

# Floor Drains

## Trapped Floor Drains



Caroflow Trapped Floor Outlet body assemblies. Manufactured in electrostatically coated, pre-treated, LM6 Aluminium (Corrosion Resistant) Silicon alloy, all with stainless steel fixings. The integral trap, supplied with each body assembly, is designed to allow its overall height to be trimmed to suit the finished level. Each Body Assembly requires the specification of a separate Grating Assembly, as detailed on page 8.

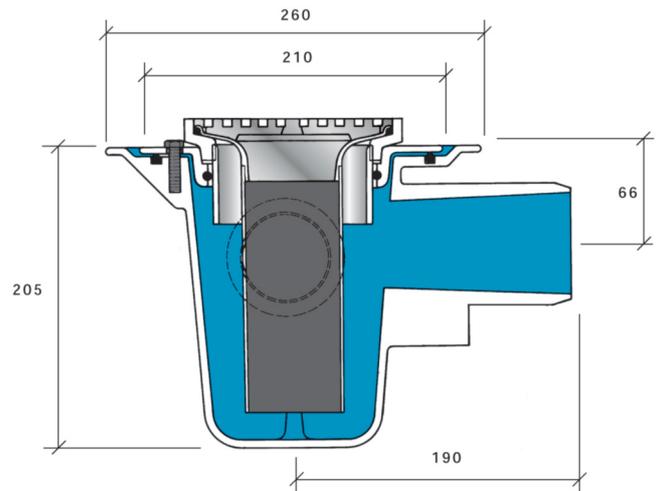
The clamping ring is manufactured with a small "weep" hole to allow any trapped water within the screed to drain into the outlet body. If pressure testing of the drainage system will be required, ensure that the plug supplied has been left in place to seal this "weep" hole. All floor outlet bodies will enable a perfect seal between the water/damp proofing membrane and the drainage pipework.

### Connections

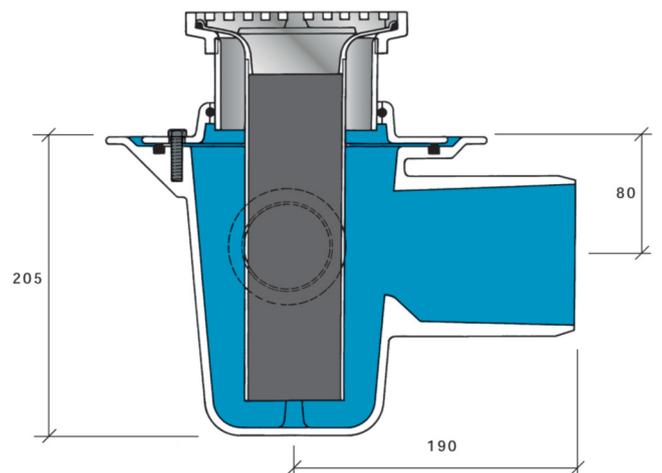
The Caroflow Trapped Floor Outlets are available with either a 45 degree spigot or a horizontal spigot take-off, with the option of two 50mm threaded side inlets. The TS/75 (45 degree spigot) and the THS/75 (horizontal spigot) are suitable for direct connection to 75mm nominal bore UPVC pipework (82mm O/D) with the THS/100 (horizontal spigot) being sized for direct connection to 100mm nominal bore UPVC pipework (110mm O/D). Adaptors, available from Caroflow, will allow for connection to all other sizes and types of pipework.

### Example specification

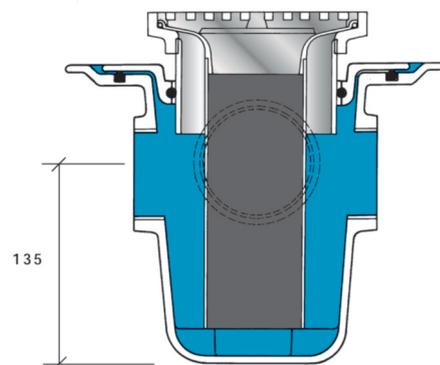
CAROFLOW Trapped Floor Drainage Horizontal Outlet body assembly (Code THSA/100), for connection to 100mm nominal bore soil pipe and allowing for connection to 2 No. 50mm nominal bore waste pipes (elsewhere measured). To be used with 150mm square grate and bezel assembly with short spigot (Code FD/150S/SS) for installation within tiled floor finish (elsewhere measured), all as manufactured by Caroflow Limited



**Trapped Horizontal 75mm Spigot** (side elevation) **Code THS/75**  
Shown with FD/SS/150C/SS – 150mm dia. S/Steel circular bezel with grate and short spigot in clamping ring, lower position. Optional side inlet position shown.



**Trapped Horizontal 100mm Spigot** (side elevation) **Code THS/100**  
Shown with FD/SS/150S/SS – 150mm x 150mm S/Steel square bezel with grate and short spigot in clamping ring, higher position. Optional side inlet position shown.

