

# Harmer Drainage Systems Aluminium Shower Floor Outlets

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



# Aluminium Shower Floor Outlets - Benefits

Harmer Aluminium Shower Floor Outlets 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 Floor Outlets 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, 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

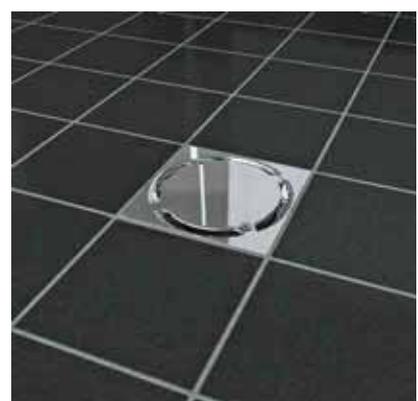
- Compact vertical and horizontal drain bodies install into timber and concrete floor construction
- Drain bodies easily connect to other materials, including the Harmer SML lightweight cast iron soil and waste system, HDPE, PVC and polypropylene
- Fully compatible with UK pipe sizes, where 43mm (1½"), 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 Floor Outlets - 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 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 Floor Outlets - 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 Mirror Finish, Stainless Steel, Nickel Bronze
- Star Grate - in Stainless Steel, Nickel Bronze
- Concentric Ring Grate - in Stainless Steel, Nickel Bronze
- A new Anti-Ligature grate option is also available in Stainless Steel and 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 128 and 132.



## Tiled Floors

### Caps, Grates and Tile Frames

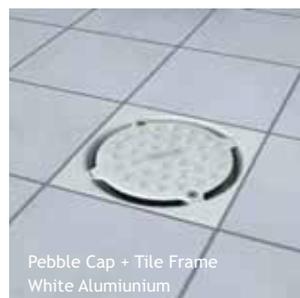
The cap, grate and tile frame components are for tiled floor applications and combine with both vertical and horizontal outlet bodies. The tile frames are available in sizes 150mm x 150mm or 200mm x 200mm.

Load Class K3 to BS EN 1253 applies.

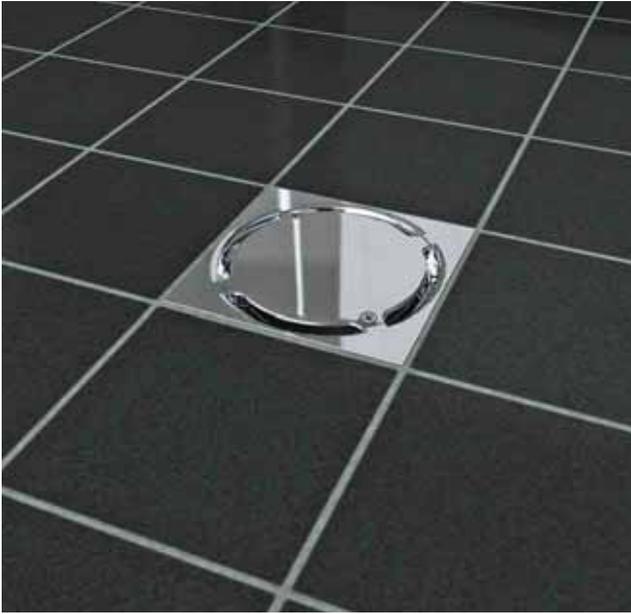
The components available are:

- Pebble Cap - in White polyester powder coated Aluminium (standard), also available in a choice of colours on request
- Plain Cap - in Mirror Finish, Stainless Steel, Nickel Bronze
- Star Grate - in Stainless Steel, Nickel Bronze
- Concentric Ring Grate - in Stainless Steel, Nickel Bronze
- A new Anti-Ligature grate option is also available in Stainless Steel and 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 129 and 133.



