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.
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 (1 1/2"), 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 (11/2”) 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.
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

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)

Plan

Plan

Body flange fixing

Body flange fixing

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

**White PPC Aluminium Clamp and Pebble Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/WH</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>1.1 kg</td>
</tr>
</tbody>
</table>

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

**Mirror Finish Clamp and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/CH</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>1.1 kg</td>
</tr>
</tbody>
</table>

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

**Stainless Steel Clamp and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/CS</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>1.7 kg</td>
</tr>
</tbody>
</table>

**Nickel Bronze Clamp and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/CN</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>1.7 kg</td>
</tr>
</tbody>
</table>

**Stainless Steel Clamp and Star Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/SS</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.8 kg</td>
</tr>
</tbody>
</table>

**Nickel Bronze Clamp and Star Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/SN</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.8 kg</td>
</tr>
</tbody>
</table>

**Stainless Steel Clamp and Concentric Ring Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/RS</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.6 kg</td>
</tr>
</tbody>
</table>

**Nickel Bronze Clamp and Concentric Ring Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/RN</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.6 kg</td>
</tr>
</tbody>
</table>

Stainless Steel Anti-Ligature drain available AVS/AS

Nickel Bronze Anti-Ligature drain available AVS/AN

---

www.harmerdrainage.co.uk
## 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

**White PPC Aluminium Tile Frame and Pebble Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/WH/T15</td>
<td>150x150mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>1.3 kg</td>
</tr>
<tr>
<td>AVS/WH/T20</td>
<td>200x200mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>1.5 kg</td>
</tr>
</tbody>
</table>

**Stainless Steel Tile Frame and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/CS/T15</td>
<td>150x150mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>AVS/CS/T20</td>
<td>200x200mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>2.7 kg</td>
</tr>
</tbody>
</table>

**Stainless Steel Tile Frame and Star Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/SS/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.1 kg</td>
</tr>
<tr>
<td>AVS/SS/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.6 kg</td>
</tr>
</tbody>
</table>

**Stainless Steel Tile Frame and Concentric Ring Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/RS/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>AVS/RS/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.6 kg</td>
</tr>
</tbody>
</table>

**Nickel Bronze Tile Frame and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/CN/T15</td>
<td>150x150mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>AVS/CN/T20</td>
<td>200x200mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>2.7 kg</td>
</tr>
</tbody>
</table>

**Nickel Bronze Tile Frame and Star Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/SN/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.1 kg</td>
</tr>
<tr>
<td>AVS/SN/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.8 kg</td>
</tr>
</tbody>
</table>

**Nickel Bronze Tile Frame and Concentric Ring Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVS/RN/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>AVS/RN/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.6 kg</td>
</tr>
</tbody>
</table>

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

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

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

---

Harmer Technical Helpline +44 (0) 1744 648400

129
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)

Plan

Body flange fixing

A

A

A

A

150 x 150mm Tile Frame

Plan

Body flange fixing

A

A

A

A

216

150 (Clamp)

Cap

4

115

(Water seal) 50

91.5º

56

101

Section AA

Note: All dimensions are shown in millimetres
### Horizontal Outlet Combinations for Flexible Sheet Flooring

**White PPC Aluminium Clamp and Pebble Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/WH</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.1 kg</td>
</tr>
</tbody>
</table>

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

**Mirror Finish Clamp and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/CH</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.1 kg</td>
</tr>
</tbody>
</table>

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

**Stainless Steel Clamp and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/CS</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.7 kg</td>
</tr>
</tbody>
</table>

**Nickel Bronze Clamp and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/CN</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.7 kg</td>
</tr>
</tbody>
</table>

**Stainless Steel Clamp and Star Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/SS</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.8 kg</td>
</tr>
</tbody>
</table>

**Nickel Bronze Clamp and Star Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/SN</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.8 kg</td>
</tr>
</tbody>
</table>

**Stainless Steel Clamp and Concentric Ring Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/RS</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.6 kg</td>
</tr>
</tbody>
</table>

Stainless Steel Anti-Ligature drain available AHS/AS

**Nickel Bronze Clamp and Concentric Ring Grate**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/RN</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.6 kg</td>
</tr>
</tbody>
</table>

Nickel Bronze Anti-Ligature drain available AHS/AN

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

### White PPC Aluminium Tile Frame and Pebble Cap

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/WH/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.3 kg</td>
</tr>
<tr>
<td>AHS/WH/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.5 kg</td>
</tr>
</tbody>
</table>

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

### Stainless Steel Tile Frame and Plain Cap

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/CS/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>AHS/CS/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.7 kg</td>
</tr>
</tbody>
</table>

### Stainless Steel Tile Frame and Star Grate

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/SS/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.1 kg</td>
</tr>
<tr>
<td>AHS/SS/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.6 kg</td>
</tr>
</tbody>
</table>

### Stainless Steel Tile Frame and Concentric Ring Grate

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/RS/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>AHS/RS/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.6 kg</td>
</tr>
</tbody>
</table>

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

### Stainless Steel Tile Frame and Star Grate

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/SN/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.1 kg</td>
</tr>
<tr>
<td>AHS/SN/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.8 kg</td>
</tr>
</tbody>
</table>

### Mirror Finish Tile Frame and Plain Cap

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/CH/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.3 kg</td>
</tr>
</tbody>
</table>

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

### Nickel Bronze Tile Frame and Plain Cap

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/CN/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>AHS/CN/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.7 kg</td>
</tr>
</tbody>
</table>

### Nickel Bronze Tile Frame and Star Grate

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/SN/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.1 kg</td>
</tr>
<tr>
<td>AHS/SN/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.8 kg</td>
</tr>
</tbody>
</table>

### Nickel Bronze Tile Frame and Concentric Ring Grate

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHS/RN/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.0 kg</td>
</tr>
<tr>
<td>AHS/RN/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>2.6 kg</td>
</tr>
</tbody>
</table>

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 (1½”) 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:

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
- 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

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.
5. Remove temporary support. Lay remaining screed so that Drain Body flange is flush with top of screed.
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.

