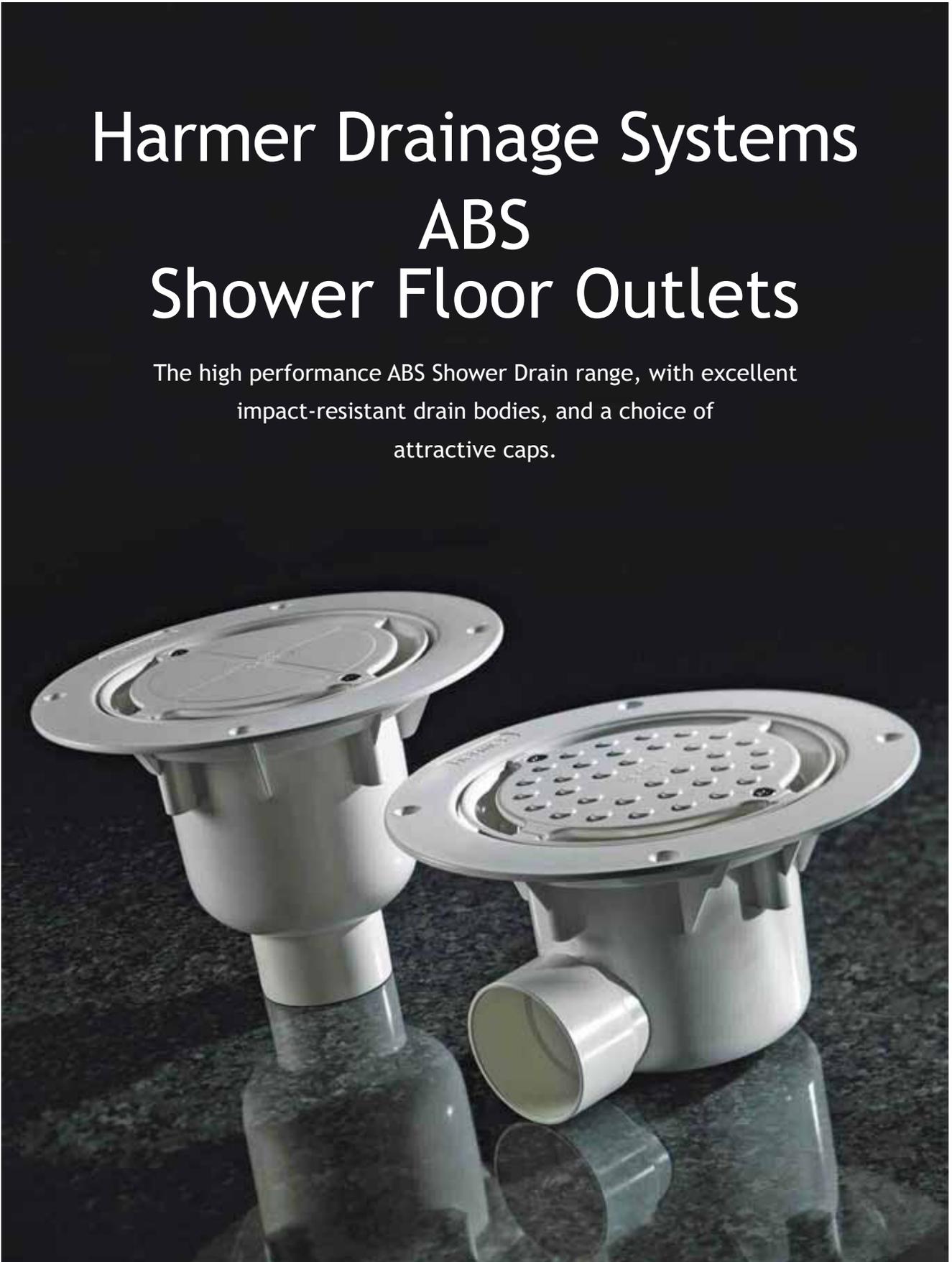


Harmer Drainage Systems ABS Shower Floor Outlets

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



ABS Shower Floor Outlets - Benefits

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

Compliances

- Harmer Shower Floor Outlets 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 mirror finish 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 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 Floor Outlets - 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.



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 Floor Outlets - Product Range Summary

All Harmer ABS Shower Drains are supplied with a choice of caps in antimicrobial plastic as well as high lustre mirror finish 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 Mirror Finish
- Anti-Ligature Cap - Stainless Steel and Nickel Bronze
- 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 145 and 147.