# Aluminium Shower Floor Outlets - Vertical Outlet



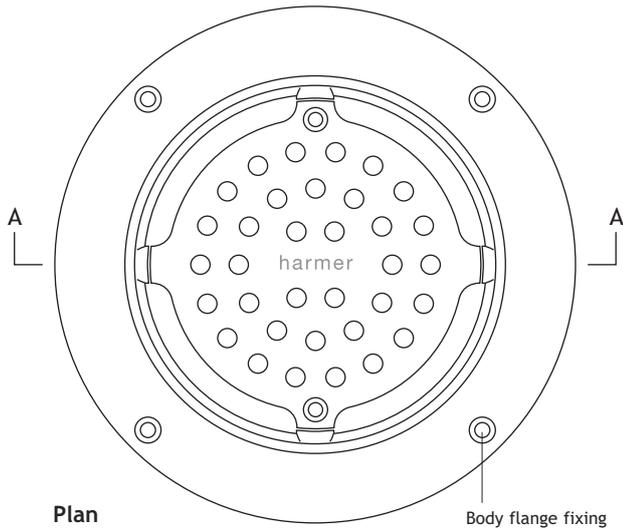
## Vertical Outlet Components



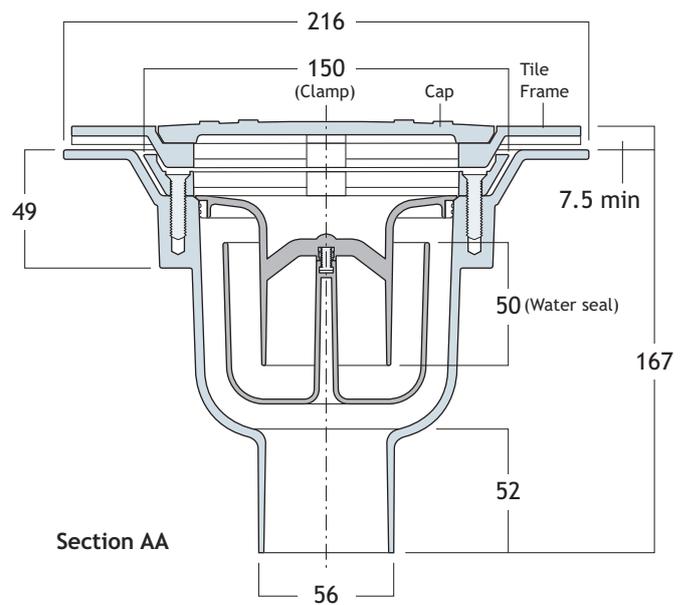
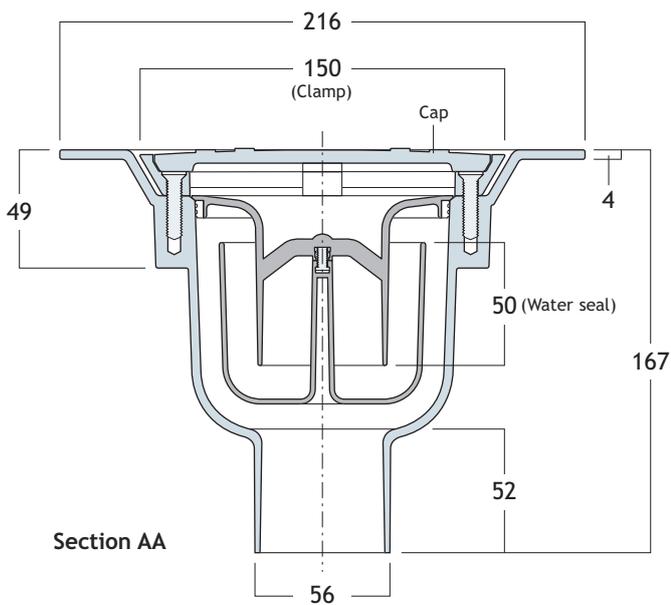
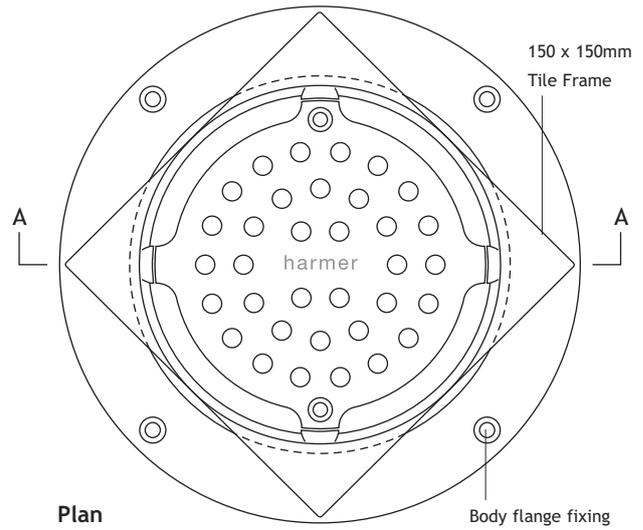
- 1 Stainless Steel screws (provided) for securing Caps and Grates. Anti-tamper security fixings are also available
- 2 White polyester powder coated Aluminium Pebble Cap; also available in Plain Mirror Finish, Stainless Steel or Nickel Bronze
- 3 Nickel Bronze Concentric Ring Grate; also available in 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 Floor Outlets - Vertical Outlet

