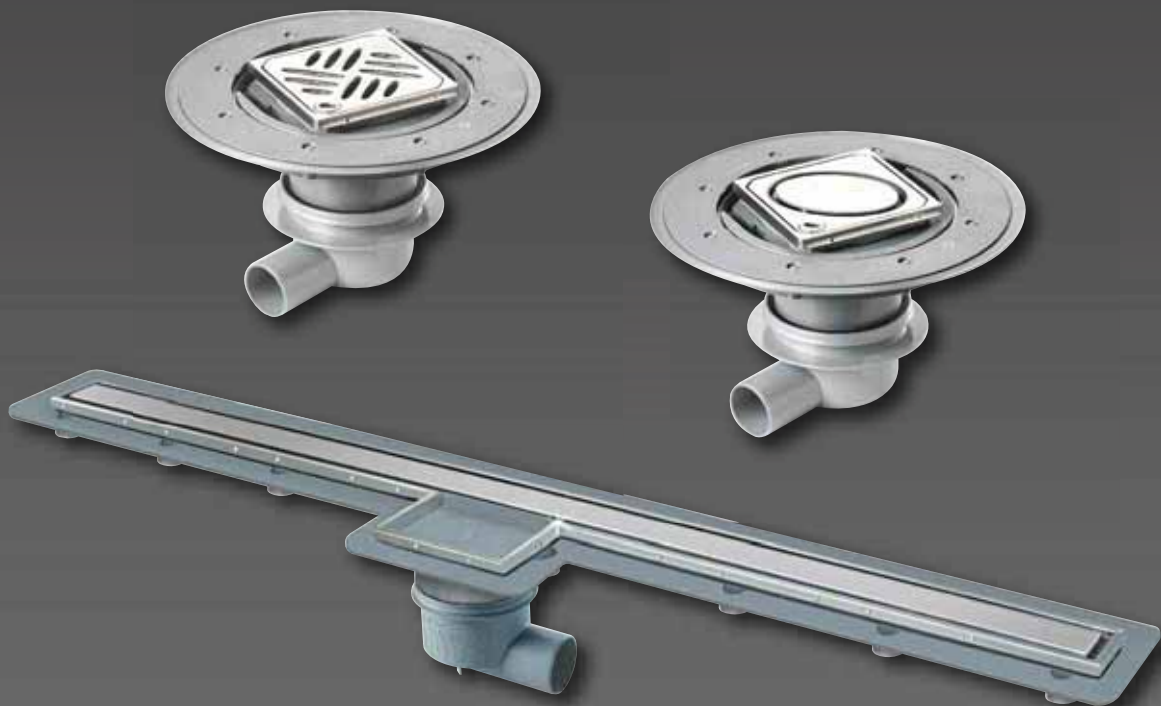


# Harmer Drainage Systems Linearis Shower Channels & Outlets

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.



# Linearis Shower Floor Channels & Outlets - Benefits

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

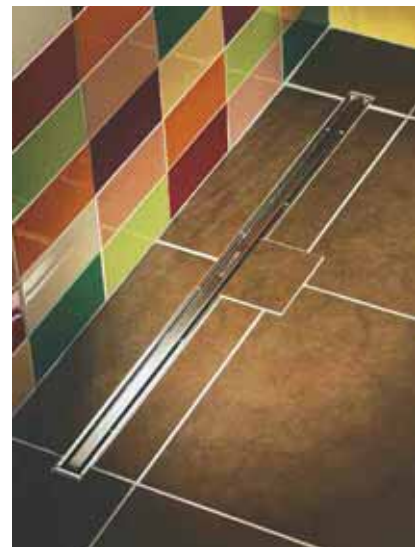
- Vertical and lateral adjustment for ease of installation of the channels and outlets, with the outlets offering 360° orientation of grates
- Lockable covers
- Suitable for sub-tile waterproofing
- Adjustable for different tile thicknesses