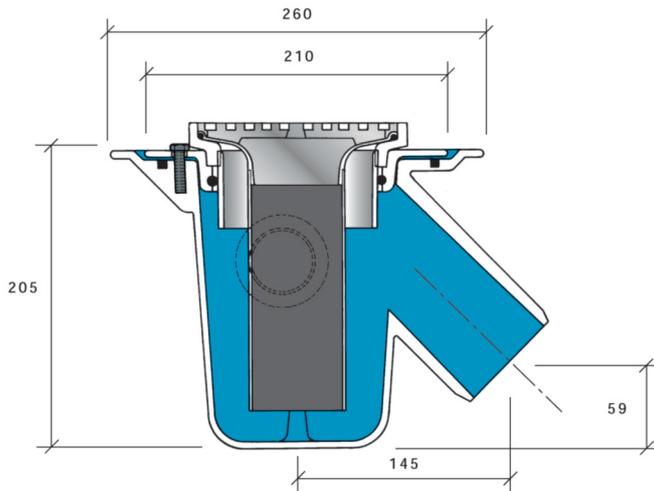


**Trapped Horizontal 100mm Spigot** (front elevation) with two side inlets.  
**Code THSA/100**  
Shown with FD/SS/150C/SS – 150mm dia. S/Steel circular bezel with grate and short spigot in clamping ring, lower position.

All drawings available as CAD on [www.caroflow.co.uk](http://www.caroflow.co.uk)

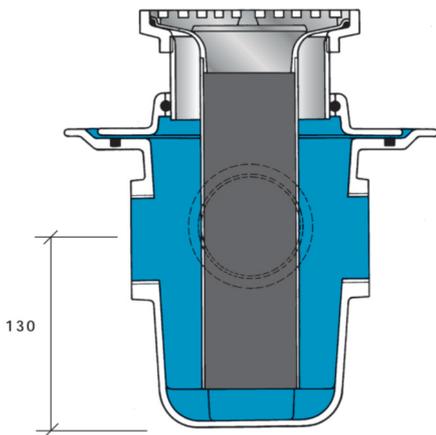
# Floor Drains

## Trapped Floor Drains



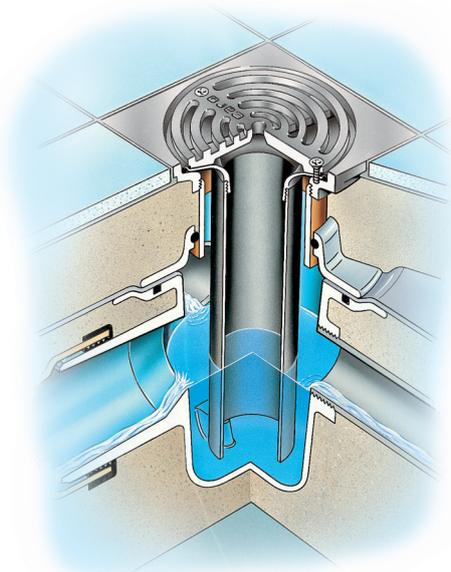
**Trapped 45° Spigot (side elevation) Code TS/75**

Shown with FD/SS/150S/SS – 150mm x 150mm S/Steel square bezel with grate and short spigot in clamping ring, lower position. Optional side inlet position shown.



**Trapped 45° Spigot (front elevation) with two side inlets. Code TSA/75**

Shown with FD/SS/150C/SS – 150mm dia. S/Steel circular bezel with grate and short spigot in clamping ring, higher position.



All drawings available as CAD on [www.caroflow.co.uk](http://www.caroflow.co.uk)

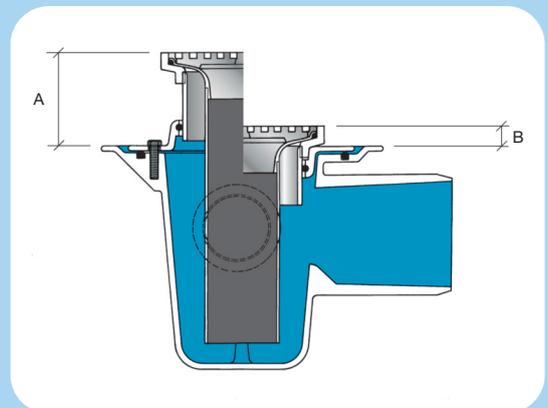
### Height Adjustability

Both Un-trapped and Trapped Caroflow outlets make use of a reversible clamping ring to allow the waterproofing membrane to be sealed to the draining body of the outlet.

This design, originally introduced by Caroflow over 20 years ago, gives a totally flexible and fully adjustable combination of height and level to the grating assembly. This height and level variation is achieved with an inset O-Ring in the clamping ring mouth that grips and seals the throat of the grating assembly.