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



**Drain Body Dimensions  
(Tiled Flooring)**



Note: All dimensions are shown in millimetres

# Aluminium Shower Floor Outlets - 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.

### Mirror Finish 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 |

Stainless Steel Anti-Ligature drain available AVS/AS

### Nickel Bronze Clamp and Concentric Ring Grate



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

Nickel Bronze Anti-Ligature drain available AVS/AN

# Aluminium Shower Floor Outlets - 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.

### Mirror Finish Tile Frame and Plain Cap



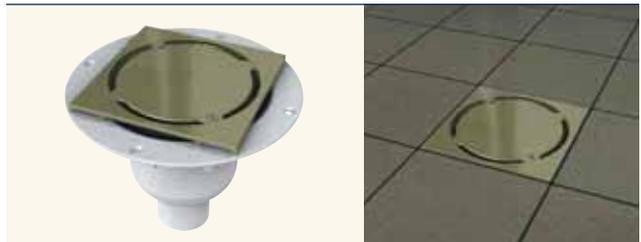
| Product Code | Size      | Flow Rate | Load Class | Weight |
|--------------|-----------|-----------|------------|--------|
| AVS/CH/T15   | 150x150mm | 1.3 l/s   | K3         | 1.3 kg |

### 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



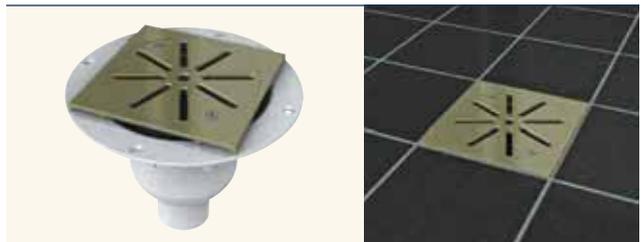
| Product Code | Size      | Flow Rate | Load Class | Weight |
|--------------|-----------|-----------|------------|--------|
| AVS/CN/T15   | 150x150mm | 1.3 l/s   | K3         | 2.0 kg |
| AVS/CN/T20   | 200x200mm | 1.3 l/s   | K3         | 2.7 kg |

### 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 |

Stainless Steel Anti-Ligature drain available AVS/AS/T15 & AVS/AS/T20

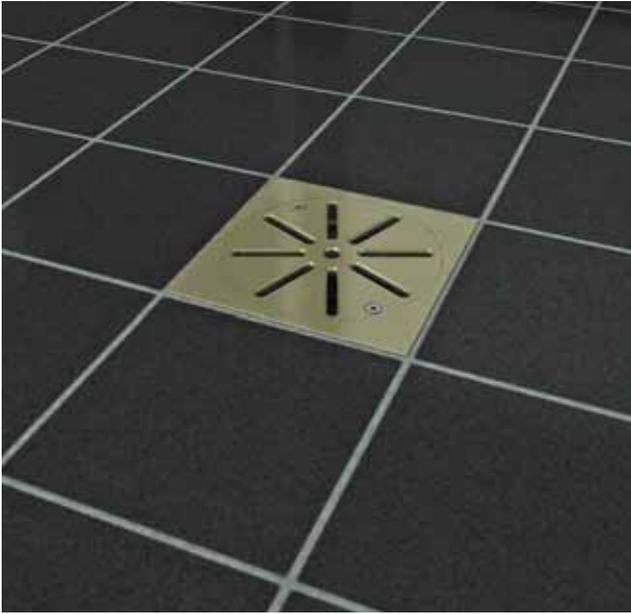
### Nickel Bronze Tile Frame and Concentric Ring Grate



| 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 |

Nickel Bronze Anti-Ligature drain available AVS/AN/T15 & AVS/AN/T20

# Aluminium Shower Floor Outlets - Horizontal Outlet



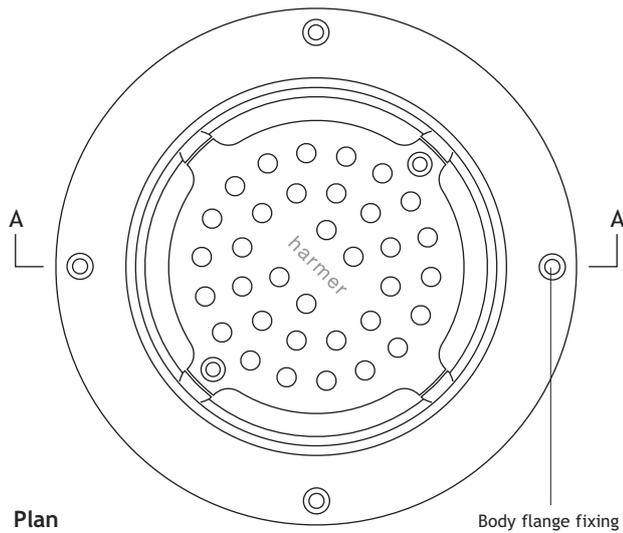
## Horizontal Outlet Components

- 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 Mirror Finish, 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