Tiled Floors

Caps and Tile Frames

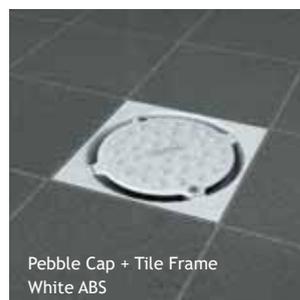
The assemblies are suitable for tiled floor applications and combine with both vertical and horizontal outlet bodies. They are available in 150mm x 150mm or 200mm x 200mm.

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 Mirror Finish
- Anti-Ligature Cap - Stainless Steel and Nickel Bronze
- 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 145 and 147.

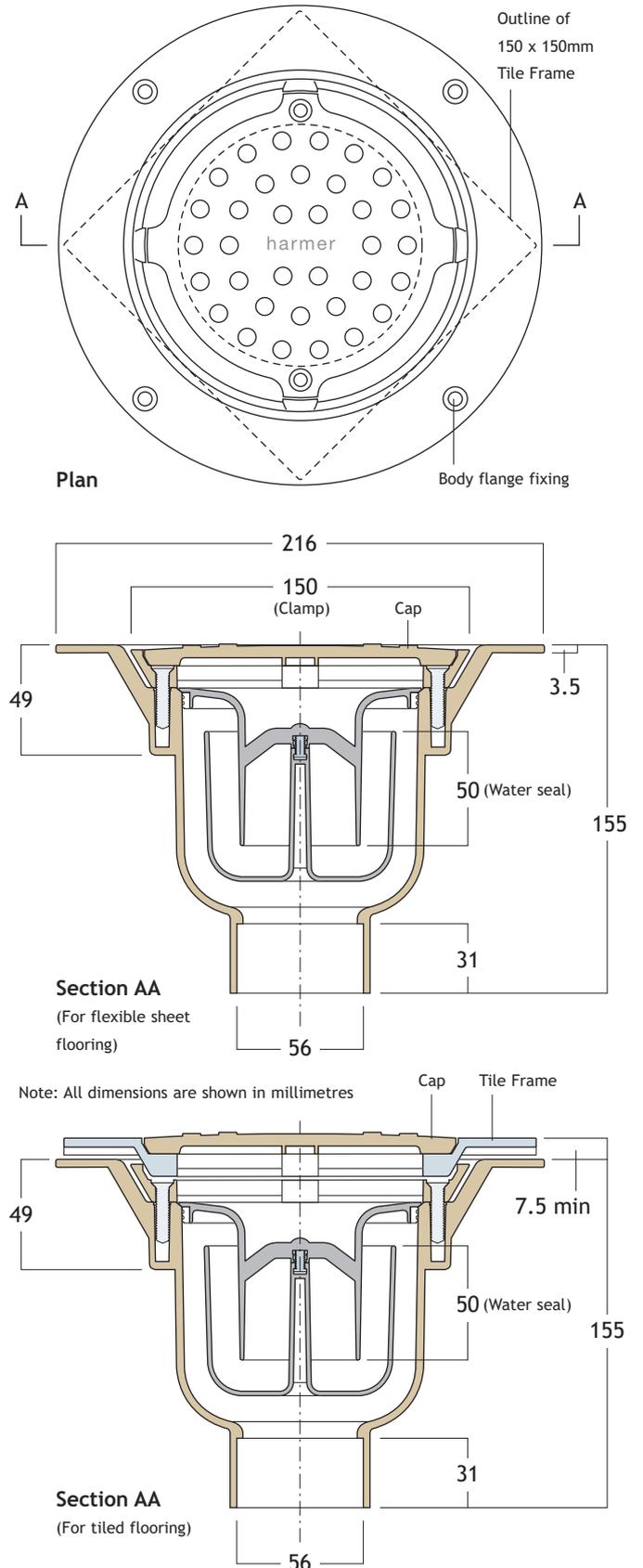


ABS Shower Floor Outlets - Vertical Outlet

Vertical Outlet Components



Drain Body Dimensions



ABS 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

White Clamp and ABS Pebble Cap

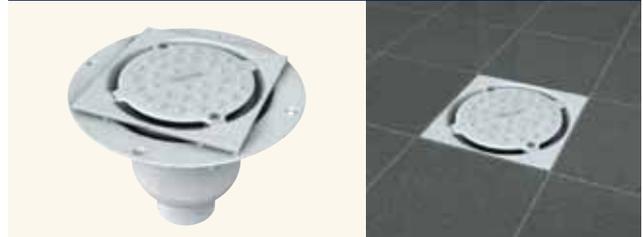