## Value for Money

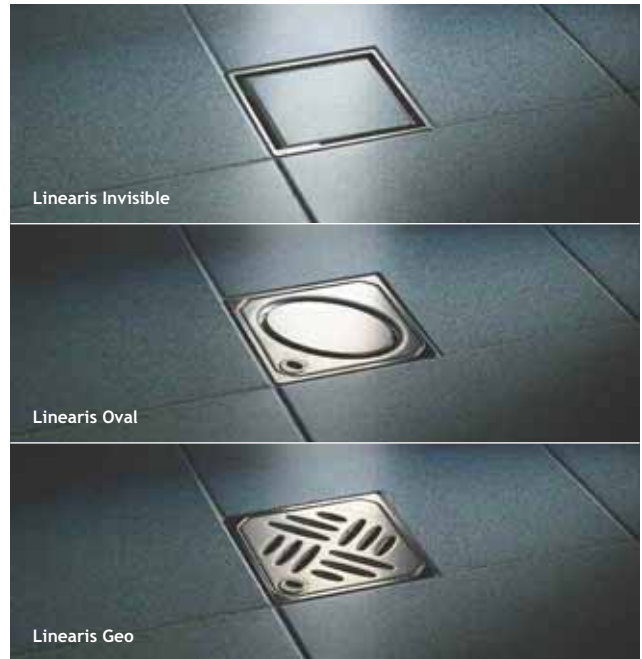
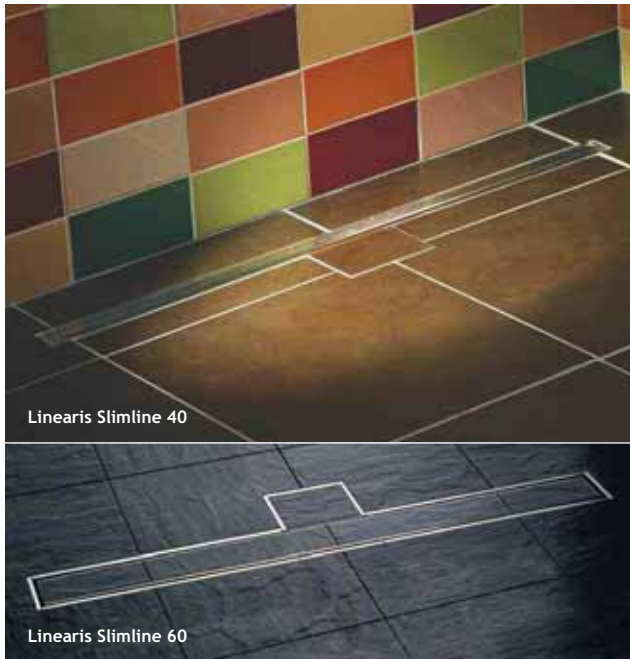
- Stainless steel is very durable and resistant in domestic and leisure applications, thereby offering excellent value for money over the life of the products

## Sustainable

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



# Linearis Shower Floor Channels & Outlets - Product Range Summary



## 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 Slimline 40



### Linearis Slimline 60



## 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 tiled 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 Oval



### Linearis Invisible



### Linearis Geo



# Linearis Shower Floor Channels & Outlets - Product Tables

## Linearis Slimline 40 and 60 Shower Floor Channels

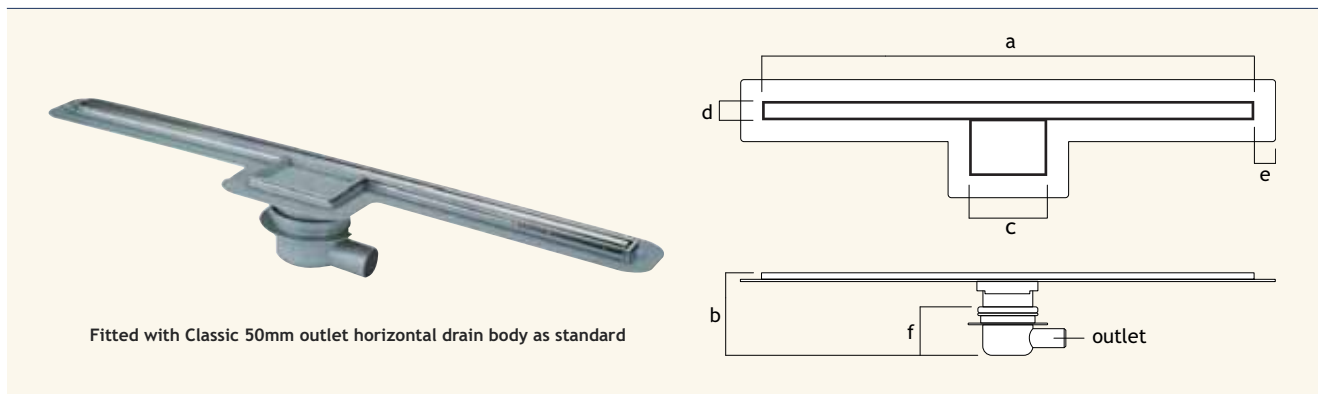
Both channel drain options are available in 3 lengths.

