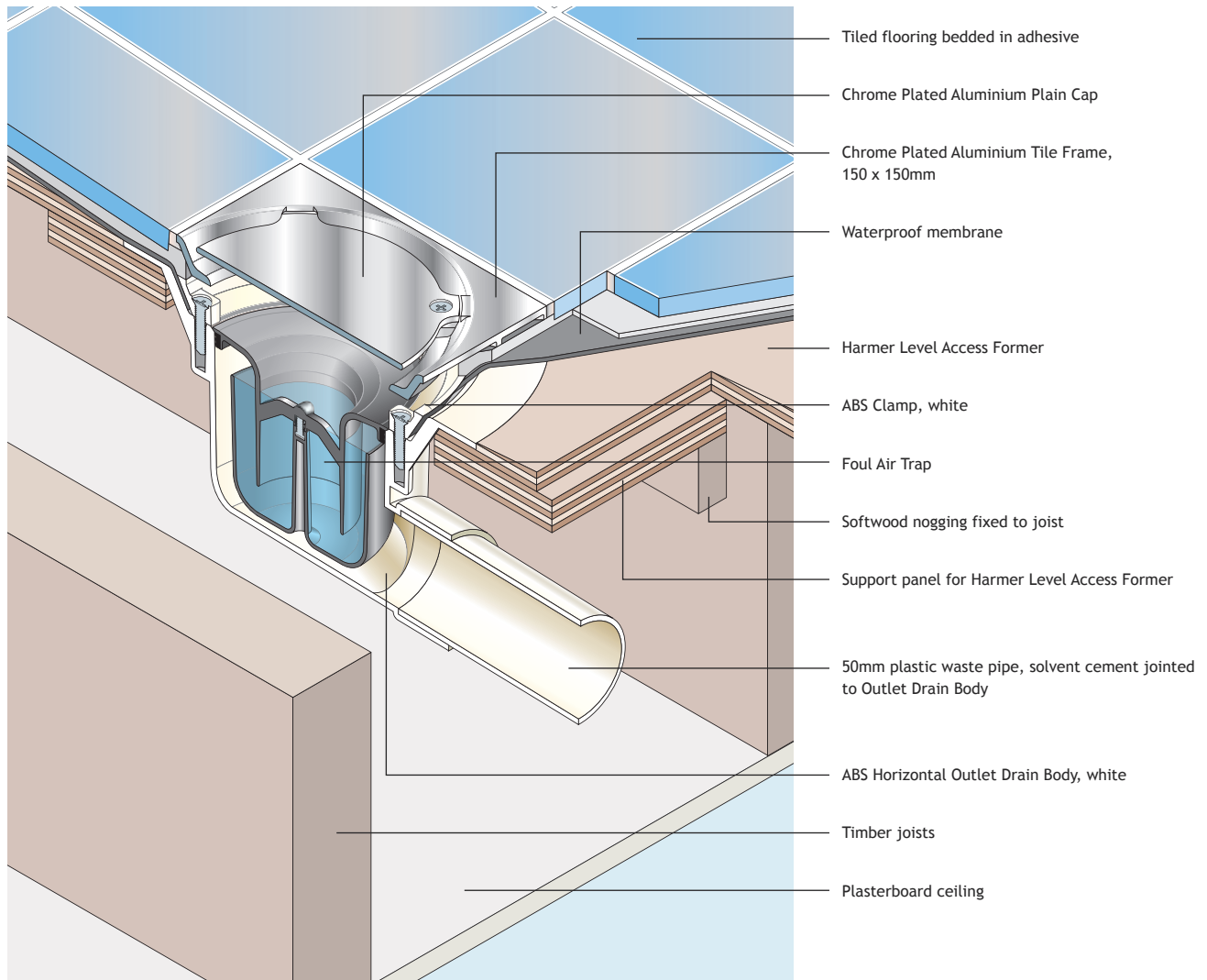
Sitework (using Harmer Level Access Former)

1. Fabricate 18mm (minimum) thick support panel (complete with hole for Drain Body) and softwood noggings, and fit flush with top of joists.
2. Fit Harmer Level Access Former (complete with integral falls and hole for Drain Body) over the ply support panel. Secure the Harmer Level Access Former to the joists using 50mm x No.8 countersunk screws at 225mm centres. Fill screw heads with filler flush to plywood surface.
Note: Harmer Level Access Former is available in various perimeter sizes and drain outlet positions to suit joist layout and site conditions.
3. Connect Drain Body to waste pipe using solvent cement joint.
4. Screw-fix Drain Body to Harmer Level Access Former using 25mm x No.8 countersunk screws. The lay marine ply decking to remainder of floor, butting up to the Harmer Level Access Former.
5. Lay the flexible sheet flooring and dress over and seal to rim of Drain Body. Trim flooring to edge of screw pockets (optimum hole diameter is 122mm).
Do not cut into ABS Drain Body.
6. Screw Clamp firmly in position to secure sheet flooring.
7. Insert Foul Air Trap into Drain Body and prime.
8. Screw Plain Cap onto Clamp.