Note: For clarity, expanding foam not shown on right hand side of drain body.
**Aluminium Shower Floor Outlets - Application Details**

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

1. **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.
   5. Remove temporary support. Lay remaining screed so that Drain Body flange is flush with top of screed.
   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.
   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.

---

**Tiled flooring bedded in adhesive**

**Stainless Steel Plain Cap**

**Stainless Steel Tile Frame, 150 x 150mm**

**Waterproof membrane**

**Aluminium Clamp, white polyester powder coated**

**Expanding foam**

**Foul Air Trap**

**Aluminium Vertical Outlet Drain Body, white polyester powder coated**

**50mm screed to precast floor**

**Harmer SML Duo Coupling**

**Harmer SML 50mm diameter lightweight cast iron waste pipe**

**Precast concrete floor**

**Suspended ceiling**

**Note:** For clarity, expanding foam not shown on right hand side of drain body.
Aluminium Shower Floor Outlets - Application Details

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

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.

Sitework (using Harmer Level Access Former)
Aluminium Shower Floor Outlets - Application Details

Shower Drain with Horizontal Outlet in timber floor with tiled flooring

1. Fabricate 18mm (minimum) thick support panel (complete with hole for Outlet Drain Body) and softwood nogging, 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.

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 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.
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 (1 1/2”), 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
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 (1½”) 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**

- Stainless Steel screws (provided) for securing Caps. Anti-tamper security fixings are also available.
- White ABS Quadrant Cap
- White ABS Pebble Cap
- Mirror Finish 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
- Vertical Drain Body with 56mm (2") outlet, connects directly to ABS pipework
- Reducer (provided) for connecting to 43mm (1½") ABS pipework

**Drain Body Dimensions**

Outline of 150 x 150mm Tile Frame

Plan

Outline of 150 x 150mm Tile Frame

Body flange fixing

216

150

(Clamp)

Cap

3.5

155

50 (Water seal)

31

56

7.5 min

49

50 (Water seal)

155

31

56

Note: All dimensions are shown in millimetres

Section AA

(For flexible sheet flooring)

Section AA

(For tiled flooring)
**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

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS/CP</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>0.5 kg</td>
</tr>
</tbody>
</table>

### White Clamp and ABS Quadrant Cap

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS/CQ</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>0.5 kg</td>
</tr>
</tbody>
</table>

### Mirror Finish Clamp and Plain Cap

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS/CH</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>0.7 kg</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS/CP/T15</td>
<td>150x150mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>0.7 kg</td>
</tr>
<tr>
<td>CVS/CP/T20</td>
<td>200x200mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>0.9 kg</td>
</tr>
</tbody>
</table>

### White Tile Frame and ABS Quadrant Cap

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS/CQ/T15</td>
<td>150x150mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>0.7 kg</td>
</tr>
<tr>
<td>CVS/CQ/T20</td>
<td>200x200mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>0.9 kg</td>
</tr>
</tbody>
</table>

### Mirror Finish Tile Frame and Plain Cap

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS/CH/T15</td>
<td>150x150mm</td>
<td>1.3 l/s</td>
<td>K3</td>
<td>0.8 kg</td>
</tr>
</tbody>
</table>

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

- Stainless Steel screws (provided) for securing Caps. Anti-tamper security fixings are also available
- White ABS Quadrant Cap
- White ABS Pebble Cap
- Mirror Finish 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 (1½”) ABS pipework

Drain Body Dimensions

Outline of 150 x 150mm Tile Frame

Plan

216
150
(Clamp)
Cap

118
50 (Water seal)
91.5º
91
56
3.5

Section AA
(For flexible sheet flooring)

118
50 (Water seal)
91.5º
91
56
7.5 min

Section AA
(For tiled flooring)

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

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS/CP</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>0.5 kg</td>
</tr>
</tbody>
</table>

**White Clamp and ABS Pebble Cap**

**Horizontal Outlet Combinations for Tiled Flooring**

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

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS/CP/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>0.7 kg</td>
</tr>
<tr>
<td>CHS/CP/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.0 kg</td>
</tr>
</tbody>
</table>

**White Tile Frame and ABS Pebble Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS/CP/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>0.7 kg</td>
</tr>
<tr>
<td>CHS/CP/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.0 kg</td>
</tr>
</tbody>
</table>

**White Clamp and ABS Quadrant Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS/CQ</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>0.5 kg</td>
</tr>
</tbody>
</table>

**White Tile Frame and ABS Quadrant Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS/CQ/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>0.7 kg</td>
</tr>
<tr>
<td>CHS/CQ/T20</td>
<td>200x200mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>1.0 kg</td>
</tr>
</tbody>
</table>

**Mirror Finish Clamp and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS/CH</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>0.7 kg</td>
</tr>
</tbody>
</table>

**Mirror Finish Tile Frame and Plain Cap**

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Size</th>
<th>Flow Rate</th>
<th>Load Class</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHS/CH/T15</td>
<td>150x150mm</td>
<td>0.8 l/s</td>
<td>K3</td>
<td>0.8 kg</td>
</tr>
</tbody>
</table>

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 (1½") ABS. Use 50mm (2") to 43mm (1½") solvent cement reducer (provided).*

*Connecting to 43mm (1½") Polypropylene. Use 50mm to 43mm (1½") 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.
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:

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

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.
5. Remove temporary support. Lay remaining screed so that Drain Body flange is flush with top of screed.
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.