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.

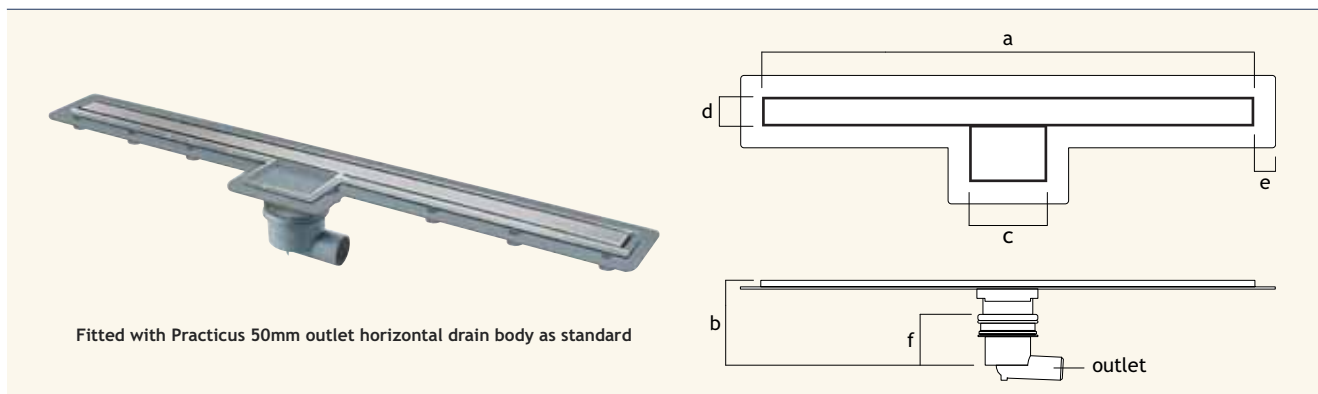
### Linearis Slimline 40



Outlet Size (mm)	Materials	a (mm)	b (mm)	c (mm)	d (mm)	e (mm)	f (mm)	Flow Rate (l/s)	Weight (kg)	Product Code
50	ABS with brushed stainless steel cover	750	112-160	140	40	40	90	0.4*	1.6	40150.83
50	ABS with brushed stainless steel cover	950	112-160	140	40	40	90	0.4*	1.8	40150.85
50	ABS with brushed stainless steel cover	1150	112-160	140	40	40	90	0.4*	2.0	40150.87

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

### Linearis Slimline 60



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

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 Shower Floor Channels & Outlets - Product Tables

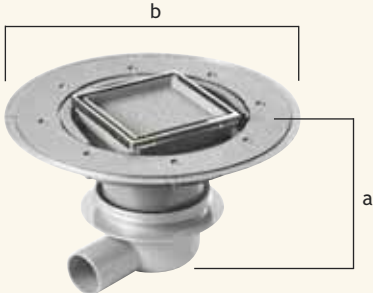
## Linearis Invisible, Oval and Geo Shower Floor Outlets

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.

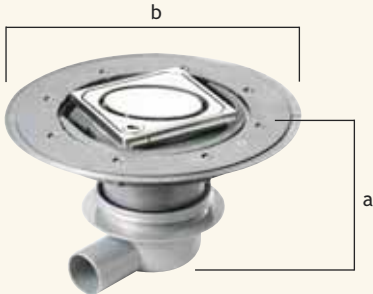
### Linearis Invisible



Fitted with Classic 50mm outlet horizontal drain body as standard

Outlet Size (mm)	Materials	a (mm)	b (mm)	Load Class (to EN 1253)	Flow Rate (l/s)	Weight (kg)	Product Code
50	ABS with stainless steel rim	133-190	312	K3	0.9	1.2	40150.55

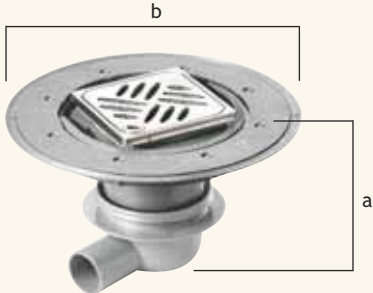
### Linearis Oval



Fitted with Classic 50mm outlet horizontal drain body as standard

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

### Linearis Geo



Fitted with Classic 50mm outlet horizontal drain body as standard

Outlet Size (mm)	Materials	a (mm)	b (mm)	Load Class (to EN 1253)	Flow Rate (l/s)	Weight (kg)	Product Code
50	ABS with brushed stainless steel cover	133-190	312	K3	0.9	1.2	40150.53

# Linearis Shower Floor Channels & Outlets - Product Tables

## Linearis Classic, Practicus, Superflat and Ultraflat Drain Bodies


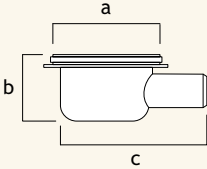

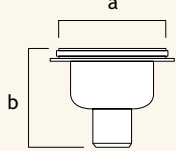
Classic and Superflat drain bodies are used to form Slimline 40, Invisible, Oval or Geo assemblies.