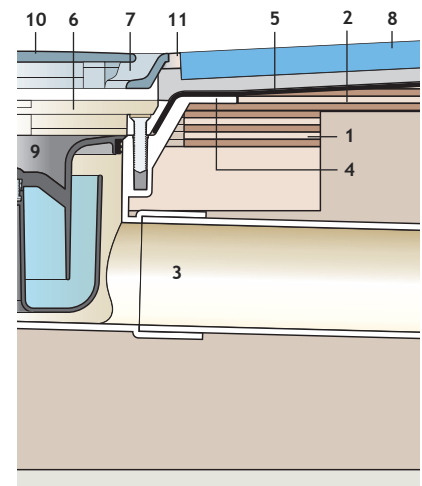
ABS Shower Drains - Application Details

Harmer Shower Drain with Horizontal Outlet in timber floor with tiled flooring



Sitework (using Harmer Level Access Former)

1. Fabricate 18mm (minimum) thick support panel (complete with hole for Drain Body) and softwood noggings, and fit flush with top of joists.
2. Fit Harmer Level Access Former (complete with integral falls and hole for Drain Body) over the ply support panel. Secure the Harmer Level Access Former to the joists using 50mm x No.8 countersunk screws at 225mm centres. Fill screw heads with filler flush to plywood surface. Note: Harmer Level Access Former is available in various perimeter sizes and drain outlet positions to suit joist layout and site conditions.
3. Connect Drain Body to waste pipe using solvent cement joint.
4. Screw-fix Drain Body to Harmer Level Access Former using 25mm x No.8 countersunk screws. Then lay marine ply decking to remainder of floor, butting up to Harmer Level Access Former.
5. Apply waterproof membrane to manufacturers' instructions. Dress membrane over and seal to rim of Drain Body. Trim to edge of screw pockets (optimum hole diameter is 122mm). **Do not cut into ABS Drain Body.**
6. Screw Clamp firmly in position to secure waterproof membrane.
7. Bed the Tile Frame over the Drain Body to the required level, using tile adhesive.
8. Bed tiles in tile adhesive, working away from the Tile Frame.
9. Insert Foul Air Trap into Drain Body prime.
10. Screw Plain Cap onto Tile Frame.
11. Apply flexible sealant between tile and edge of Tile Frame, then apply grout conventionally to remainder of tile joints.



Harmer Linearis Channel Drains

The Harmer Linearis Channel Drainage range from Alumasc offers a mix of sophisticated elegance and advanced engineering to meet all the practical, aesthetic and functional demands of today's contemporary showers and wet rooms.

Introduction

The Harmer Linearis range caters for all the requirements of modern living, with Linearis drainage solutions blending beautifully with any bathroom design to create the perfect environment. Harmer Linearis removes the need for a conventional shower tray and offers a choice of innovative Slimline Drainage Channels with contemporary styling.

Available in a choice of widths (40mm and 60mm) and lengths (750mm, 950mm and 1150mm), the high performance Linearis Slimline 40 and Slimline 60 channels deliver fast and efficient drainage. Additionally, both Slimline channels feature lockable covers and have easy access for maintenance.

The wider Slimline 60 has all the features of the Slimline 40, but with an increased capacity of up to 1.2 litres per second it is able to tackle the new high volume shower heads currently being installed in luxury bathrooms and fitness centres.

The Slimline 60 channel cover can be reversed to allow for tiling, allowing the drain to be co-ordinated to match the bathroom tiling. It can also be adjusted to accommodate tiles up to thicknesses of 20mm, such as natural stone and granite.

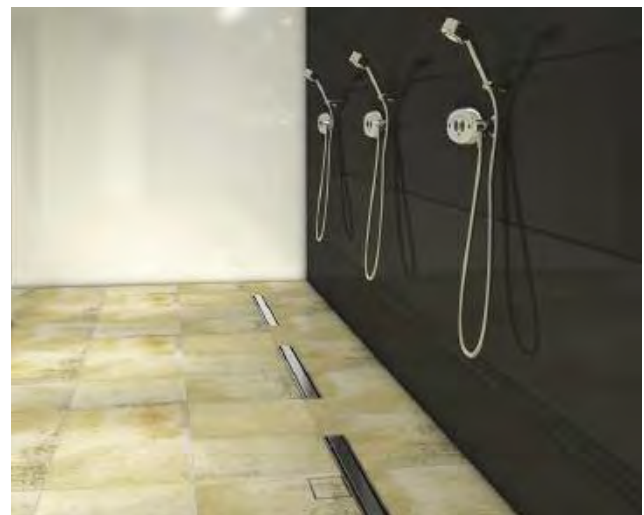
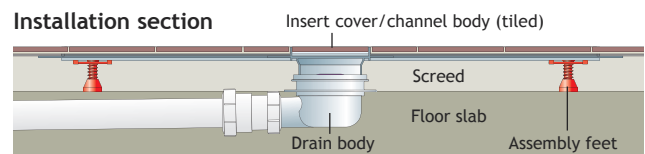
Features and Benefits

