

Cast Iron Floor Outlets - Materials Care, Maintenance, Installation & Specifying/Ordering

Materials

All Harmer cast iron floor gullies are cast to material grade EN-GJL-200 to BS EN 1561, painted internally and externally with a dark grey 2-part epoxy coating as in compliance to Class 1 fire classification BS 476:Part 7: 1997, Surface spread of flame. Smoke and Toxicity test to Part 2, Annex 1 & Annex 2 of fire test procedure code, IMO Resolution MSC61(67).

Ductile iron components are cast to material grade EN-GJS-450-10 to BS EN 1536 with zinc anti-corrosion coating applied by sherardizing.

Stainless Steel grates and bezels are cast to material Grade 304 as standard with satin finish which is suitable for most applications. Material Grade 316 for more harsh environments eg: swimming pools is available on request.

Nickel bronze grates and bezels are cast to copper alloy material Grade C99700. These are provided to machined finish for a polished effect.

Maintenance

The high quality grates and bezels are maintenance free but should be inspected periodically and cleaned of any trapped matter.

If drains are not used for a period of time the trap water may evaporate or become fetid. To remedy this, there is no need to remove the grate, simply reprime the Trap by pouring clean water through the drain. NEVER USE BLEACH OR CAUSTIC CLEANING AGENTS.

To clean Stainless Steel grates, use only soapy water and wipe dry. Under no circumstances use metal scouring pads, metal scrapers or wire wool since this will contaminate surfaces leaving rust spots.

Due to the nature of Nickel Bronze, periodic cleaning is required to prevent tarnishing. Use soapy water and wipe dry.

Periodic Use

If drains are not used for long periods of time or only intermittently, it is recommended that a solid plate cover be installed instead of standard grate.

Security

Generally, grates are secured with Phillips Pozidrive screws but special security fixing options are available.

Inverted Trap

Should it be necessary to access the drain for maintenance or rodding purposes, the trap must first be removed.

Equipment required:

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

Procedure:

- Put on protective latex gloves
- Remove grate screws
- Dry all surfaces
- Remove black funnel trap using handle inside unit

Refitting trap:

- Apply silicone lubricant to seal rim of funnel
- Push fit the trap into the bezel throat
- Position grate and secure with screws
- Reprime the trap with clean water
- Dispose of dirty water



Installation Procedure

1. Offer drain body to the required position.
2. Align waste pipe and secure, whilst maintaining the rim of the floor drain is set to the required finished slab level.
3. Lay concrete ground slab.
4. Lay DPM. Cut hole in membrane and clamp firmly to the floor drain with bolts as provided.
5. Lay insulation if required.
6. Rotate threaded bezel into threaded clamp to the required FFL height.
7. Install funnel trap inside bezel if required and cover with grating.
8. Lay screed to falls.
9. Lay floor tiles or vinyl depending on floor finished required.

Specifying/Ordering

There are 3 bezel connections available as follows:

/4

4" NPSM
(Cast Iron Drainage)



/110

110mm dia direct fix
(No gully applications)



/B

110mm dia pvc throat
(For O-ring clamp option)



The standard default for cast iron body is "/4".

Example 1:

Floor Drains in Showers

Item: Harmer Floor Drains.

Floor Construction: Sheet vinyl over insulated solid ground floor slab.

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

Body type/material: Untrapped Medium Sump with side inlets manufactured from Cast Iron ref: CM1VT100/A.

Grate finish/material: Satin Stainless compact ring complete with trap assembly ref: VR20/SS/4/T.

Example 2:

Floor Drains in Changing Rooms

Item: Harmer Floor Drains.

Floor Construction: 150mm ceramic tiles over insulated solid ground floor slab.