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


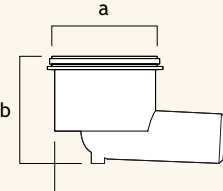

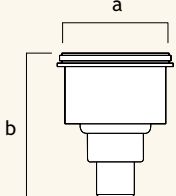

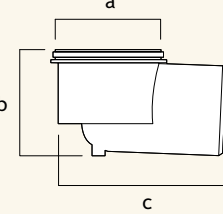

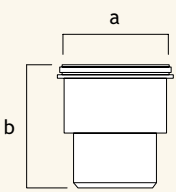
The 50mm water seal (Classic and Practicus) conforms to EN 1253.

The 30mm water seal option (Superflat and Ultraflat) is for restricted depth applications.


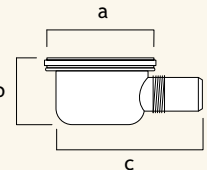

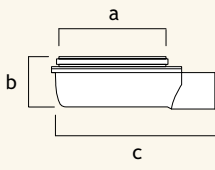
### Linearis Classic

							
50 horizontal		50 vertical					
Outlet Size (mm)	Materials	a (mm)	b (mm)	c (mm)	Water Trap (mm)	Weight (kg)	Product Code
50 horizontal	ABS	129	90	184	50	0.2	40150
50 vertical	ABS	129	135	—	50	0.2	40250

### Linearis Practicus

							
50 horizontal		50 vertical					
							
100 horizontal		100 vertical					
Outlet Size (mm)	Materials	a (mm)	b (mm)	c (mm)	Water Trap (mm)	Weight (kg)	Product Code
50 horizontal	Polypropylene	150	132	313	50	0.8	45150
50 vertical	Polypropylene	150	192	—	50	0.8	45250
100 horizontal	Polypropylene	150	132	215	50	0.8	45110
100 vertical	Polypropylene	150	153	—	50	0.8	45210

### Linearis Superflat and Ultraflat

								
Superflat		Ultraflat						
Body Type	Outlet Size (mm)	Materials	a (mm)	b (mm)	c (mm)	Water Trap (mm)	Weight (kg)	Product Code
Superflat	50 horizontal	Polypropylene	129	80	194.5	30	0.2	42701
Ultraflat	50 horizontal	ABS	150	69	227	30	0.3	45700

# 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.

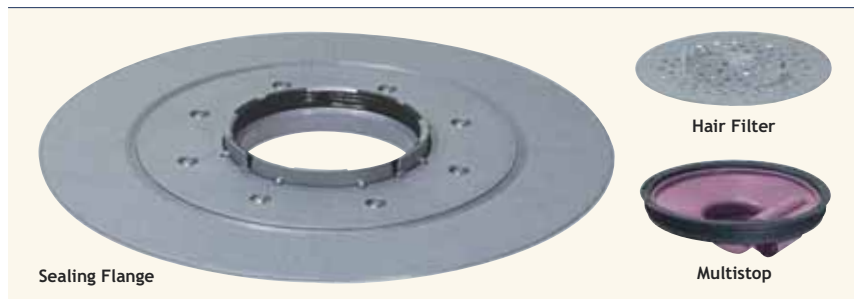
Whilst optional, the accessories are recommended to ensure maximum performance efficiency.

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



Accessory Type	Material	Product Code	
		For Slimline 40, Invisible, Oval, Geo	For Slimline 60
Sealing Flange	ABS	43401	48401
Hair Filter	Polypropylene	43700	48700
Multistop	Polypropylene	43500	48500

## 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 Channel (Slimline 40 shown)



Linearis Gully (Geo shown)



Linearis Gully (Oval shown)



# 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](http://www.harmerdrainage.co.uk). For project specific specification advice, contact Harmer Technical Services.