Product Code	Flow Rate	Load Class	Weight
CVS/CP	1.3 l/s	K3	0.5 kg

Vertical Outlet Combinations for Tiled Flooring

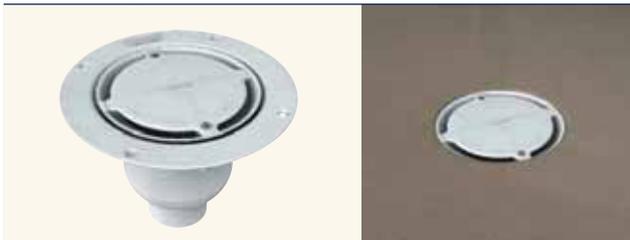
Note: Add suffix /LC to product codes if anti-tamper security screws are required

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

Mirror Finish Clamp and Plain Cap



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

Mirror Finish 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

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

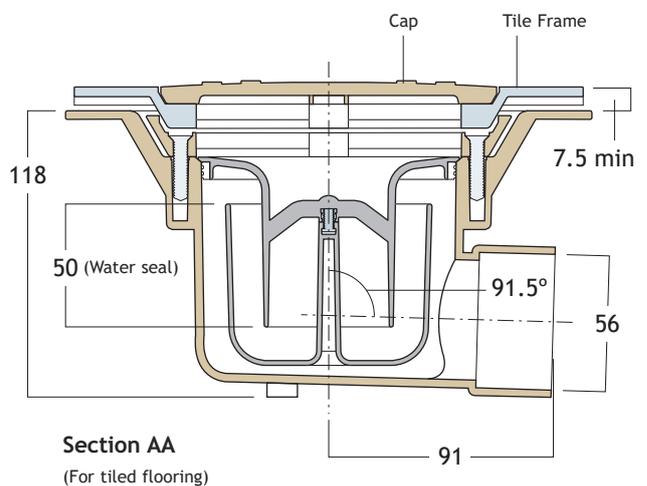
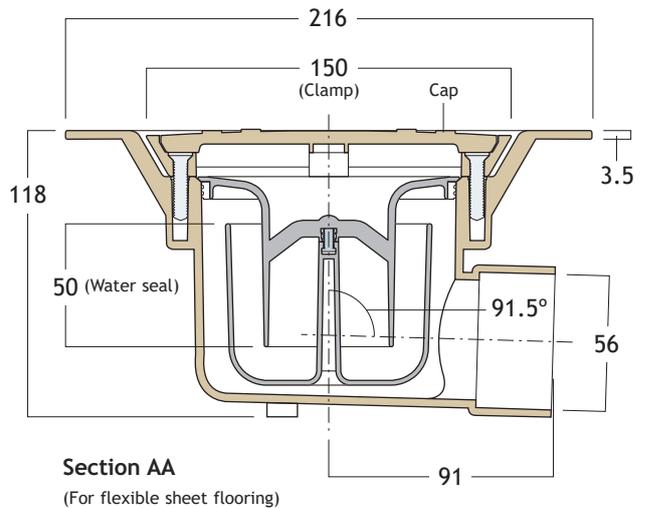
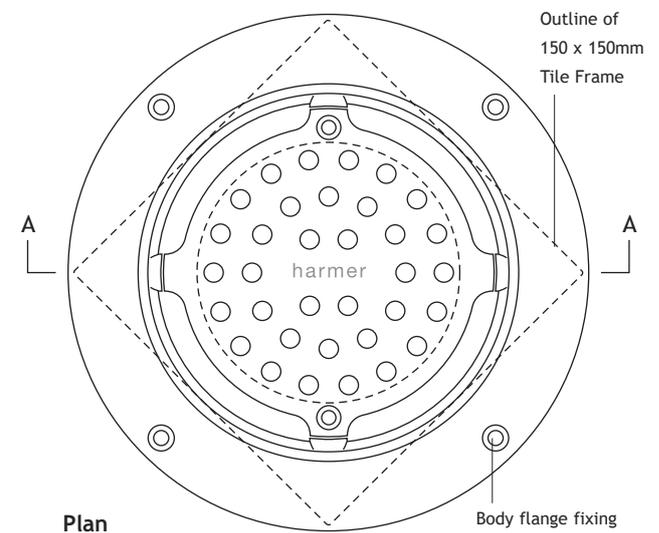
Nickel Bronze Anti-Ligature drain available CVS/AN, CVS/AN/T15 & CVS/AN/T20