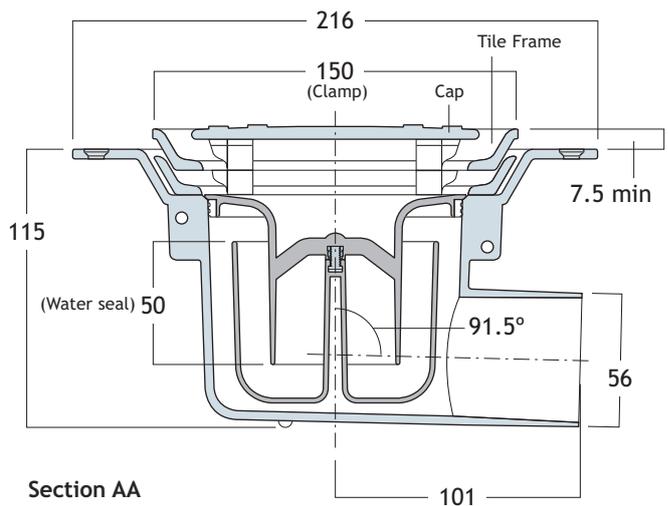
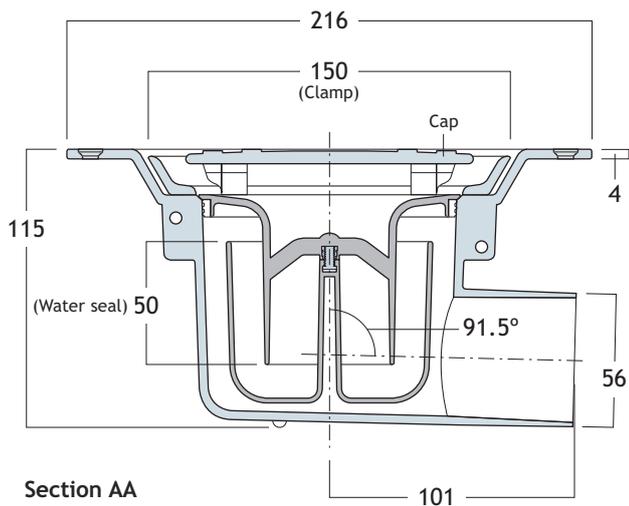
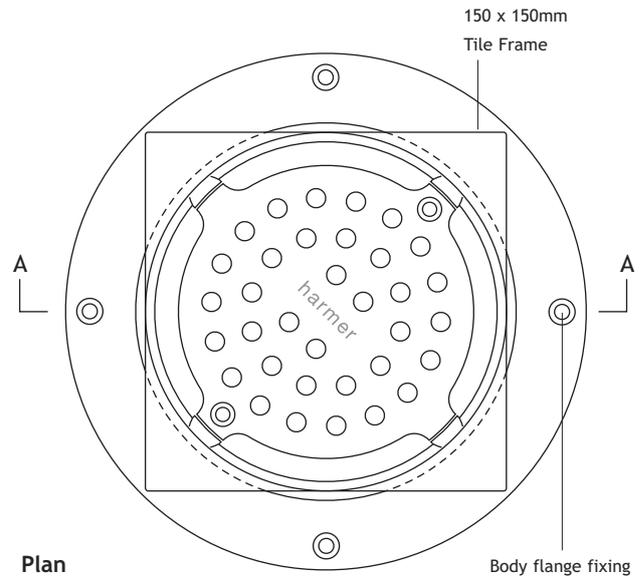


# Aluminium Shower Floor Outlets - Horizontal Outlet

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



**Drain Body Dimensions  
(Tiled Flooring)**



Note: All dimensions are shown in millimetres

# Aluminium Shower Floor Outlets - 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.

### Mirror Finish 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 |

Stainless Steel Anti-Ligature drain available AHS/AS

### Nickel Bronze Clamp and Concentric Ring Grate



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

Nickel Bronze Anti-Ligature drain available AHS/AN

# Aluminium Shower Floor Outlets - 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

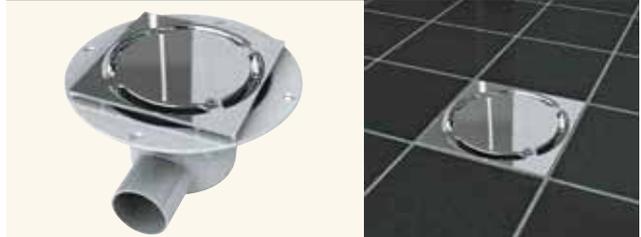
### White PPC Aluminium Tile Frame and Pebble Cap



| 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.

### Mirror Finish 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 |

### 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



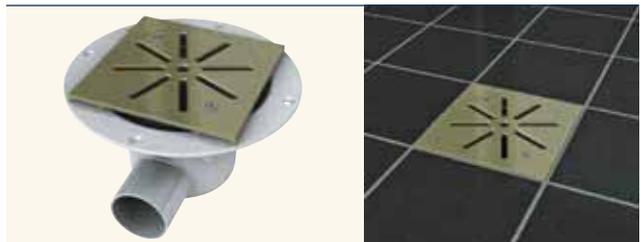
| Product Code | Size      | Flow Rate | Load Class | Weight |
|--------------|-----------|-----------|------------|--------|
| AHS/CN/T15   | 150x150mm | 0.8 l/s   | K3         | 2.0 kg |
| AHS/CN/T20   | 200x200mm | 0.8 l/s   | K3         | 2.7 kg |