**Sitework**

- Flexible sheet flooring
- ABS Pebble Cap, white
- ABS Clamp, white
- Expanding foam
- Foul Air Trap
- ABS Vertical Outlet Drain Body, white
- 50mm screed to precast floor
- 50mm plastic waste pipe, solvent cement jointed to Outlet Drain Body and 50mm plastic pipe bend
- Precast concrete floor
- 50mm plastic pipe bend
- Suspended ceiling

**Note:** For clarity, expanding foam not shown on right hand side of drain body
ABS Shower Floor Outlets - Application Details

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

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.
5. Remove temporary support. Lay remaining screed so that Drain Body flange is flush with top of screed.
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.
**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.
Sitework (using Harmer Level Access Former)

1. Fabricate 18mm (minimum) thick support panel (complete with hole for Drain Body) and softwood nogging, 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.
Stainless Steel Shower Floor Channels & Outlets - Introduction

Harmer Drainage Systems
Stainless Steel
Shower Channels & Outlets

The new high performance stainless steel linear wet room drain and shower drains. Available with a choice of 5 grate options for tile and vinyl floors applications.
Stainless Steel Shower Floor Channels & Outlets - Benefits

Harmer Stainless Steel Shower Channels and Drains offer a range of high performance linear wet room drains and shower gullies to suit modern bathroom requirements. The spa channels and drains are available in a choice of stylish grate options in a variety of lengths.

Compliances
- The stainless steel is fully pickle passivated to ensure high quality corrosion-free joints

Flow Performance
- High flow rate performance
- Spa channels have an integral outlet with a 50mm connector

Robust and Secure
- Available in V2A Grade 304 stainless steel
- Excellent corrosion resistance and durability

A Choice of Channels and Grates
- Suitable for both tile and vinyl floor applications
- The spa channels are available with 5 stylish grate designs to suit any wet room design, including a tile finish option
- Available in 5 different lengths from 700mm to 1200mm
- The shower drain is available with either a vertical or horizontal outlet
- The drains are available with 5 stylish grate options

Low Maintenance
- Easy to clean and maintain with easy access to the channel and trap within the drain body

Easy and Quick to Install
- Simple and easy to install, especially suited for projects where a shallow depth outlet is required
- The channels have Integral feet and supports to help secure positioning
- The Spa channel can be used in connection with a wet room former
- Secure fixings for the drain bodies

Value for Money
- Stainless steel is very durable and resistant in domestic and industrial applications so its life cycle cost is excellent

Sustainable
- Stainless steel is 100% recyclable
- Around 60% recycled material is used in the production of stainless steel
Shower Floor Channels

The new high performance range of stainless steel linear wet room drains. Available in a range of channel widths and lengths along with a choice of stylish grate options for tiled and flexible sheet vinyl flooring to suit any wet room design.

Harmer Stainless Steel shower channels offer an excellent solution for new wet room designs, removing the requirement for the traditional shower basins. This enables better use of limited space and can give extra design style to contemporary bathroom designs.

The shower channels are available in either a standard design which is ideal for a screed floor or with flange for a tile floor finish.

- Available in 5 different channel lengths from 700mm to 1200mm
- Integral fall so no slope required
- They can be used in combination with a wet room former

Grate Options

There are 5 stylish grate options.

- Brescia Grate
- Quattro Grate
- Verona Grate
- Genoa Grate
- Palermo Grate*

*Example of possible tile arrangement for Palermo Grate
Stainless Steel Shower Floor Outlets - Product Range Summary

**Shower Floor Outlets**
A range of shallow depth stainless steel trapped shower gullies available with a vertical or horizontal outlets. Available in a choice of three stylish grate designs to suit and bathroom or wet room design. The stainless steel shower gullies are especially suited for projects where a shallow depth outlet is required.

- Designed for all types of bathrooms and wet room design for both domestic and commercial applications
- The horizontal outlet has a depth of 58mm
- The vertical outlets as a total depth of 77mm including the spigot
- Supplied with a 50mm Connector
- Integral four air trap conforms to BS EN 1253 requirement for a 50mm water seal
- Three stylish 100mm x 100mm polished stainless steel grate options
- Available in 304 grade stainless steel
- Supplied with secure fixings for the grate

**Grate Options**
There are 3 stylish grate options.

- Casoria Grate
- Florence Grate
- Genoa Grate
Stainless Steel Shower Floor Channels - Tiled Floor Product Tables

Harmer Stainless Steel shower channels offer a range of lengths from 700 to 1200mm. With a choice of four stylish grate designs and a special tile infill grate. The standard design is ideally suited for screed floors.

Standard Shower Floor Channels for Tiled Floors

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Length (L) (mm)</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>d (mm)</th>
<th>e (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>700 to 1200</td>
<td>106</td>
<td>65</td>
<td>176-188</td>
<td>143</td>
<td>65</td>
</tr>
</tbody>
</table>

Brescia Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SC/700/B</td>
</tr>
<tr>
<td>800</td>
<td>SC/800/B</td>
</tr>
<tr>
<td>900</td>
<td>SC/900/B</td>
</tr>
<tr>
<td>1000</td>
<td>SC/1000/B</td>
</tr>
<tr>
<td>1200</td>
<td>SC/1200/B</td>
</tr>
</tbody>
</table>

Verona Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SC/700/V</td>
</tr>
<tr>
<td>800</td>
<td>SC/800/V</td>
</tr>
<tr>
<td>900</td>
<td>SC/900/V</td>
</tr>
<tr>
<td>1000</td>
<td>SC/1000/V</td>
</tr>
<tr>
<td>1200</td>
<td>SC/1200/V</td>
</tr>
</tbody>
</table>