- Made from ABS and stainless steel offering durability
- Reversible channel cover for tiling
- Adjustable for different tile thicknesses - up to 20mm
- Lockable channel cover
- Fully accessible for maintenance with removable trap
- Vertical and lateral adjustment for ease of installation
- Adjustable drain depth to cope with various floor applications

Harmer Linearis Slimline Assembly



Installation section



Harmer Floor Drains

The Harmer Floor range of drains from Alumasc sets new standards in quality, versatility and performance.

Introduction

Drain Bodies in polyester powder coated aluminium, together with elegant grates, combine to create a range of floor drains to suit virtually any interior drainage application and all types of flooring.

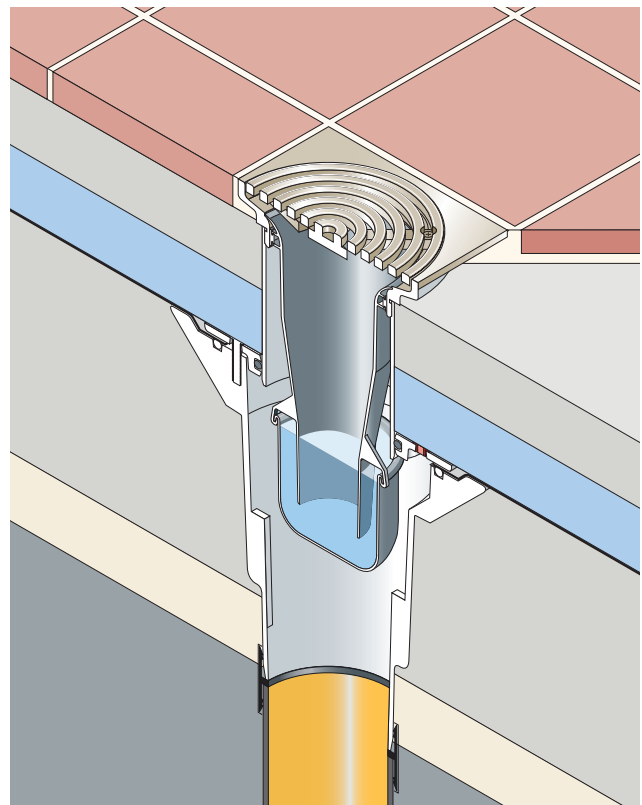
Harmer Floor Drains show marked advances in design sophistication and performance. With minimum complexity, they are versatile and efficient. Straightforward installation methods mean Harmer Floor Drains are synonymous with speed and cost effectiveness in any application.

Finely engineered manufacture and enhanced features bring many benefits, including corrosion resistance and durability, with smooth and attractive finishes that are tough and hygienic. Harmer Floor Drains are available either trapped or untrapped. The range of grates includes stainless steel and nickel bronze, available in a choice of attractive finishes.



Features and Benefits

- Trapped and untrapped versions are available with vertical or horizontal outlets and optional auxiliary inlets, offering flexibility of application
- Polyester powder coated aluminium Drain Body and Clamp Ring for durability and long life
- Grates and bezels are available in stainless steel or nickel bronze to suit all floor finishes (screed, tile, flexible sheet flooring), giving designers and specifiers numerous design options
- Grate, bezel and throat installed as a single unit into the insitu body providing ease of installation
- High flow performance exceeds current British Standards
- Direct connection to drainage system via 110mm spigot outlet
- The fully adjustable, sliding throat permits vertical (25mm-115mm), horizontal and rotational adjustment to the finest tolerances
- Top accessible via removal of Trap and Trap Cup in Bezel for ease of maintenance



Other Harmer Drainage Products

In addition to Harmer Shower Drains, Harmer Linearis and Harmer Floor Drains, Alumasc offers the complementary drainage systems, shown below.

For detailed information on these systems, please contact Alumasc Technical Services or visit the Alumasc Drainage website.

Harmer Roof Outlets



Harmer Roof metal and insulated outlets offer comprehensive and innovative drainage solutions for all types of flat roof, including those carrying vehicular traffic, and also for low pitch industrial roofing. Harmer Roof range groupings are detailed below.