### 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 |

Stainless Steel Anti-Ligature drain available AHS/AS/T15 & AHS/AS/T20

### 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 |

Nickel Bronze Anti-Ligature drain available AHS/AN/T15 & AHS/AN/T20

# Aluminium Shower Floor Outlets - 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 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, mirror finish, 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 Floor Outlets - 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 Harmer Drainage 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](mailto: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
- Mirror Finish - 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:

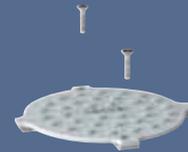
- 150 x 150mm or 200 x 200mm Tile Frame
- White Polyester Powder Coated Aluminium - Pebble Cap
- Mirror Finish - Plain Cap
- Stainless Steel - Plain Cap; Concentric Ring Grate; Star Grate; Anti-Ligature
- Nickel Bronze - Plain Cap; Concentric Ring Grate; Star Grate; Anti-Ligature

## 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 136 to 139.

#### Caps/Grates

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



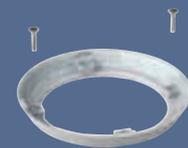
#### Tile Frames

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.



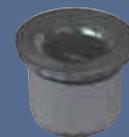
#### Clamp Ring

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

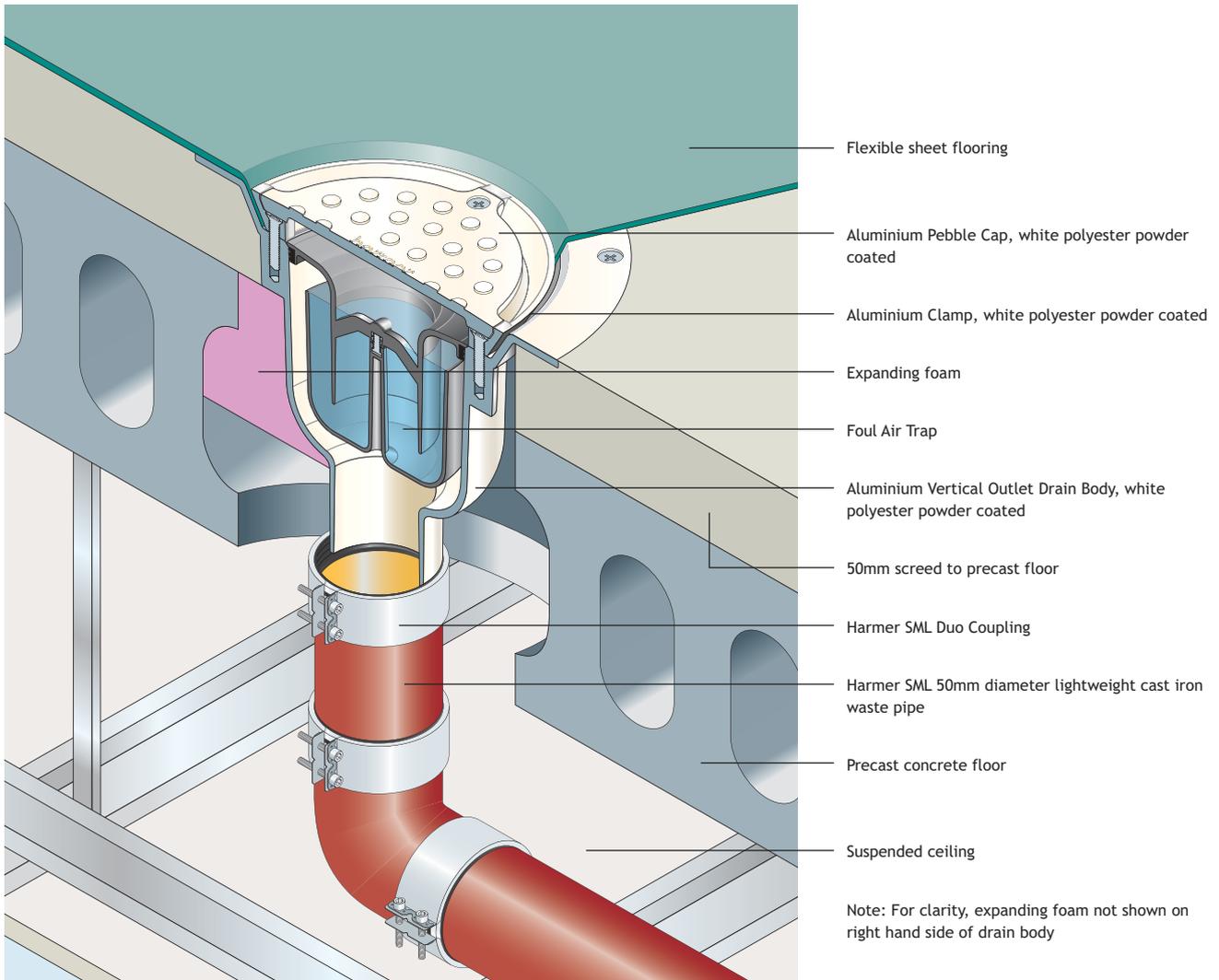
Install into concrete and joisted timber floor construction.