ABS Shower Floor Outlets - Horizontal Outlet

Horizontal Outlet Components



Drain Body Dimensions



Note: All dimensions are shown in millimetres

ABS 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

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



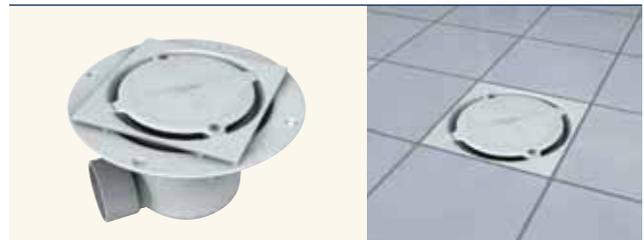
Product Code	Size	Flow Rate	Load Class	Weight
CHS/CP/T15	150x150mm	0.8 l/s	K3	0.7 kg
CHS/CP/T20	200x200mm	0.8 l/s	K3	1.0 kg

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

Mirror Finish Clamp and Plain Cap



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

Mirror Finish 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

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

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

ABS Shower Floor Outlets - Connection & Maintenance

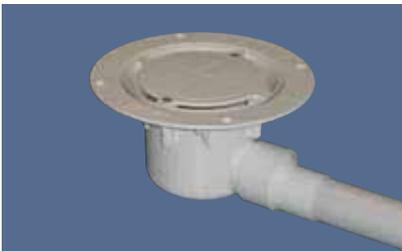
The Harmer Shower Floor Outlet is highly versatile and can be connected to most types of pipework. The cap, clamp and trap have been designed to optimise efficient flow performance for self-cleaning and reduced maintenance.

Pipe Connection

Harmer ABS Shower Drain bodies have a nominal 56mm diameter spigot. They connect to ABS, PVC 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).



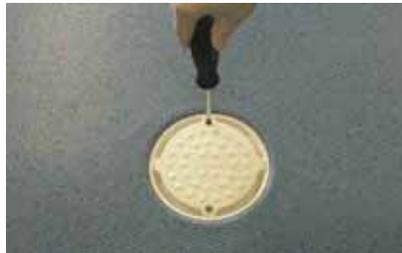
Connecting to 43mm (1 1/2") Polypropylene. Use 50mm to 43mm (1 1/2") proprietary solvent cement/compression reducer.



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 mirror finish cap which is stainless steel.

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 Mirror Finish 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 Floor Outlets - Specification & Installation

Standard specification guidelines for the Harmer ABS Shower Floor Outlet 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

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
- Mirror Finish - Plain Cap
- Anti-Ligature Cap

Caps - Tiled Flooring

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

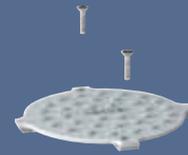
- 150 x 150mm or 200 x 200mm Tile Frame
- White ABS - Pebble Cap
- White ABS - Quadrant Cap
- Mirror Finish - Plain Cap
- Anti-Ligature Cap

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 150 to 153.

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.