Genoa Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SC/700/G</td>
</tr>
<tr>
<td>800</td>
<td>SC/800/G</td>
</tr>
<tr>
<td>900</td>
<td>SC/900/G</td>
</tr>
<tr>
<td>1000</td>
<td>SC/1000/G</td>
</tr>
<tr>
<td>1200</td>
<td>SC/1200/G</td>
</tr>
</tbody>
</table>

Quattro Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SC/700/Q</td>
</tr>
<tr>
<td>800</td>
<td>SC/800/Q</td>
</tr>
<tr>
<td>900</td>
<td>SC/900/Q</td>
</tr>
<tr>
<td>1000</td>
<td>SC/1000/Q</td>
</tr>
<tr>
<td>1200</td>
<td>SC/1200/Q</td>
</tr>
</tbody>
</table>

Palermo Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SC/700/P</td>
</tr>
<tr>
<td>800</td>
<td>SC/800/P</td>
</tr>
<tr>
<td>900</td>
<td>SC/900/P</td>
</tr>
<tr>
<td>1000</td>
<td>SC/1000/P</td>
</tr>
<tr>
<td>1200</td>
<td>SC/1200/P</td>
</tr>
</tbody>
</table>
Stainless Steel Shower Floor Channels - Tiled Floor Product Tables

Harmer Stainless Steel shower channels offer a range of lengths from 700 to 1200mm. With a choice of four stylish grate designs and a special tile infill grate. The channel with flange design is ideally suited for tiled floors.

Shower Floor Channels with Flange for Tiled Floors

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Length (L) (mm)</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>d (mm)</th>
<th>e (mm)</th>
<th>f (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>700 to 1200 (+50)</td>
<td>136</td>
<td>65</td>
<td>176-188</td>
<td>143</td>
<td>65</td>
<td>88</td>
</tr>
</tbody>
</table>

Brescia Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCF/700/B</td>
</tr>
<tr>
<td>800</td>
<td>SCF/800/B</td>
</tr>
<tr>
<td>900</td>
<td>SCF/900/B</td>
</tr>
<tr>
<td>1000</td>
<td>SCF/1000/B</td>
</tr>
<tr>
<td>1200</td>
<td>SCF/1200/B</td>
</tr>
</tbody>
</table>

Verona Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCF/700/V</td>
</tr>
<tr>
<td>800</td>
<td>SCF/800/V</td>
</tr>
<tr>
<td>900</td>
<td>SCF/900/V</td>
</tr>
<tr>
<td>1000</td>
<td>SCF/1000/V</td>
</tr>
<tr>
<td>1200</td>
<td>SCF/1200/V</td>
</tr>
</tbody>
</table>

Genoa Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCF/700/G</td>
</tr>
<tr>
<td>800</td>
<td>SCF/800/G</td>
</tr>
<tr>
<td>900</td>
<td>SCF/900/G</td>
</tr>
<tr>
<td>1000</td>
<td>SCF/1000/G</td>
</tr>
<tr>
<td>1200</td>
<td>SCF/1200/G</td>
</tr>
</tbody>
</table>

Quattro Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCF/700/Q</td>
</tr>
<tr>
<td>800</td>
<td>SCF/800/Q</td>
</tr>
<tr>
<td>900</td>
<td>SCF/900/Q</td>
</tr>
<tr>
<td>1000</td>
<td>SCF/1000/Q</td>
</tr>
<tr>
<td>1200</td>
<td>SCF/1200/Q</td>
</tr>
</tbody>
</table>

Palermo Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCF/700/P</td>
</tr>
<tr>
<td>800</td>
<td>SCF/800/P</td>
</tr>
<tr>
<td>900</td>
<td>SCF/900/P</td>
</tr>
<tr>
<td>1000</td>
<td>SCF/1000/P</td>
</tr>
<tr>
<td>1200</td>
<td>SCF/1200/P</td>
</tr>
</tbody>
</table>

Harmer Technical Helpline +44 (0) 1744 648400
Stainless Steel Shower Floor Channels - Flexible Sheet Floor Product Tables

Harmer Stainless Steel shower channels offer a range of lengths from 700 to 1200mm. With a choice of four stylish grate designs. The Flexible sheet channel design has an integral clamp to ensure a secure waterproof finish, ideally suited for vinyl floor applications.

Shower Floor Channels for Flexible Sheet Floors

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Length (L) (mm)</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>d (mm)</th>
<th>e (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>700 to 1200 (+40)</td>
<td>170</td>
<td>62</td>
<td>176-188</td>
<td>143</td>
<td>65</td>
</tr>
</tbody>
</table>

Brescia Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCV/700/B</td>
</tr>
<tr>
<td>800</td>
<td>SCV/800/B</td>
</tr>
<tr>
<td>900</td>
<td>SCV/900/B</td>
</tr>
<tr>
<td>1000</td>
<td>SCV/1000/B</td>
</tr>
<tr>
<td>1200</td>
<td>SCV/1200/B</td>
</tr>
</tbody>
</table>

Verona Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCV/700/V</td>
</tr>
<tr>
<td>800</td>
<td>SCV/800/V</td>
</tr>
<tr>
<td>900</td>
<td>SCV/900/V</td>
</tr>
<tr>
<td>1000</td>
<td>SCV/1000/V</td>
</tr>
<tr>
<td>1200</td>
<td>SCV/1200/V</td>
</tr>
</tbody>
</table>

Genoa Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCV/700/G</td>
</tr>
<tr>
<td>800</td>
<td>SCV/800/G</td>
</tr>
<tr>
<td>900</td>
<td>SCV/900/G</td>
</tr>
<tr>
<td>1000</td>
<td>SCV/1000/G</td>
</tr>
<tr>
<td>1200</td>
<td>SCV/1200/G</td>
</tr>
</tbody>
</table>