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



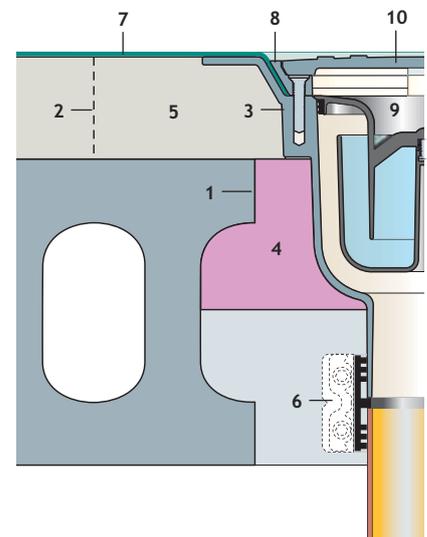
# Aluminium Shower Floor Outlets - Application Details

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



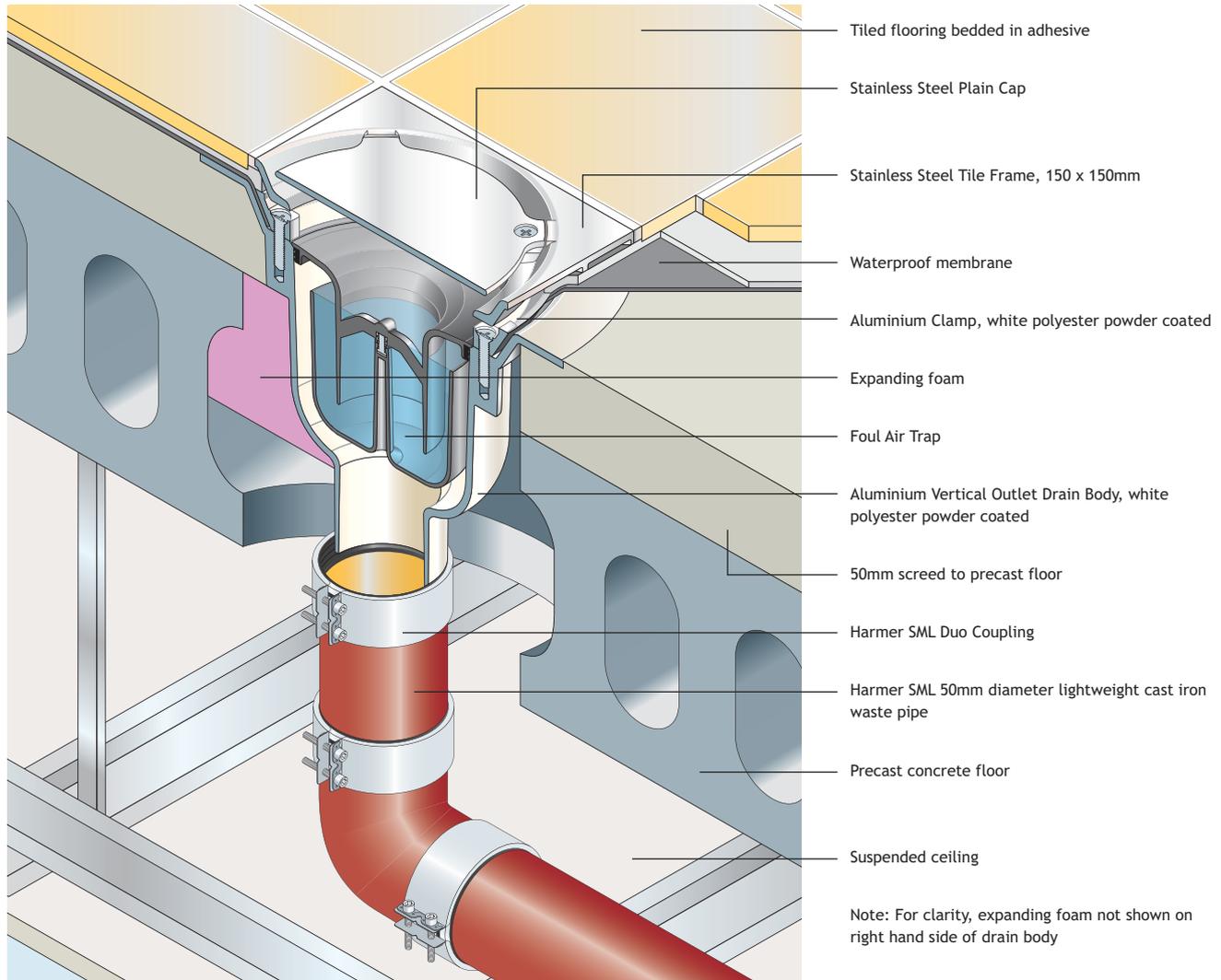
### Sitework

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.