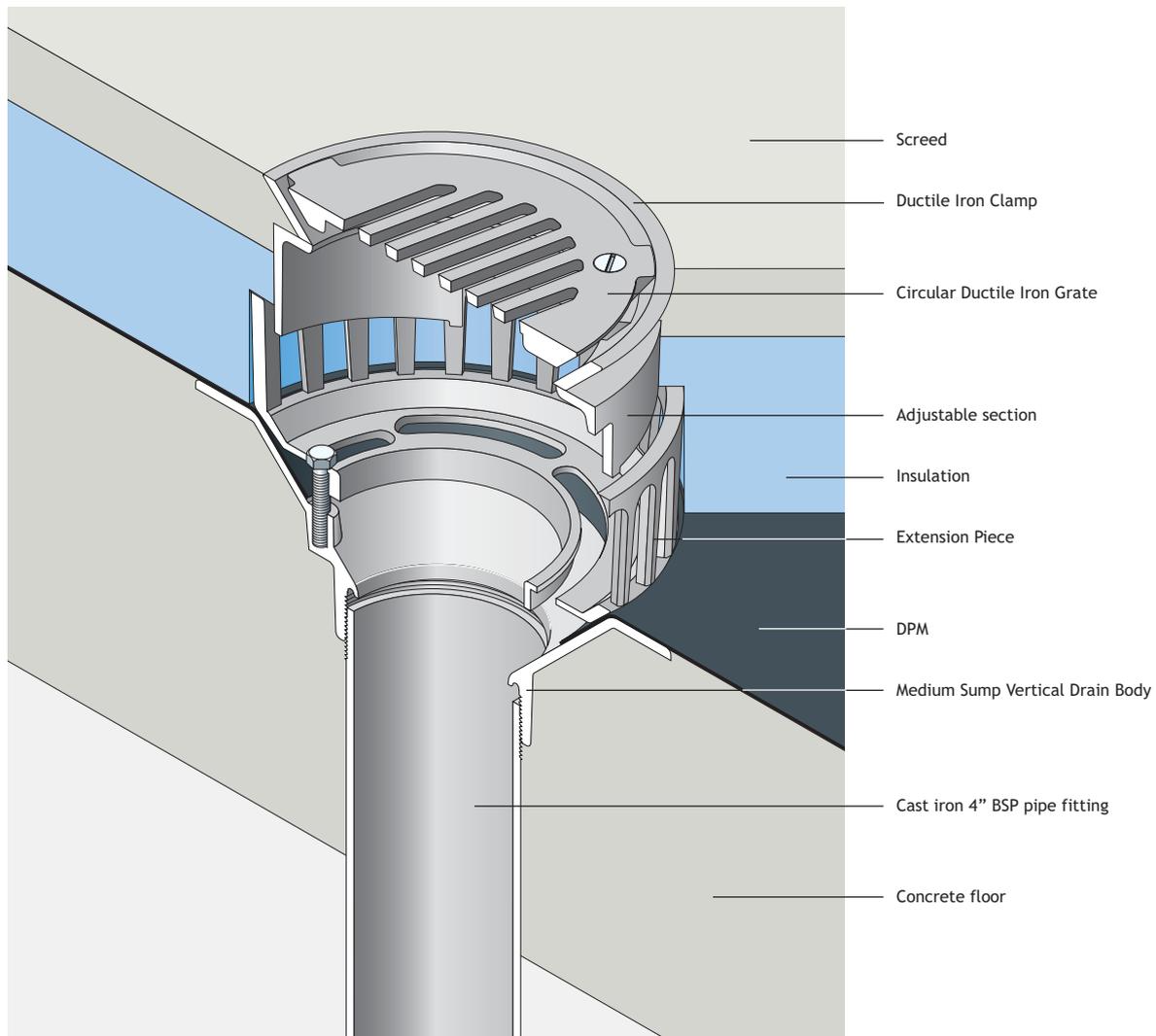
Manufacturer: Alumasc Exterior Building Products Ltd, White House Works, Bold Road, Sutton, St Helens, Merseyside WA9 4JG.

Body type/material: P-trapped Horizontal thread without inlets manufactured from Cast Iron ref: CTH100.

Grate finish/material: Machined Nickel Bronze Quattro grate and bezel assembly ref: SH15/NB/4.

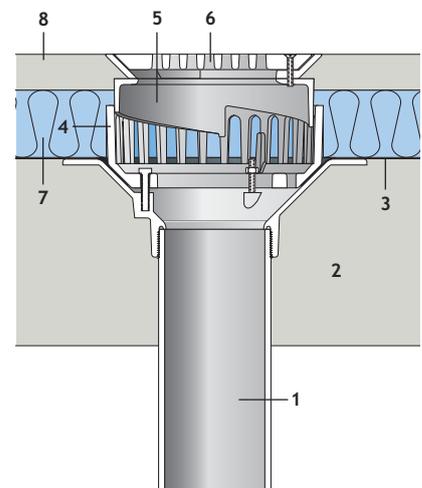
Cast Iron Floor Outlets - Application Details

Medium Sump Vertical Drain Body with Extension Piece and Adjustable Height Circular Ductile Iron Grate