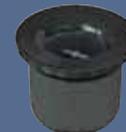
Clamp Ring

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

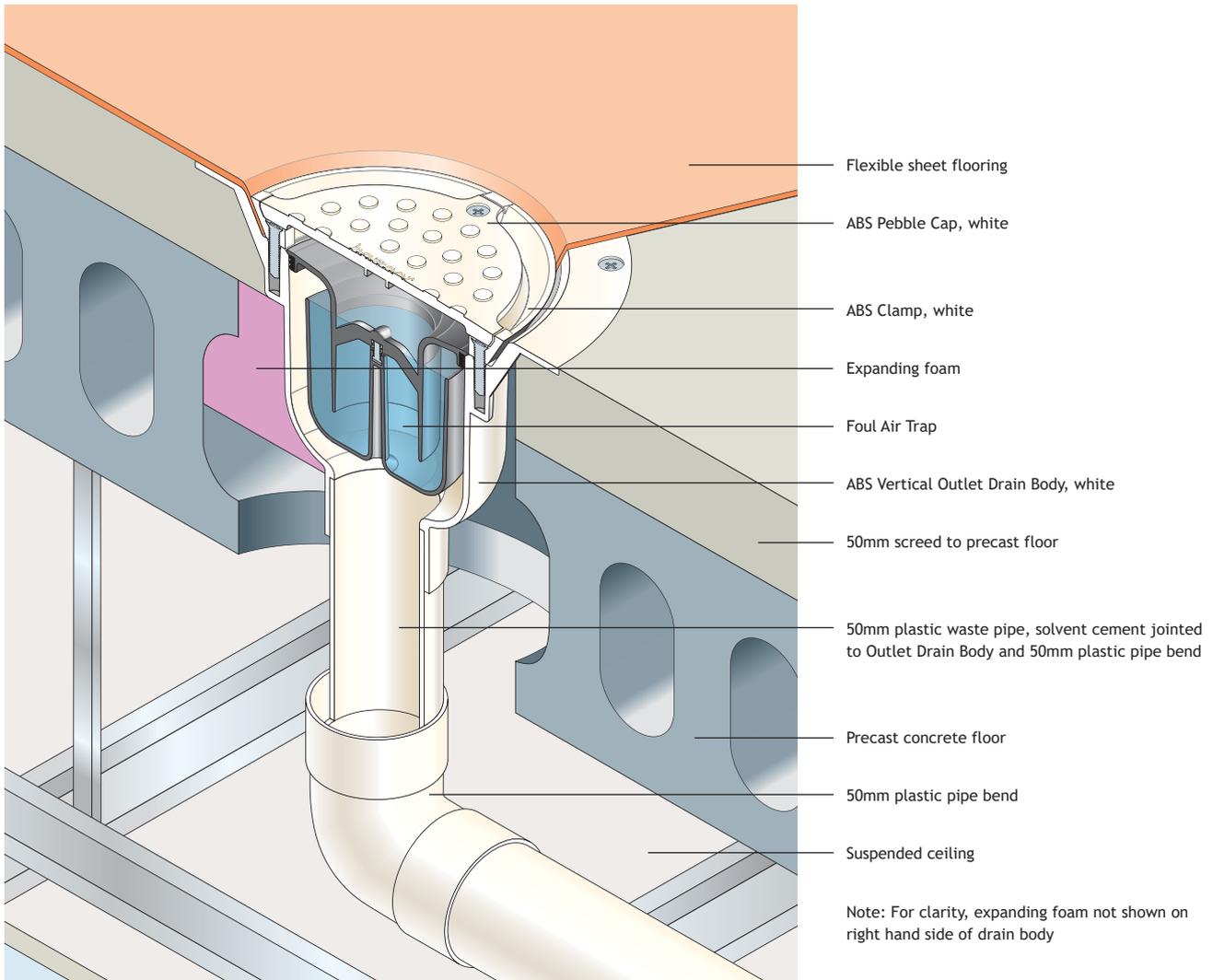
Install into concrete and joisted timber floor construction.

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



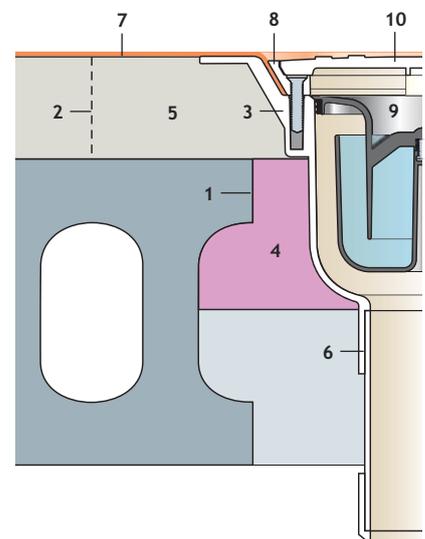
ABS Shower Floor Outlets - Application Details