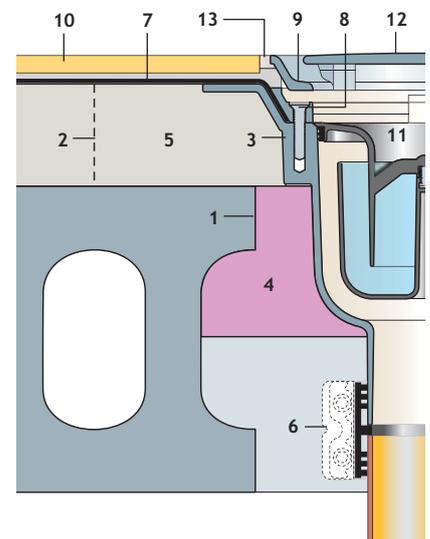
# Aluminium Shower Floor Outlets - Application Details

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



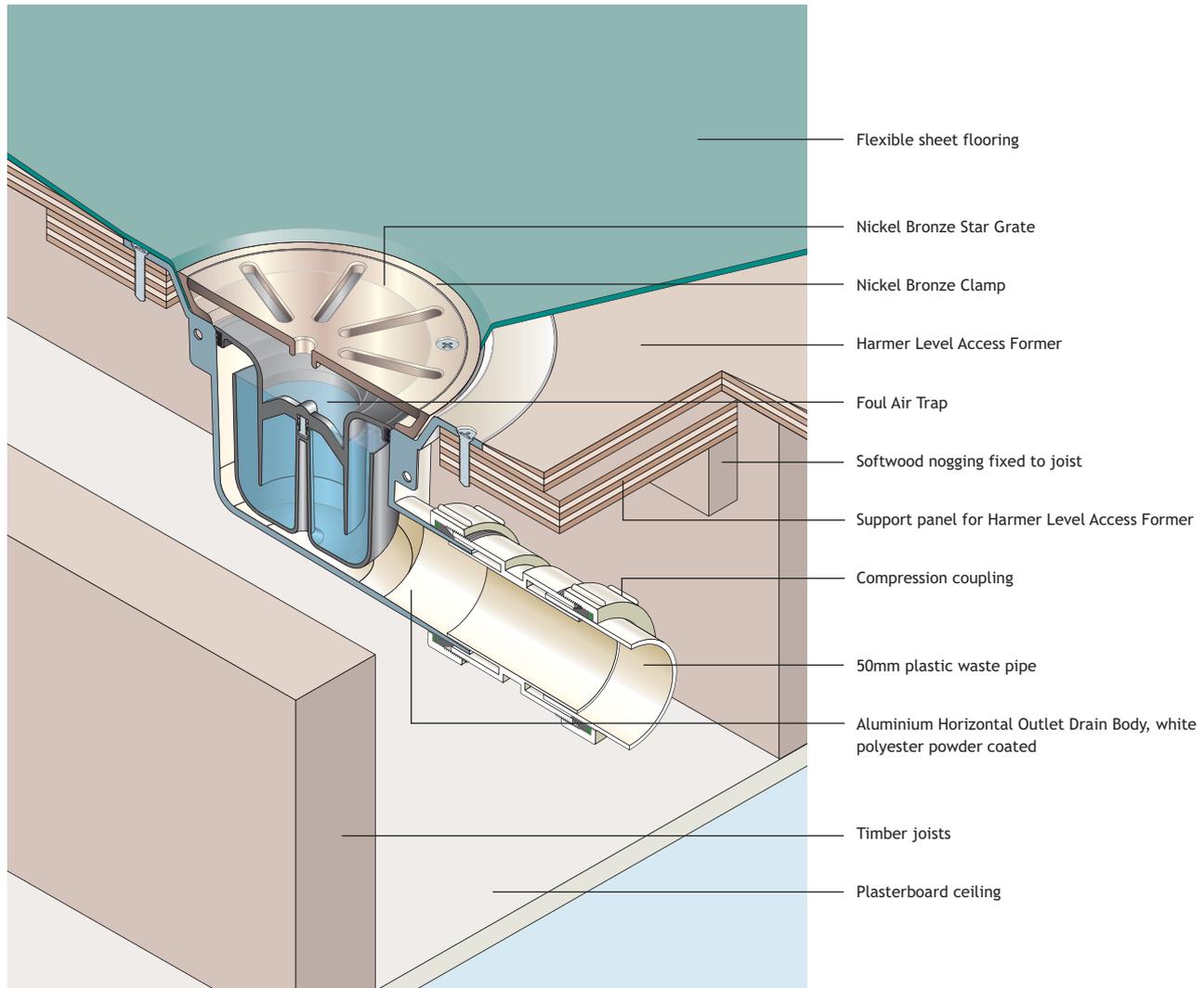
### Sitework

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.