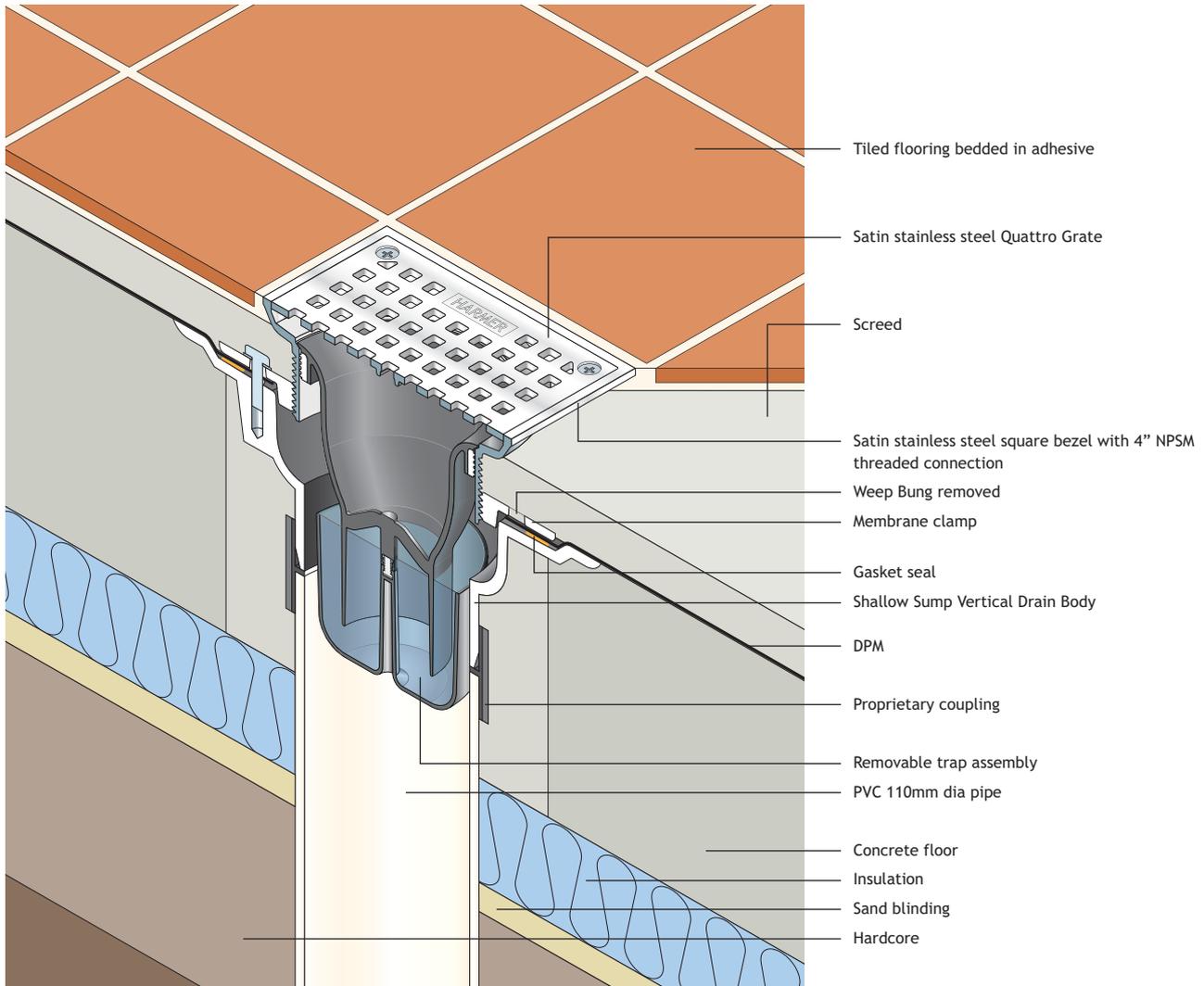
Sitework

1. Assemble BSP pipe/adaptor to drain body.
2. Temporarily support drain and cast into concrete slab at correct level.
3. Lay DPM and dress into drain.
4. Position extension piece and secure into place to adequately clamp down DPM.
5. Align adjustable section.
6. Fit clamp and grate.
7. Lay insulation.
8. Lay screed to falls.



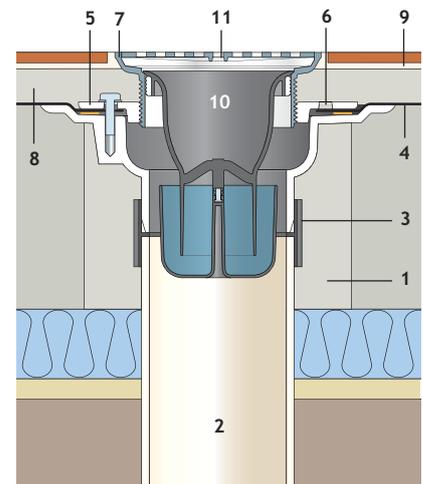
Cast Iron Floor Outlets - Application Details