Quattro Grate

<table>
<thead>
<tr>
<th>Grate Length (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>SCV/700/Q</td>
</tr>
<tr>
<td>800</td>
<td>SCV/800/Q</td>
</tr>
<tr>
<td>900</td>
<td>SCV/900/Q</td>
</tr>
<tr>
<td>1000</td>
<td>SCV/1000/Q</td>
</tr>
<tr>
<td>1200</td>
<td>SCV/1200/Q</td>
</tr>
</tbody>
</table>
Stainless Steel Shower Floor Outlets - Tiled Floor Product Tables

A range of shallow depth Stainless Steel trapped shower drains available either with vertical or horizontal outlets. Available in three grate designs to suit any bathroom or wet room.

### Vertical Shower Floor Outlets for Tiled Floors

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Grate Type</th>
<th>Grate Size</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>d (mm)</th>
<th>e (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Casoria</td>
<td>100 x 100</td>
<td>74</td>
<td>40</td>
<td>100</td>
<td>77</td>
<td>20</td>
<td>SBV40/S10/C</td>
</tr>
<tr>
<td>40</td>
<td>Florence</td>
<td>100 x 100</td>
<td>74</td>
<td>40</td>
<td>100</td>
<td>77</td>
<td>20</td>
<td>SBV40/S10/F</td>
</tr>
<tr>
<td>40</td>
<td>Genoa</td>
<td>100 x 100</td>
<td>74</td>
<td>40</td>
<td>100</td>
<td>77</td>
<td>20</td>
<td>SBV40/S10/G</td>
</tr>
</tbody>
</table>

### Horizontal Shower Gullies for Tiled Floors

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Grate Type</th>
<th>Grate Size</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>d (mm)</th>
<th>e (mm)</th>
<th>f (mm)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>Casoria</td>
<td>100 x 100</td>
<td>58</td>
<td>32</td>
<td>100</td>
<td>107</td>
<td>30</td>
<td>42</td>
<td>SBH32/S10/C</td>
</tr>
<tr>
<td>32</td>
<td>Florence</td>
<td>100 x 100</td>
<td>58</td>
<td>32</td>
<td>100</td>
<td>107</td>
<td>30</td>
<td>42</td>
<td>SBH32/S10/F</td>
</tr>
<tr>
<td>32</td>
<td>Genoa</td>
<td>100 x 100</td>
<td>58</td>
<td>32</td>
<td>100</td>
<td>107</td>
<td>30</td>
<td>42</td>
<td>SBH32/S10/G</td>
</tr>
</tbody>
</table>
Stainless Steel Shower Floor Channels & Outlets - NBS Specification

A typical NBS Specification for Harmer Stainless Steel Shower Floor Channels & Outlets. A full range of NBS specifications and floor drainage calculators are available via the Harmer online NBS Specification Builder at www.harmerdrainage.co.uk.

For project specific specification advice, contact Harmer Technical Services.

R11 Above Ground Foul Drainage Systems
To be read with Preliminaries/General Conditions

GENERAL
115 ABOVE GROUND FOUL DRAINAGE SYSTEMS
- Sanitary and floor drainage outlets: As per detail sections below
- Waste pipework: As per detail sections below
- Discharge stack and branch pipework: As per detail sections below
- Separate ventilating pipework: As per detail sections below
- Accessories: As per detail sections below
- Disposal: As per detail sections below

SYSTEM PERFORMANCE
210 DESIGN
- Complete the design of the above ground foul drainage system
- Standard: To EN 1253
- Proposals: Submit drawings, technical information, calculations and manufacture’s literature

220 COLLECTION AND DISTRIBUTION OF FOUL WATER
- General: Complete, and without leakage or noise nuisance

230 DESIGN PARAMETERS - GENERAL
- Quick, quiet and complete, self-cleansing in normal use, without blockage, cross-flow, back-fall, leakage, odours, noise nuisance or risk to health
- Pressure fluctuations in pipework (maximum): ±38mm water gauge
- Water seal retained in traps (minimum): 25mm

PRODUCTS
310 HARMER FLOOR DRAINAGE
Floor Finish: Tile/Vinyl
Manufacturer: Alumasc Exterior Building Products Ltd,
White House Works, Bold Road, Sutton, St Helens, Merseyside WA9 4JG
Tel: 01744 648400, Fax: 01744 648401.
Email: harmer@alumasc-exteriors.co.uk
Reference: Harmer Stainless Steel SPA Channel
Material: Grade 304 Stainless Steel
Channel Type: Stainless Steel Shower Channels - Tile
Stainless Steel Shower Channels - Vinyl
Outlet Type: 32mm dia horizontal spigot, 0.2l/s
Channel Length: 700, 800, 900, 1000, 1200mm
Grate Type: Brescia, Quattro, Verona, Genoa, Palermo
Grate Material: Austenitic Grade 304 Stainless Steel, pickle passivated, brushed
Product Code: Refer to tables
Accessories: 500 x 500mm Corner Channel
Stainless Steel Shower Floor Channels & Outlets - Application Details

**Shower Floor Channel with Flange for Tiled Floor Finish, with Quattro Grate**

1. Form cut-out in floor to receive channel.
2. Line up waste pipe connection and fit plastic gully.
3. Place channel into cut-out and secure gully.
4. Apply fixing screws to flange of channel to secure to floor.
5. Lay waterproof tanking to flange.
6. Apply adhesive and lay floor tiles.
7. Place grating into channel.
8. Fix ceiling lining.