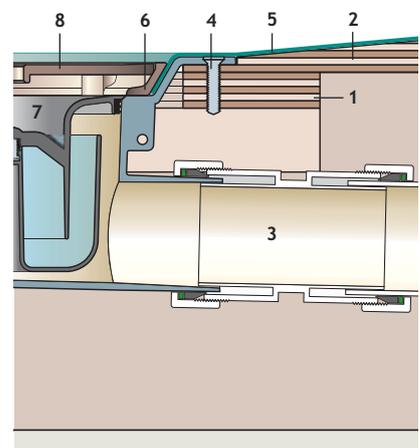
# Aluminium Shower Floor Outlets - Application Details

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



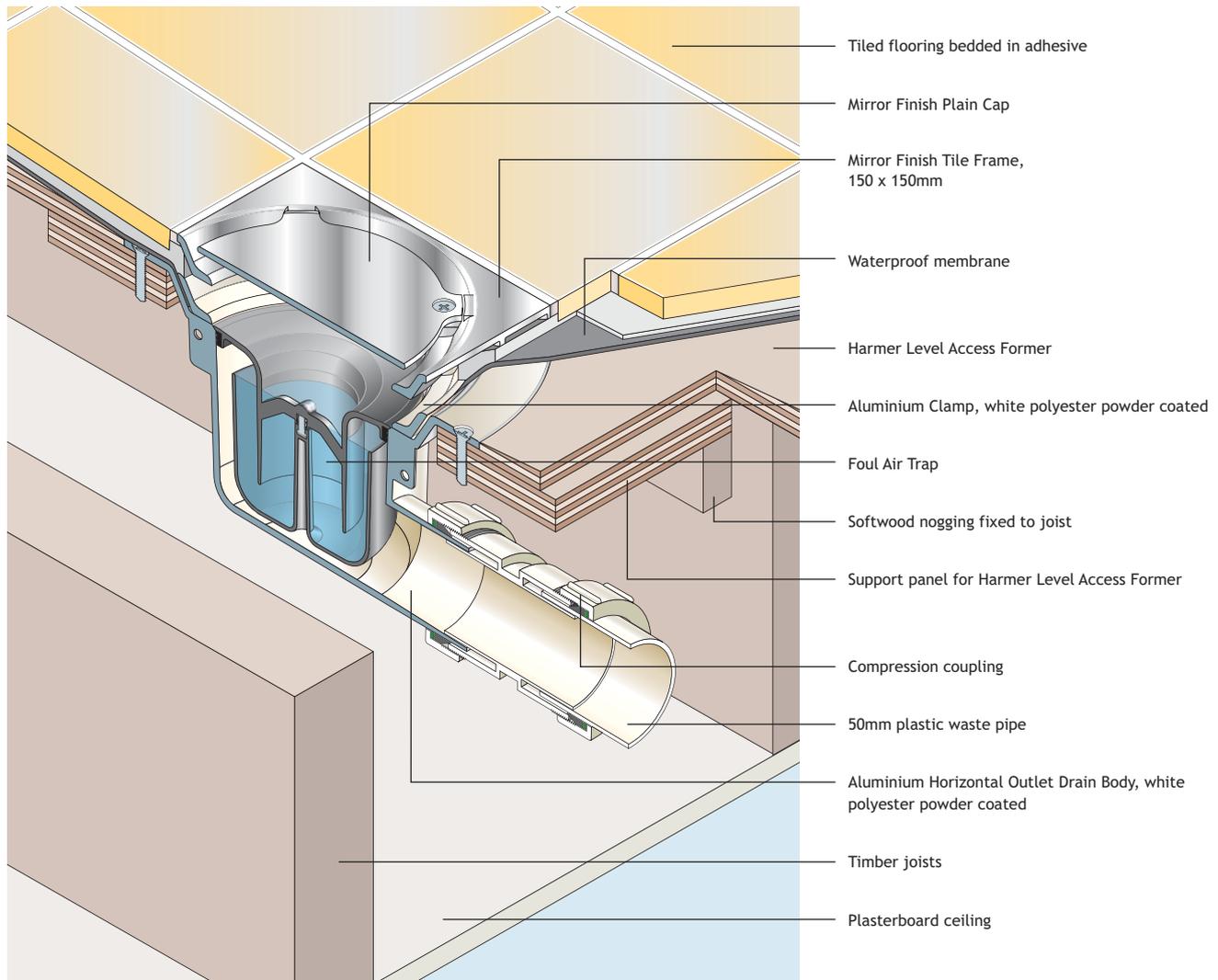
### Sitework (using Harmer Level Access Former)

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 Floor Outlets - Application Details

## 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.