Shallow Sump Vertical Drain Body with Quattro Grate and Bezel



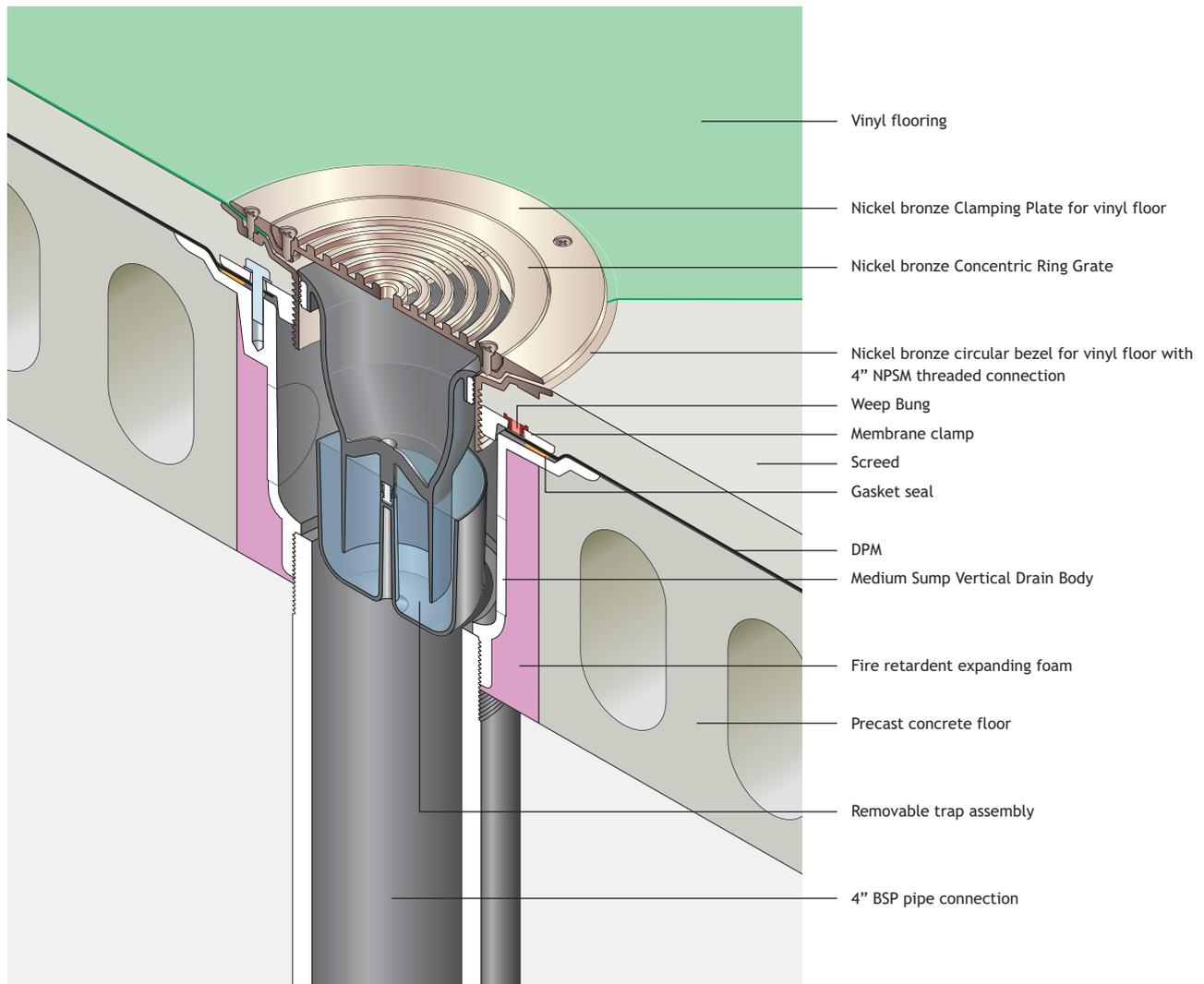
Sitework

1. Form hole in concrete floor to receive drain body.
2. Position drain pipe to align with drain body.
3. Join together with proprietary coupling.
4. Lay waterproof tanking system.
5. Fix clamp to secure tanking over gasket seal.
6. Remove weep bung.
7. Fit threaded bezel to required height of FFL.
8. Lay screed to falls.
9. Apply adhesive to lay tiles.
10. Connect funnel trap inside bezel.
11. Secure grate



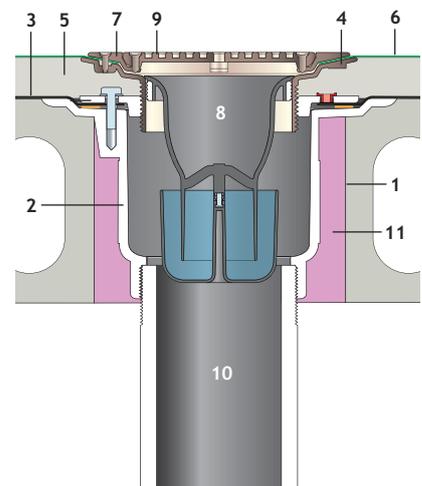
Cast Iron Floor Outlets - Application Details