NBSPlus

## 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 manufacturer'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):  $\pm 38$ mm water gauge
  - Water seal retained in traps (minimum): 25mm

### PRODUCTS

- 310 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](mailto: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

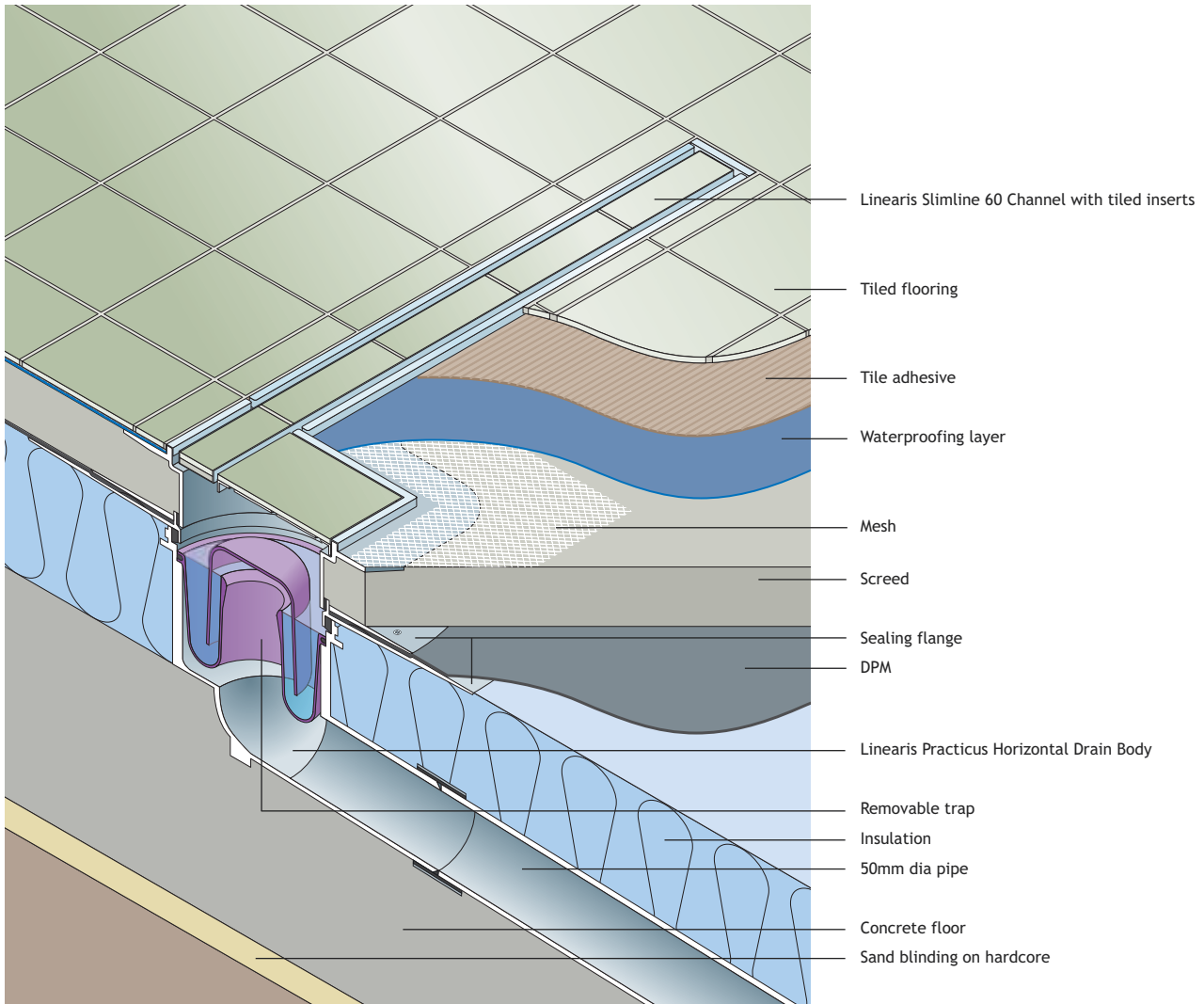


Create Harmer Drainage NBS specifications by selecting the required product range, profile, size and finish by visiting: [www.harmerdrainage.co.uk](http://www.harmerdrainage.co.uk)