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



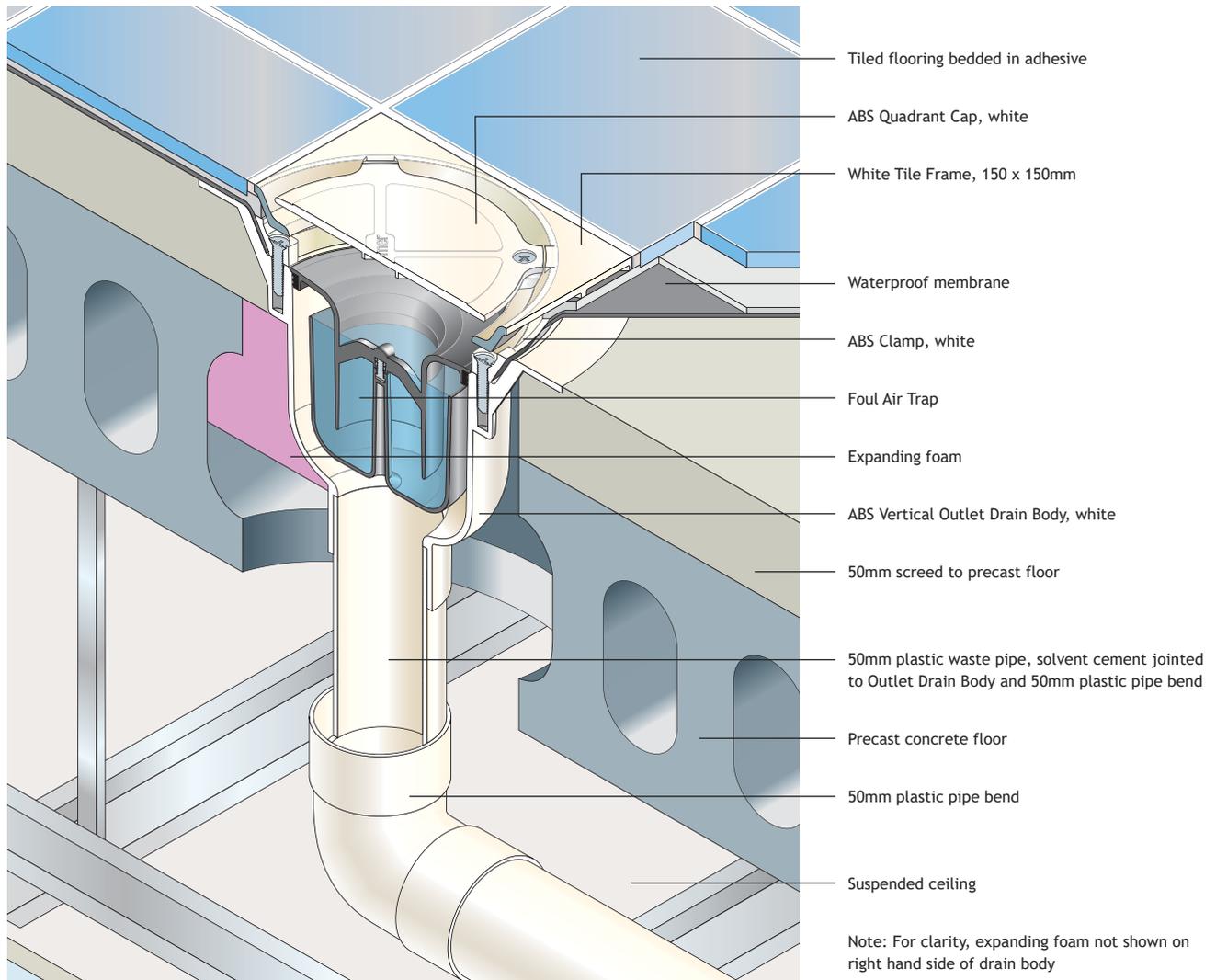
Sitework

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 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.



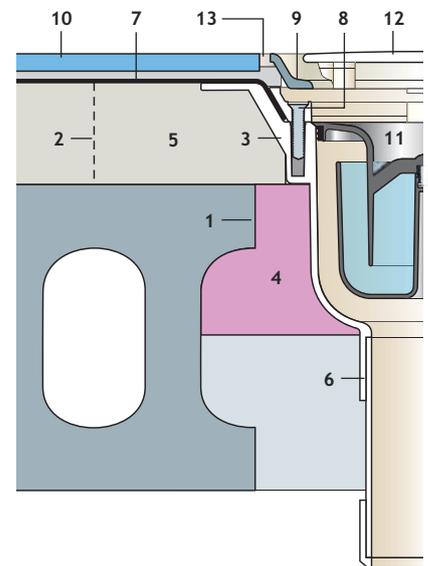
ABS Shower Floor Outlets - Application Details