Medium Sump Vertical Drain Body with Concentric Ring Grate and Bezel



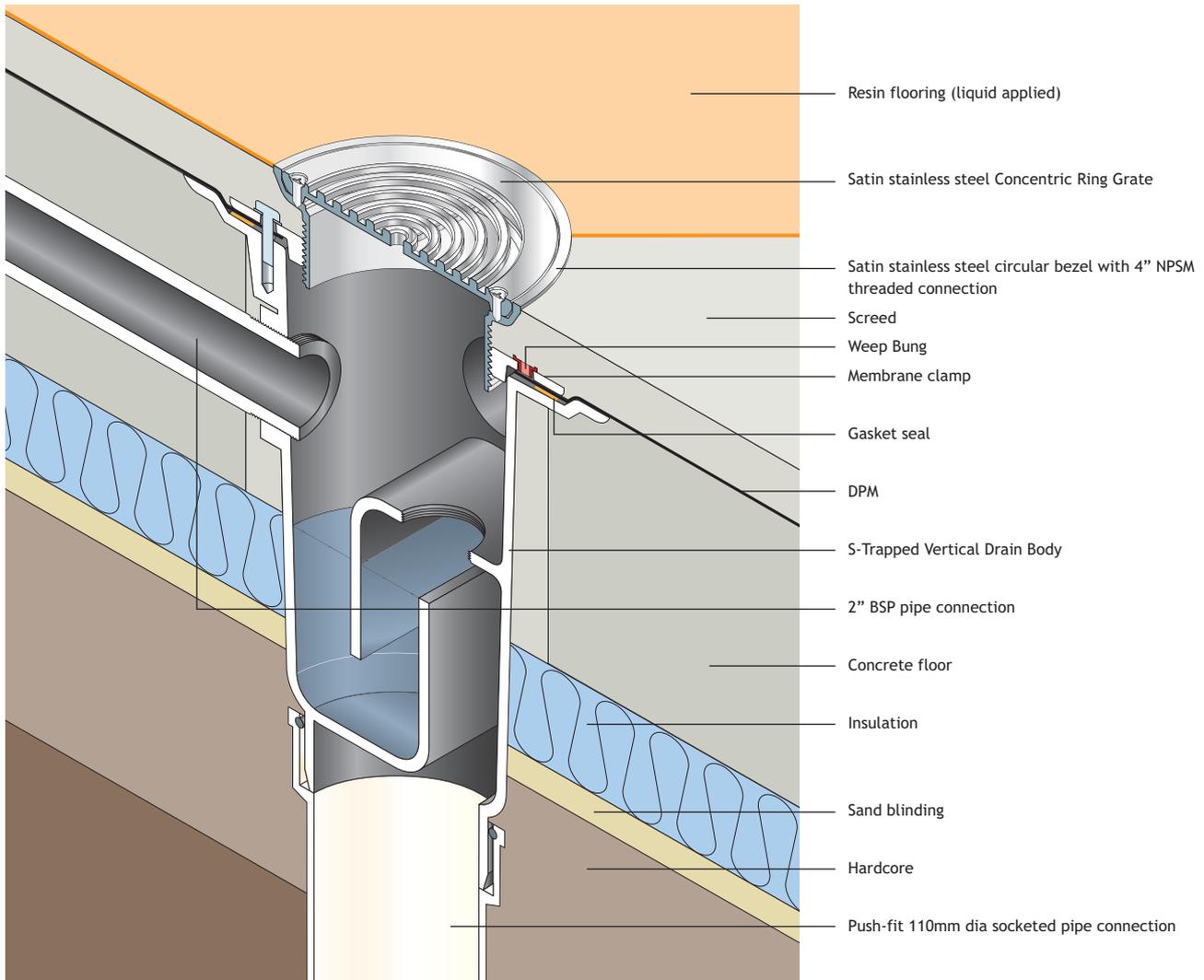
Sitework

1. Form hole in precast concrete floor to receive drain body.
2. Position drain body in floor.
3. Lay the DPM. Cut hole in the membrane and clamp firmly over the gasket seal on the drain body with bolts as provided.
4. Connect the threaded bezel to the clamp and adjust the height to the required FFL.
5. Lay screed to falls.
6. Apply vinyl sheet flooring and dress inside the bezel.
7. Secure vinyl to bezel using clamp plate.
8. Connect funnel trap inside bezel.
9. Secure grating.
10. Connect BSP pipe.
11. Apply fire retardant expanding foam to fill void in floor at drain position.



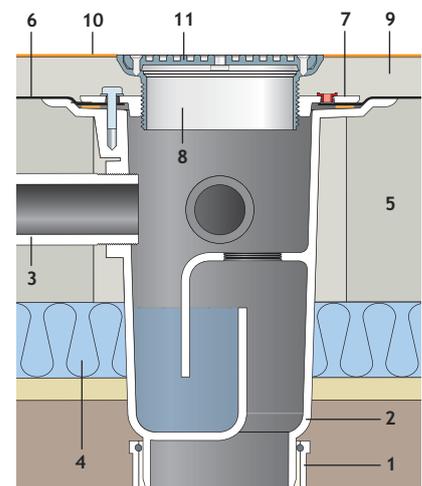
Cast Iron Floor Outlets - Application Details

S-Trapped Vertical Drain Body with Concentric Ring Grate and Bezel



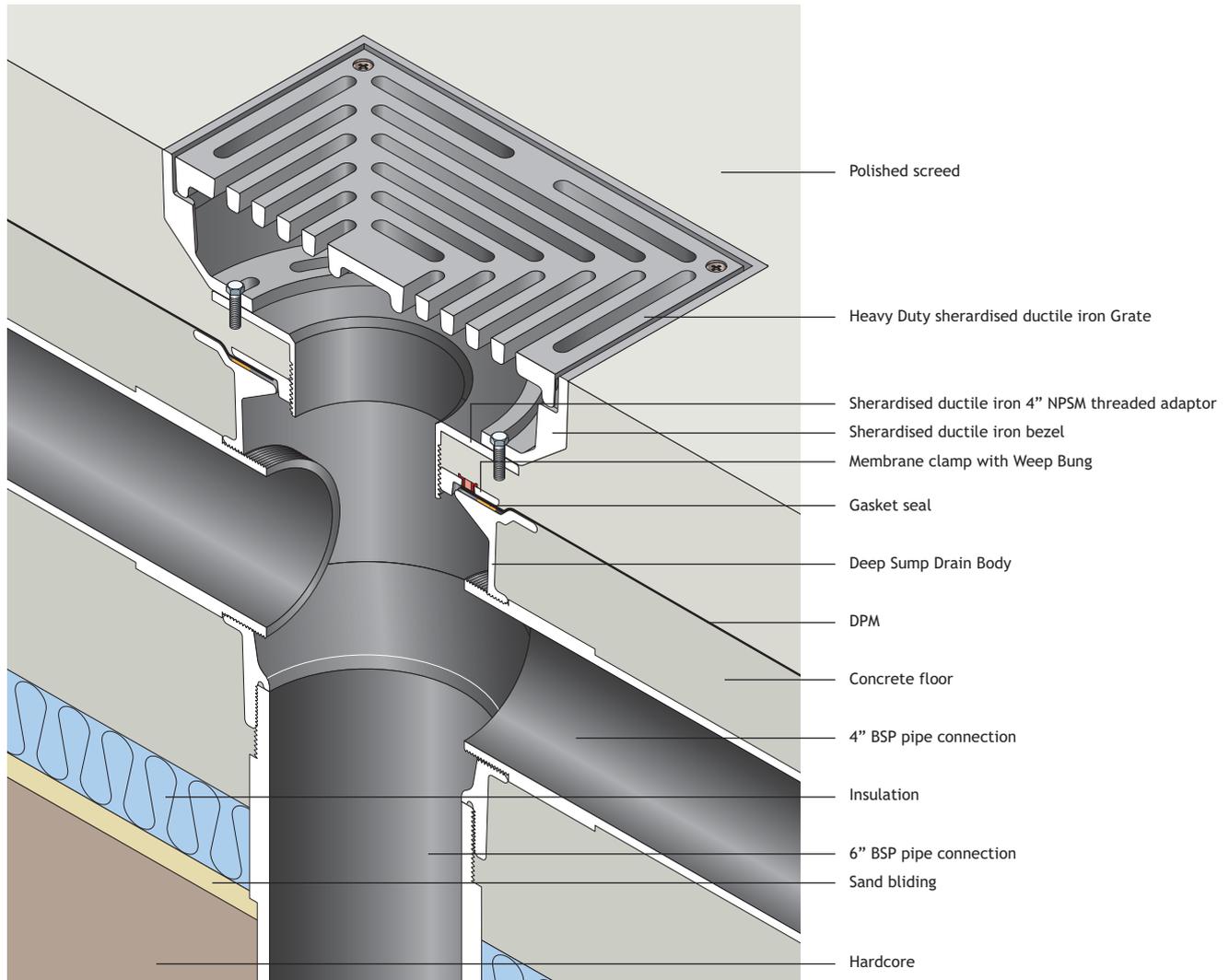
Sitework

1. Temporarily support socketed pipe at adequate level for fitting of drain.
2. Push-fit drain body into place.
3. Add additional waste pipe connections using the 2" BSP inlets on drain body.
4. Lay sand blinding and insulation over hardcore.
5. Pour concrete to cast drain in position.
6. Lay DPM and dress into drain.
7. Secure gasket and clamp leaving weep bung in place.
8. Fit threaded bezel to required height of FFL.
9. Lay screed to falls.
10. Pour liquid applied resin on floor up to bezel frame edge.
11. Secure grate.