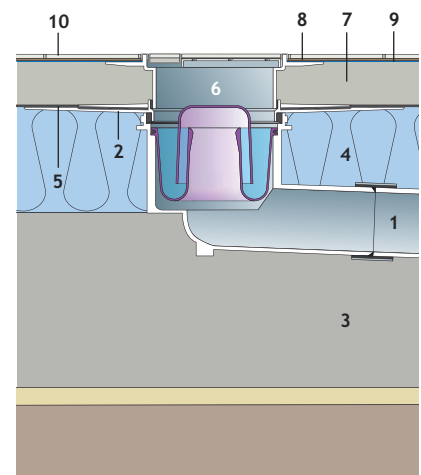
# Linearis Shower Floor Channels & Outlets - Application Details

## Slimline 60 Channel used with DPM Above Insulation



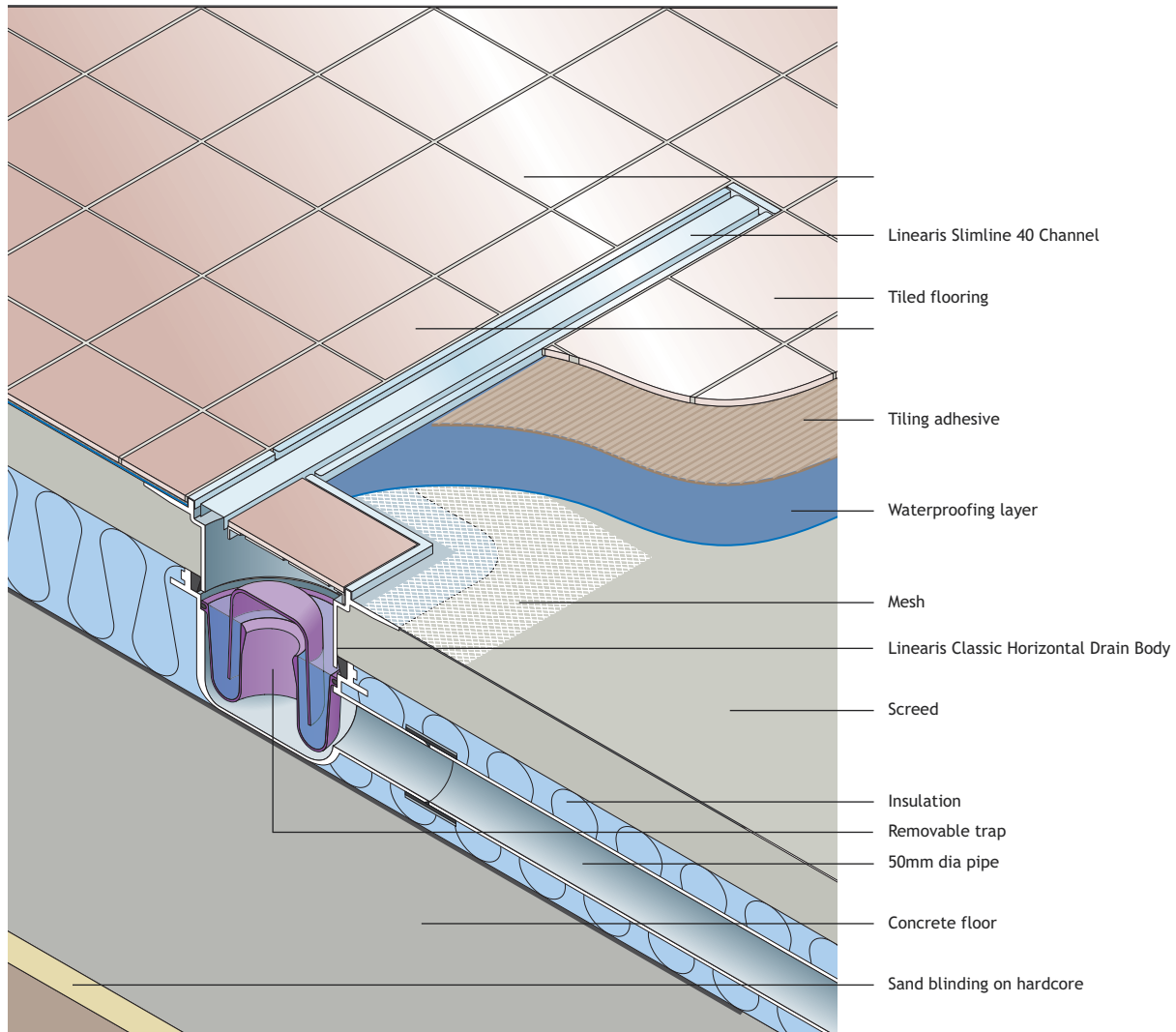
## Sitework

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 waterproof 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.