**Sitework**
Shower Floor Channel for Flexible Sheet Floor Finish, with Verona Grate

**Sitework**

1. Form hole to receive shower drain trap in precast concrete floor.
2. Form shutter around hole and shutter around slot for channel. Lay main area of screed to fall towards channel.
3. Remove shutters. Secure shower drain trap to channel. Secure channel into position.
4. Within precast concrete floor depth, seal space around trap and channel with expanding foam.
5. Connect waste pipe.
6. Lay vinyl sheet flooring and dress into channel.
7. Secure clamp over vinyl.
8. Fit grating.

**Note:** For clarity, expanding foam not shown
Stainless Steel Shower Floor Channels & Outlets - Application Details

Shower Floor Channel for Tiled Floor Finish, with Genoa Grate

1. Form hole to receive shower drain trap in precast concrete floor.
2. Form shutter around hole and shutter around slot for channel. Lay main area of screed to fall towards channel.
3. Remove shutters. Secure shower drain trap to channel. Secure channel into position.
4. Within precast concrete floor depth, seal space around trap and channel with expanding foam.
5. Connect waste pipe.
6. Apply waterproof tanking to flange of channel.
7. Apply adhesive and lay tiles.
8. Fit grating.

Note: For clarity, expanding foam not shown
Linearis Shower Floor Channels & Outlets - Introduction

Harmer Drainage Systems
Linearis
Shower Channels & Outlets

The Harmer Linearis Channel and Outlet drainage range offers a mix of sophisticated elegance and advanced engineering to meet all the practical, aesthetic and functional demands of today’s contemporary shower and wet rooms, and at the same time removing the need for conventional shower trays.
The Harmer Linearis Shower Channel and Outlet drainage range copes exceptionally well with the high flow demands of modern showers, delivering fast and efficient drainage for domestic, residential and leisure developments, especially luxury bathrooms and fitness centres.

Compliances
- Linearis is manufactured in accordance with EN 1253
- All products are manufactured under ISO 9001: 2000 quality standard

Flow Performance
- High flow rate performance up to 1.2 litres per second for Slimline channels that will cope with high volume shower heads

Robust and Secure
- Grates, covers and rims are made with Grade 304 stainless steel
- Channel and outlet bodies are made from ABS

A Choice of Channels and Outlets
- The channels and outlets are designed for tiled floor applications
- The Slimline 40 and 60 shower channels are available in a choice of widths and lengths to suit any wet room design
- The Slimline 60 channel grating can be reversed so that only the rim is visible when filled with tiling
- The shower outlets are available with 3 grate designs, including a recessed option for receiving tiles
- The shower channels and outlets are available with a choice of drain bodies, and with either vertical or horizontal outlets

Low Maintenance
- Easy access for maintenance

Easy and Quick to Install
- Vertical and lateral adjustment for ease of installation of the channels and outlets, with the outlets offering 360° orientation of grates
- Lockable covers
- Suitable for sub-tile waterproofing
- Adjustable for different tile thicknesses

Value for Money
- Stainless steel is very durable and resistant in domestic and leisure applications, thereby offering excellent value for money over the life of the products

Sustainable
- Stainless steel is 100% recyclable
- Around 60% recycled material is used in the production of stainless steel
Linearis Channel Drainage

The sleek, clean lines of the Linearis Slimline 40 and Slimline 60 channels will complement and enhance the tiling pattern in any shower or wet room.

Available in a choice of widths and lengths, the high performance channels deliver fast and efficient drainage. Additionally both Slimline channels feature lockable covers and have easy access for maintenance.

Linearis Shower Gullies

The Harmer Linearis range of shower gullies presents the opportunity to select a gully to coordinate with your room styling. There are 3 types to choose from:

Invisible features a recessed cover which can easily be tiles to minimise the appearance of the drain and blend it in with the adjacent tiles.

Oval conveys elegance to add a touch of luxury to the wet room or shower.

Geo represents a contemporary symmetrical design which will complement any modern scheme.
Linearis Slimline 40 and 60 Shower Floor Channels

Both channel drain options are available in 3 lengths.

The Slimline 40 Channel can be adjusted to accommodate different tile thicknesses ranging from 8-10mm. It is supplied complete with a Classic 50mm diameter outlet horizontal drain body as standard. Other drain bodies are available - see tables on page 171.

The Slimline 60 Channel can be adjusted to accommodate different tile thicknesses ranging from 8-20mm. Additionally, the Slimline 60 Channel can be reversed and filled with tiling to fully match the surrounding floor tiles. It is supplied complete with a Practicus 50mm diameter outlet horizontal drain body as standard. Other drain bodies are available - see tables on page 171.

Various accessories are also available for both channel types - see page 172.

Linearis Slimline 40

Fitted with Classic 50mm outlet horizontal drain body as standard

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>d (mm)</th>
<th>e (mm)</th>
<th>f (mm)</th>
<th>Flow Rate (l/s)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>750</td>
<td>112-160</td>
<td>140</td>
<td>40</td>
<td>40</td>
<td>90</td>
<td>0.4*, 1.2**</td>
<td>3.8</td>
<td>48908</td>
</tr>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>950</td>
<td>112-160</td>
<td>140</td>
<td>40</td>
<td>40</td>
<td>90</td>
<td>0.4*</td>
<td>1.8</td>
<td>48910</td>
</tr>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>1150</td>
<td>112-160</td>
<td>140</td>
<td>40</td>
<td>40</td>
<td>90</td>
<td>0.4*</td>
<td>2.0</td>
<td>48912</td>
</tr>
</tbody>
</table>

Note: *With 10mm threshold (see page 174 and 175 for detail)