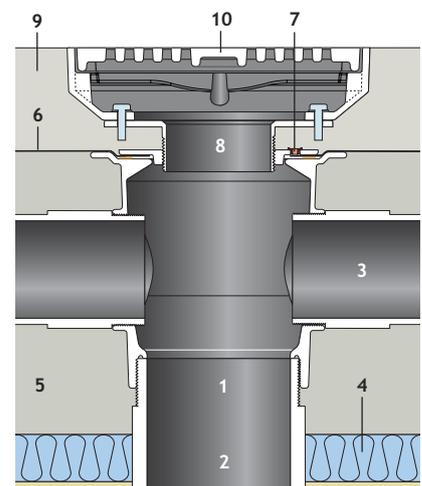
Cast Iron Floor Outlets - Application Details

Deep Sump Vertical Drain Body with Sherardised Ductile Iron Heavy Duty Grate and Bezel



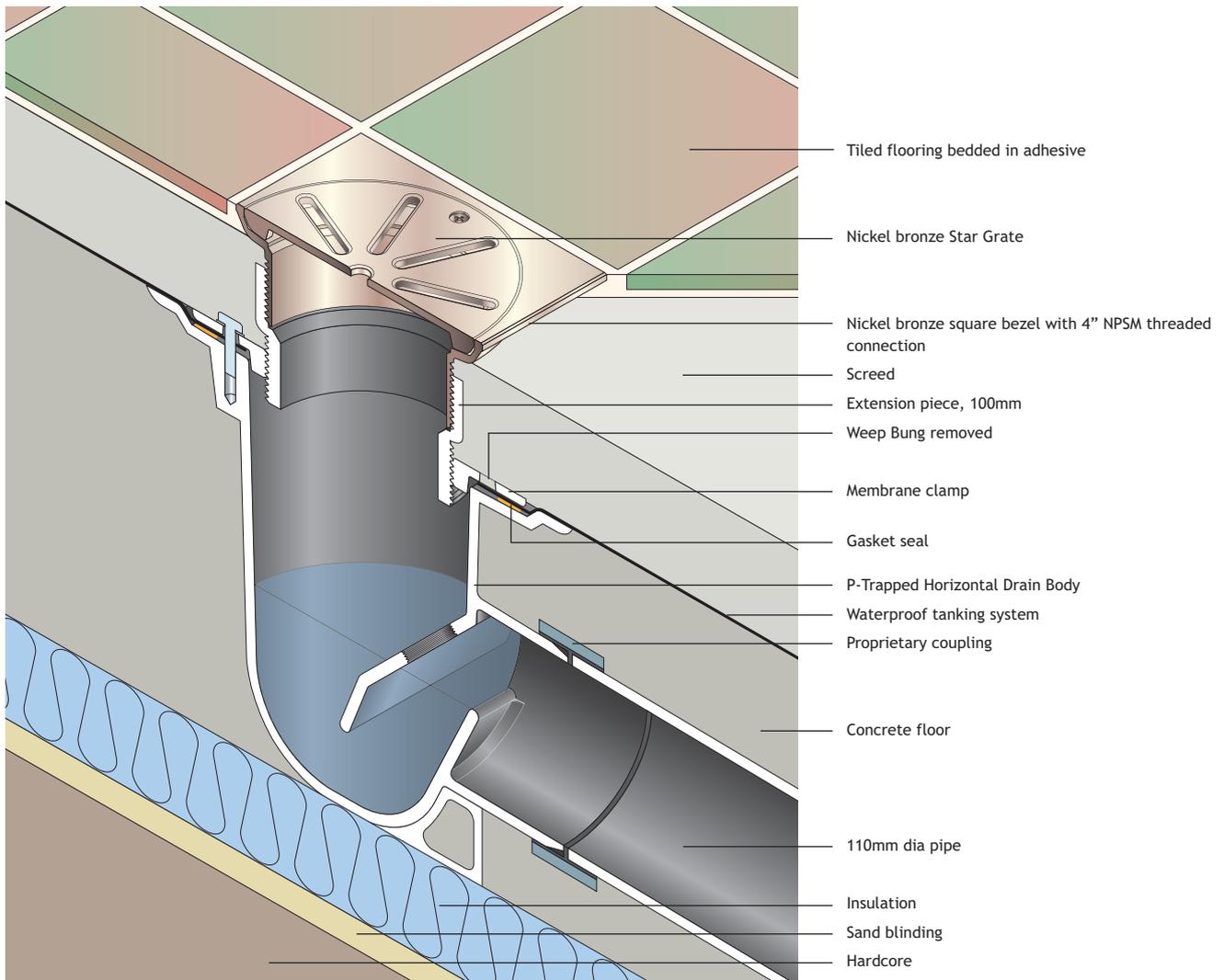
Sitework

1. Assemble BSP pipe/adaptor to drain body.
2. Temporarily support drain/pipe assembly to correct height.
3. Fit additional waste pipe connections using the 4" BSP inlets on drain body.
4. Lay sand blinding and insulation over hardcore.
5. Pour concrete to cast drain in position.
6. Lay DPM and dress into drain.
7. Secure gasket and clamp, leaving weep bung intact.
8. Fit ductile iron frame with threaded 4" adaptor to the clamp at the required height of FFL.
9. Lay polished screed to falls.
10. Place 323 x 323mm square ductile iron grate into frame.