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



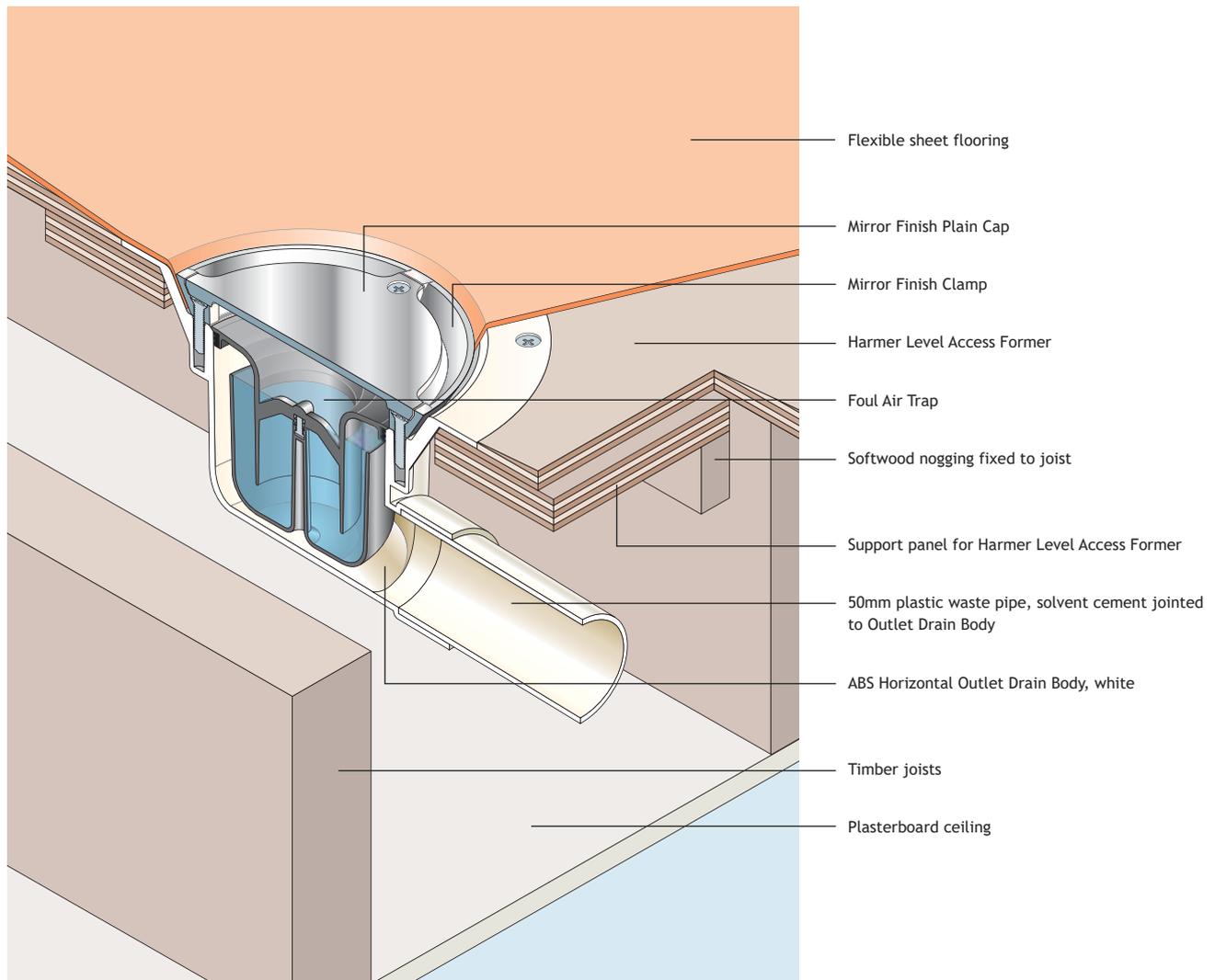
Sitework

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 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.