Fitted with Classic 50mm outlet horizontal drain body as standard

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>d (mm)</th>
<th>e (mm)</th>
<th>f (mm)</th>
<th>Flow Rate (l/s)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>750</td>
<td>187-230</td>
<td>140</td>
<td>60</td>
<td>40</td>
<td>130</td>
<td>0.6*, 1.2**</td>
<td>3.8</td>
<td>48908</td>
</tr>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>950</td>
<td>187-230</td>
<td>140</td>
<td>60</td>
<td>40</td>
<td>130</td>
<td>0.6*, 1.2**</td>
<td>4.3</td>
<td>48910</td>
</tr>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>1150</td>
<td>187-230</td>
<td>140</td>
<td>60</td>
<td>40</td>
<td>130</td>
<td>0.6*, 1.2**</td>
<td>4.7</td>
<td>48912</td>
</tr>
</tbody>
</table>

Note: *0.6 l/s without threshold (see page 174 and 175 for detail) **1.2 l/s with 10mm threshold (see page 174 and 175 for detail)

Linearis Slimline 60

Fitted with Practicus 50mm outlet horizontal drain body as standard

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>d (mm)</th>
<th>e (mm)</th>
<th>f (mm)</th>
<th>Flow Rate (l/s)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>750</td>
<td>187-230</td>
<td>140</td>
<td>60</td>
<td>40</td>
<td>130</td>
<td>0.6*, 1.2**</td>
<td>3.8</td>
<td>48908</td>
</tr>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>950</td>
<td>187-230</td>
<td>140</td>
<td>60</td>
<td>40</td>
<td>130</td>
<td>0.6*, 1.2**</td>
<td>4.3</td>
<td>48910</td>
</tr>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>1150</td>
<td>187-230</td>
<td>140</td>
<td>60</td>
<td>40</td>
<td>130</td>
<td>0.6*, 1.2**</td>
<td>4.7</td>
<td>48912</td>
</tr>
</tbody>
</table>

Note: *0.6 l/s without threshold (see page 174 and 175 for detail) **1.2 l/s with 10mm threshold (see page 174 and 175 for detail)
Linearis Invisible, Oval and Geo Shower Floor Outlets

All 3 gully drain options are fully adjustable through a 360° rotation for convenient installation. The Invisible gully can also be tiled to match the surrounding floor tiling. The gullies can be adjusted to accommodate different tile thicknesses ranging from 8-20mm.

The gullies are supplied complete with a Classic 50mm diameter outlet horizontal drain body as standard. Other drain bodies are available - see tables on page 171.

Various accessories are also available for all 3 gully types - see page 172.

Linearis Invisible

Fitted with Classic 50mm outlet horizontal drain body as standard

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>Load Class (to EN 1253)</th>
<th>Flow Rate (l/s)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ABS with stainless steel rim</td>
<td>133-190</td>
<td>312</td>
<td>K3</td>
<td>0.9</td>
<td>1.2</td>
<td>40150.35</td>
</tr>
</tbody>
</table>

Linearis Oval

Fitted with Classic 50mm outlet horizontal drain body as standard

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>Load Class (to EN 1253)</th>
<th>Flow Rate (l/s)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>133-190</td>
<td>312</td>
<td>K3</td>
<td>0.9</td>
<td>1.2</td>
<td>40150.54</td>
</tr>
</tbody>
</table>

Linearis Geo

Fitted with Classic 50mm outlet horizontal drain body as standard

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>Load Class (to EN 1253)</th>
<th>Flow Rate (l/s)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ABS with brushed stainless steel cover</td>
<td>133-190</td>
<td>312</td>
<td>K3</td>
<td>0.9</td>
<td>1.2</td>
<td>40150.53</td>
</tr>
</tbody>
</table>
Linearis Classic, Practicus, Superflat and Ultraflat Drain Bodies

Classic and Superflat drain bodies are used to form Slimline 40, Invisible, Oval or Geo assemblies.

Practicus and Ultraflat drain bodies are used to form Slimline 60 assemblies.

The 50mm water seal (Classic and Practicus) conforms to EN 1253.
The 30mm water seal option (Superflat and Ultraflat) is for restricted depth applications.

Linearis Classic

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>Water Trap (mm)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 horizontal</td>
<td>ABS</td>
<td>129</td>
<td>90</td>
<td>184</td>
<td>50</td>
<td>0.2</td>
<td>40150</td>
</tr>
<tr>
<td>50 vertical</td>
<td>ABS</td>
<td>129</td>
<td>135</td>
<td>—</td>
<td>50</td>
<td>0.2</td>
<td>40250</td>
</tr>
</tbody>
</table>

Linearis Practicus

<table>
<thead>
<tr>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>Water Trap (mm)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 horizontal</td>
<td>Polypropylene</td>
<td>150</td>
<td>132</td>
<td>313</td>
<td>50</td>
<td>0.8</td>
<td>45150</td>
</tr>
<tr>
<td>50 vertical</td>
<td>Polypropylene</td>
<td>150</td>
<td>192</td>
<td>—</td>
<td>50</td>
<td>0.8</td>
<td>45250</td>
</tr>
<tr>
<td>100 horizontal</td>
<td>Polypropylene</td>
<td>150</td>
<td>132</td>
<td>215</td>
<td>50</td>
<td>0.8</td>
<td>45110</td>
</tr>
<tr>
<td>100 vertical</td>
<td>Polypropylene</td>
<td>150</td>
<td>153</td>
<td>—</td>
<td>50</td>
<td>0.8</td>
<td>45210</td>
</tr>
</tbody>
</table>

Linearis Superflat and Ultraflat

<table>
<thead>
<tr>
<th>Body Type</th>
<th>Outlet Size (mm)</th>
<th>Materials</th>
<th>a (mm)</th>
<th>b (mm)</th>
<th>c (mm)</th>
<th>Water Trap (mm)</th>
<th>Weight (kg)</th>
<th>Product Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superflat</td>
<td>50 horizontal</td>
<td>Polypropylene</td>
<td>129</td>
<td>80</td>
<td>194.5</td>
<td>30</td>
<td>0.2</td>
<td>42701</td>
</tr>
<tr>
<td>Ultraflat</td>
<td>50 horizontal</td>
<td>ABS</td>
<td>150</td>
<td>69</td>
<td>227</td>
<td>30</td>
<td>0.3</td>
<td>45700</td>
</tr>
</tbody>
</table>
Linearis Shower Floor Channels & Outlets - Accessories and Maintenance

Miscellaneous Accessories for Channels and Outlets

A range of accessories is available for use with all the Linearis shower channel and outlet systems.