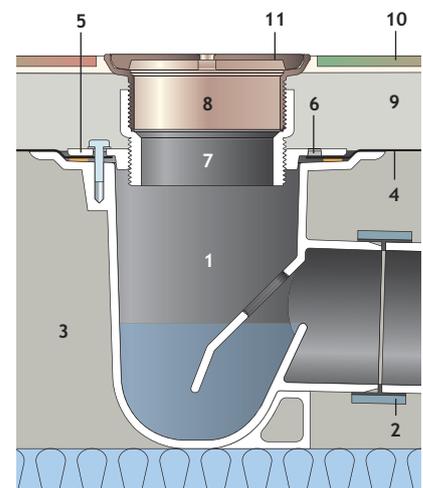
Cast Iron Floor Outlets - Application Details

P-Trapped Horizontal Drain Body with Star Grate and Bezel



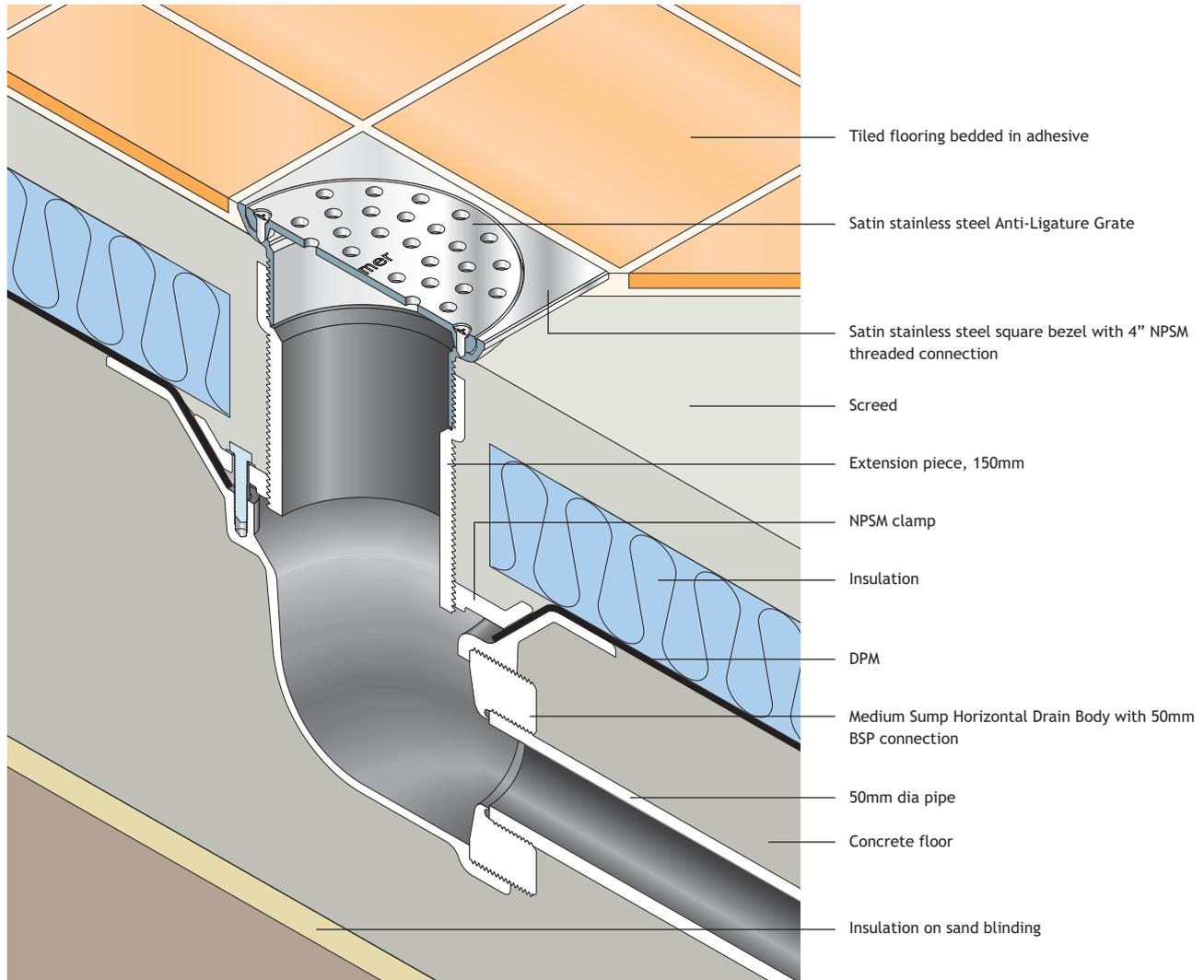
Sitework

1. Position drain body in appropriate location supported on insulation.
2. Connect 110mm diameter pipe with proprietary coupling.
3. Pour concrete mix to cast drain into floor.
4. Lay waterproof tanking system and dress into drain.
5. Fix clamp to secure tanking over gasket seal.
6. Remove weep bung.
7. Install cast iron extension piece and set to required level.
8. Fit threaded bezel to the required FFL.
9. Lay screed to falls.
10. Apply adhesive and fit tiles.
11. Secure grate.