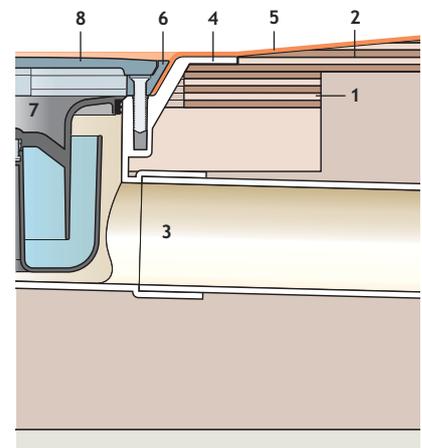
ABS Shower Floor Outlets - Application Details

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



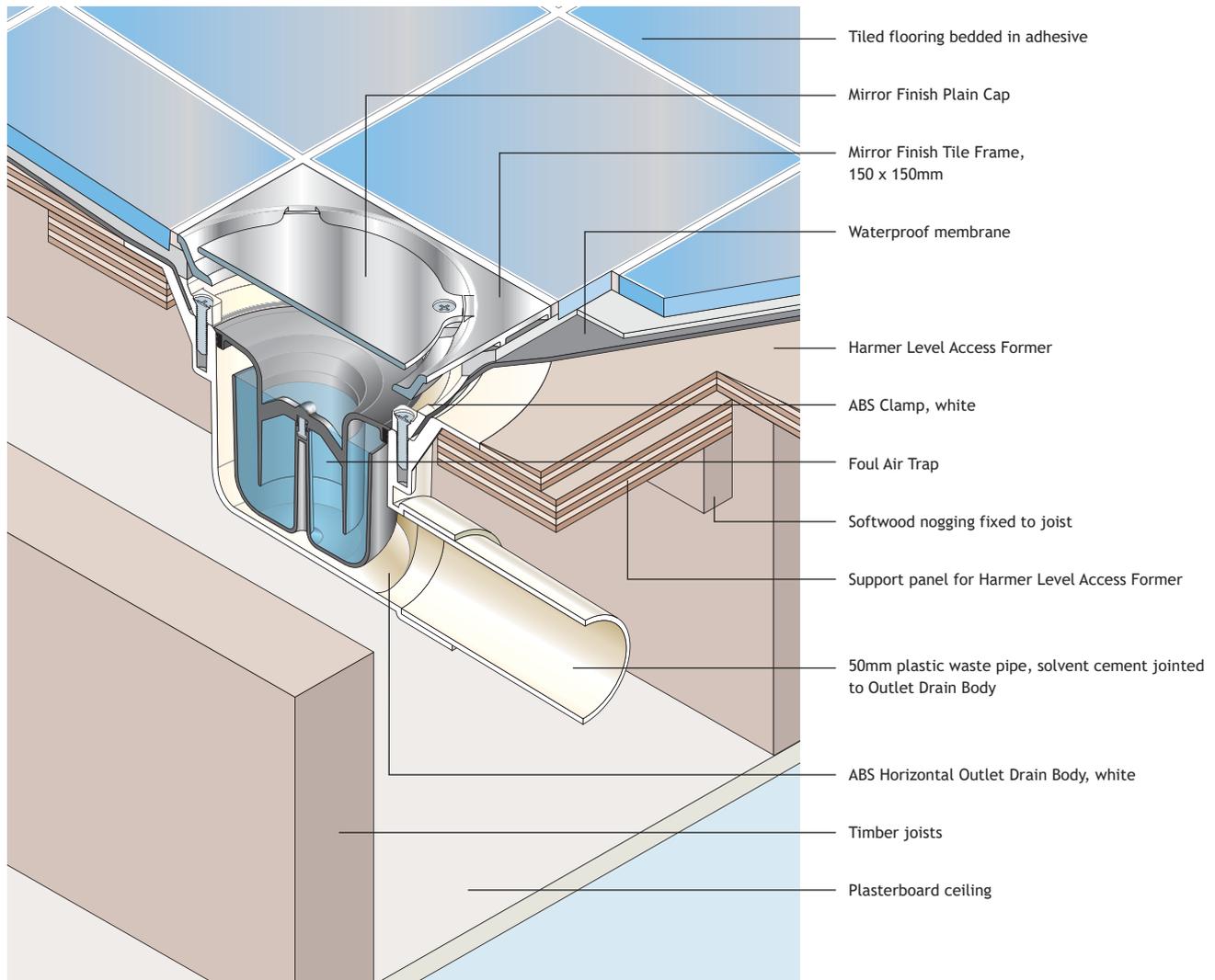
Sitework (using Harmer Level Access Former)

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 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 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 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.