Harmer AV

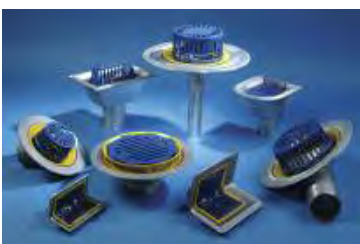
A range of high performance metal roof outlets with circular flanges, suitable for all regular flat roofing applications with continuous membranes. There is a choice of outlets with spigot or screw connection, for vertical, horizontal or 45 degree discharge. Harmer AV outlets are suitable for both new building and refurbishment and can be connected to any approved pipework material including Harmer SML which gives optimum performance in both single pipe and collector pipe applications.

Harmer Detail

A range of metal outlets designed to solve problematic detailing requirements. Special application outlets are available for balconies, gulleys and car parks along with two-way outlets for use where the roof surface abuts a wall or parapet.

Harmer Insulated

A range based on a rigid polyurethane foam body which has a high insulation value. They are ideal for installation in flat roofs to avoid any possibility of condensation forming as a result of thermal bridging.



Harmer AV and Harmer Detail Outlets



Harmer Insulated Outlets

Harmer SML Soil and Waste System



Harmer SML is a lightweight, dry-jointed cast iron soil and waste system that is Agrément certified and fully compliant with BS EN 877. This high performance pipework system combines an excellent fire classification with the latest acoustic performance requirements for building materials. Harmer SML has a proven track record of use over the lifetime of the building and is manufactured using 95% recycled material.

The Harmer SML system consists of coated, socketless cast iron pipes and fittings simply joined with either ductile iron or stainless steel rubber-lined couplings, allowing ease of installation. The range also includes bracketry for restraining the pipework vertically and supporting it horizontally, along with a choice of special connectors for linking with other materials.

Key Features

- Agrément certified
- Meets European Standard BS EN 877
- Excellent noise attenuation
- Non-combustible
- High tensile strength
- Choice of ductile or stainless steel couplings
- Secure socketless fixing between pipe and fitting
- Quick to assemble, low maintenance, and 100% recyclable



Harmer SML Pipes



Harmer SML Couplings

Alumasc Premium Products

Alumasc provides an unrivalled range of premium products for building exteriors and drainage, along with high levels of technical expertise and project support. Our wealth of experience combined with networks of approved installers, merchant stockists and a choice of warranty options ensures we provide appropriate product and system solutions for all types of buildings.



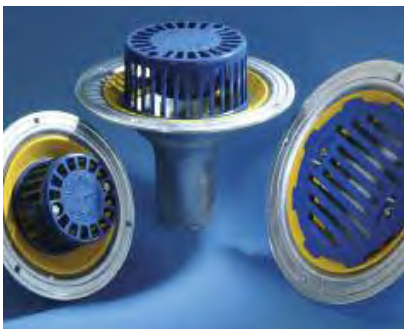
Alumasc is the UK's leading manufacturer of aluminium rainwater systems and offers a complete range of gutters, downpipes and fascia/soffits for both contemporary and traditional architecture.

Alumasc's cast iron rainwater system is for historic and restoration sites, with bespoke designs available to match or replace existing installations.

Rainwater

- Aluminium Rainwater Systems
- Aluminium Fascias, Soffits and Copings
- Cast Iron Rainwater Systems

www.alumascrainwater.co.uk



Alumasc's Harmer brand provides market leading solutions for rainwater handling and building drainage.

Aluminium roof, floor and shower drains are complemented by specialist drainage ranges in plastic. A choice of cast iron pipework systems is available for internal and rainwater drainage. Specialist rainwater management systems and paving and deck supports are also available.

Drainage

- Roof, Floor and Shower Drains
- Cast Iron Soil & Waste Systems
- Rainwater Management Systems
- Paving and Decking Supports

www.alumascdrainage.co.uk



Alumasc is a specialist provider of world class waterproofing and green roof systems.

The range includes Derbigum high performance flat roof membranes, Firestone TPO and EPDM single ply membranes, Hydrotech structural waterproofing and ZinCo Extensive, Biodiverse, Semi-intensive and Intensive green roofs.

Waterproofing

- Flat Roof Membranes
- Single Ply Membranes
- Structural Waterproofing
- Green Roof Systems

www.alumasewaterproofing.co.uk



Alumasc is a specialist in the design and development of thermally efficient insulated render systems. Alumasc's external wall insulation systems are available with a choice of insulating material and silicone, mineral or polymer-modified decorative render finishes.

Facades

- External Wall Insulation
- Render Only Systems
- Brick Slips & Specialist Systems
- Decorative Coatings

www.alumascfacades.co.uk

HARMER

DRAINAGE SYSTEMS

Rainwater

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Façades

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The Alumasc logo, featuring a stylized figure with arms raised in a circle above the word 'alumasc' in a lowercase, sans-serif font. Below the name, it reads 'EXTERIOR BUILDING PRODUCTS' in a smaller, uppercase, sans-serif font.

alumasc
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