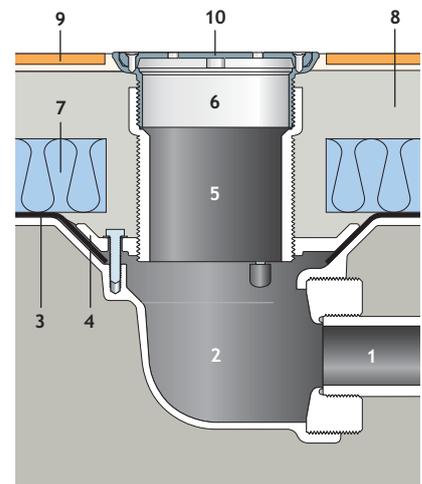
Cast Iron Floor Outlets - Application Details

Medium Sump Horizontal Drain Body with Anti-Ligature Grate and Bezel



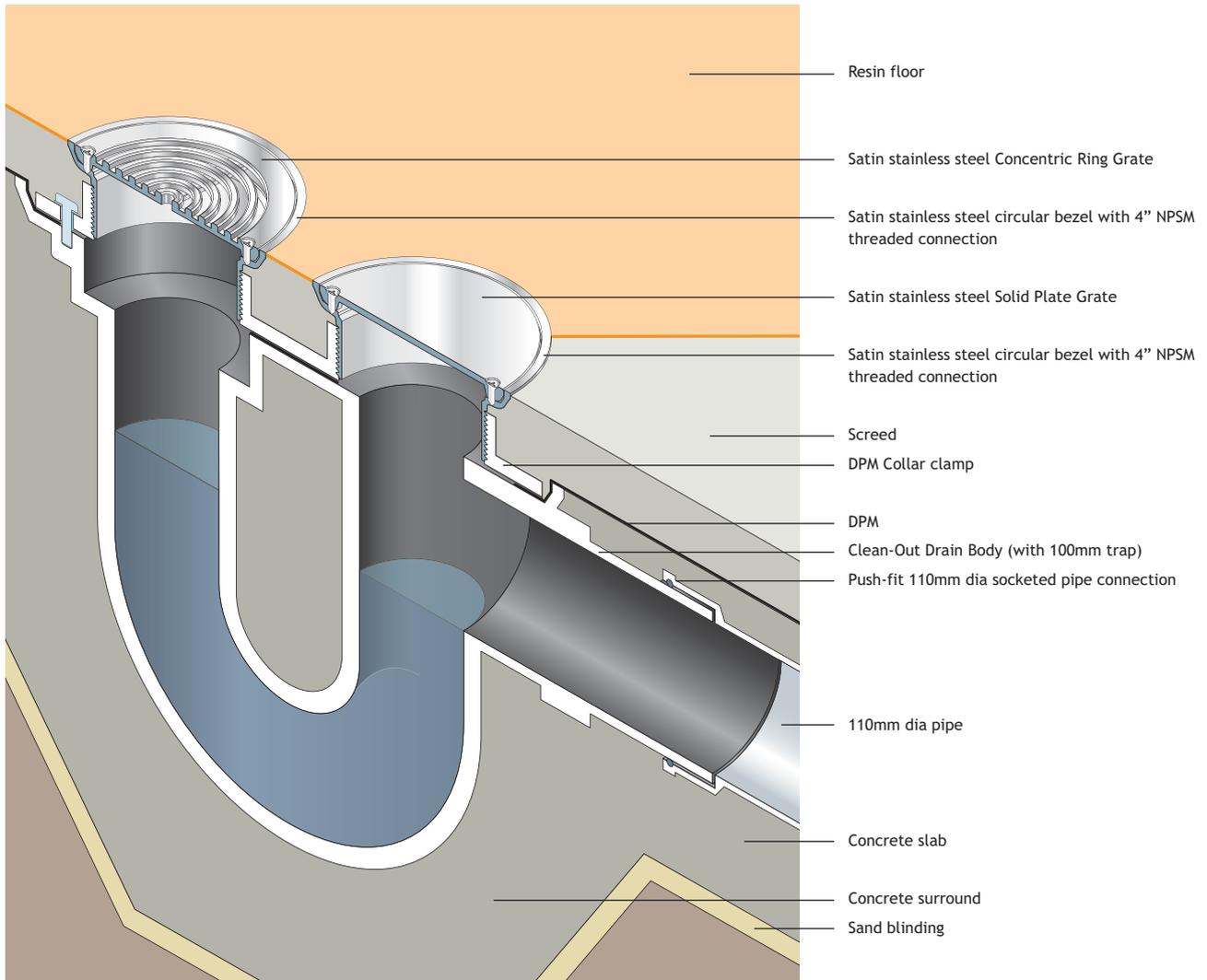
Sitework

1. Assemble BSP pipe/adaptor to drain body.
2. Temporarily support drain and cast into concrete slab at appropriate level.
3. Lay DPM and dress into drain.
4. Fix clamping plate.
5. Install cast iron extension piece for increased height flexibility.
6. Fix threaded bezel to required height of FFL.
7. Lay insulation over floor.
8. Lay screed to falls.
9. Apply adhesive and fit tiles.
10. Secure grate.



Cast Iron Floor Outlets - Application Details

Clean-Out Drain Body with Concentric Ring and Solid Plate Grates and Bezels



Sitework

1. Temporarily support drain body to the appropriate level.
2. Connect socketed pipework.
3. Cast drain into concrete slab/surround.
4. Lay DPM and dress over top of drain body.
5. Fix securing clamp.
6. Install two threaded bezels to the required FFL height.
7. Lay screed to falls.
8. Apply resin floor finish.
9. Secure draining grate and solid plate.