Whilst optional, the accessories are recommended to ensure maximum performance efficiency.

The Sealing Flange is used when there is a requirement for an additional waterproofing membrane under a concrete screed.

The Hair Filter is an effective method of preventing hair build-up.

The Multistop prevents the potential problems of odour, insects and foam build-up.

Accessories

<table>
<thead>
<tr>
<th>Accessory Type</th>
<th>Material</th>
<th>Product Code For Slimline 40, Invisible, Oval, Geo</th>
<th>Product Code For Slimline 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sealing Flange</td>
<td>ABS</td>
<td>43401</td>
<td>48401</td>
</tr>
<tr>
<td>Hair Filter</td>
<td>Polypropylene</td>
<td>43700</td>
<td>48700</td>
</tr>
<tr>
<td>Multistop</td>
<td>Polypropylene</td>
<td>43500</td>
<td>48500</td>
</tr>
</tbody>
</table>

Maintenance Access

Maintenance is made easy when using the Linearis range because of the incorporation of integral access methods:

- Slimline 40 and Slimline 60 Shower Channels have lockable covers.
- The Invisible Shower Gully has a lockable cover.
- Oval and Geo Shower Gullies both feature a Lock & Lift System.
Linearis Shower Floor Channels & Outlets - NBS Specification

A typical NBS Specification for Linearis Floor Channels & Outlets. A full range of NBS specifications and floor drainage calculators are available via the Harmer online NBS Specification Builder at www.harmerdrainage.co.uk. For project specific specification advice, contact Harmer Technical Services.

R11 Above Ground Foul Drainage Systems
To be read with Preliminaries/General Conditions

GENERAL

Above Ground Foul Drainage Systems
- Sanitary and floor drainage outlets: As per detail sections below
- Waste pipework: As per detail sections below
- Discharge stack and branch pipework: As per detail sections below
- Separate ventilating pipework: As per detail sections below
- Accessories: As per detail sections below
- Disposal: As per detail sections below

SYSTEM PERFORMANCE

Design
- Complete the design of the above ground foul drainage system
- Standard: To EN 1253
- Proposals: Submit drawings, technical information, calculations and manufacture’s literature

Collection and Distribution of Foul Water
- General: Complete, and without leakage or noise nuisance

Design Parameters - General
- Quick, quiet and complete, self-cleansing in normal use, without blockage, cross-flow, back-fall, leakage, odours, noise nuisance or risk to health
- Pressure fluctuations in pipework (maximum): ±38mm water gauge
- Water seal retained in traps (minimum): 25mm

PRODUCTS

HARMER FLOOR DRAINAGE

Floor Finish: Tile
Manufacturer: Alumasc Exterior Building Products Ltd, White House Works, Bold Road, Sutton, St Helens, Merseyside WA9 4JG
Tel: 01744 648400, Fax: 01744 648401.
Email: harmer@alumasc-exteriors.co.uk

Reference: Harmer Linearis Shower Channel and Outlets
Material: ABS
Channel Type: Linearis Slimline 40/Linearis Slimline 60
Outlet Type: Horizontal Trap, 50mm Dia, 0.4l/s or 0.6l/s
Channel Length: 750/950/1150mm
Grate Material: Austenitic Grade 304 Stainless Steel, pickle passivated, brushed
Product Code: Refer to tables
Accessories: Drain Bodies/100mm Outlet Dia/Sealing Flange/Multistop/Hair Filter

Create Harmer Drainage NBS specifications by selecting the required product range, profile, size and finish by visiting: www.harmerdrainage.co.uk
**Application Details**

**Linearis Shower Floor Channels & Outlets -**

**Slimline 60 Channel used with DPM Above Insulation**

**Sitework**

1. Connect waste pipe to drain body with proprietary coupling.
2. Set pipework so that the clamping flange of the lower section drain body will be level with the top insulation.
3. Lay concrete slab.
4. Lay insulation.
5. Lay DPM. Cut a hole in the membrane and clamp firmly to the floor drain incorporating optional sealing flange.
6. Push fit the sliding upper adjustable channel section into the drain body to the correct height for FFL.
7. Lay screed to falls.
8. Fit mesh sheet around perimeter of complete channel.
9. Apply waterproofing tanking layer.
10. Apply adhesive and lay floor tiles.
Linearis Shower Floor Channels & Outlets - Application Details

**Slimline 40 Channel used with DPM Below Insulation**

**Sitework**

1. Connect waste pipe to drain body with proprietary coupling.
2. Position drain body on concrete floor.
3. Lay insulation.
4. Push fit the sliding upper adjustable channel section into the drain body to the correct height for FFL.
5. Lay screed to falls.
6. Fit mesh sheet around perimeter of complete channel.
7. Apply waterproof tanking layer.
8. Apply adhesive and lay floor tiles.
9. Fit the channel grating.
10. Fit the access cover.