The throat is available in three standard lengths to allow for differing installation situations, although it is possible to produce in any length that is required, by special order.



Description/Code	Height Variation	
	High Position – A	Low Position – B
Short Spigot (/SS)	54 – 83 mm	17 – 49 mm
Medium Spigot (/MS)	83 – 138 mm	49 – 74 mm
Long Spigot (/LS)	138 – 238 mm	74 – 174 mm

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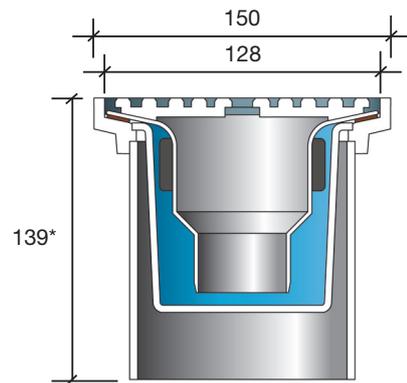
## Advantage Trapped Grate Assemblies



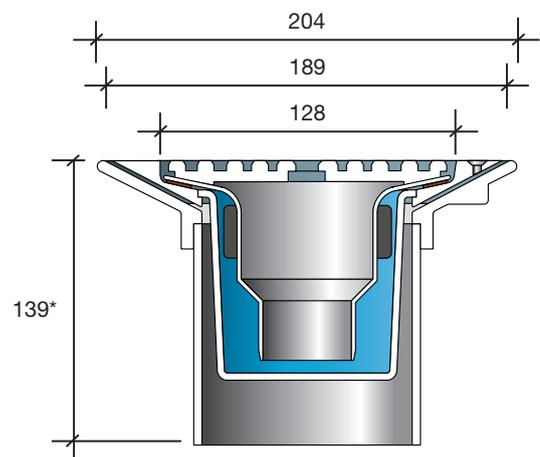
Designed to offer integrally trapped drainage combined with superb quality, ease of use and lower costs, the new Caroflow ADVANTAGE Grating Assemblies incorporate a 50mm Foul Odour Trap that means that the whole unit can be installed directly into the drainage pipe socket without having to use a bulky and expensive body.

If required to seal to DPM then the ADVANTAGE Body unit allows for a completely sealed installation, but still with the advantages of cost and space saving.

ADVANTAGE Trapped Grates can be used with all the traditional body components in the Caroflow range.



**ADV/SS/150S Caroflow** 150mm Square Stainless Steel Advantage Trapped Grating Assemblies suitable for use in tiled flooring situations and simple connection to 110mm socketed pipe.

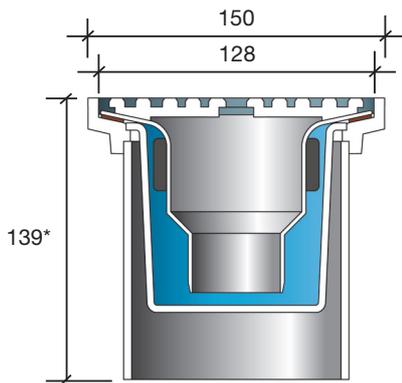


**ADV/SS/150CF Caroflow** Stainless Steel Advantage Trapped Grating Assembly with Clamping Flange. Suitable for use in vinyl/sheet flooring situations and simple connection to 110mm socketed pipe.

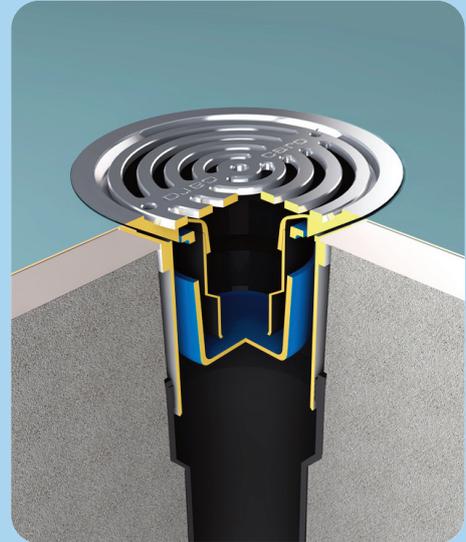
\* Length and material can be made to order

# Floor Drains

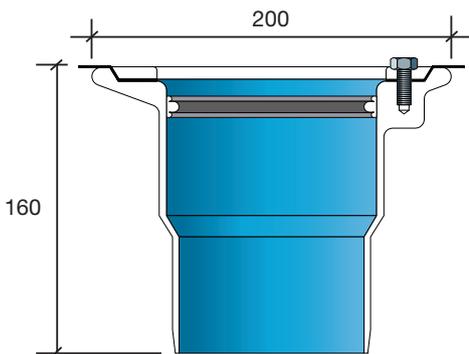
## Advantage Trapped Grate Assemblies



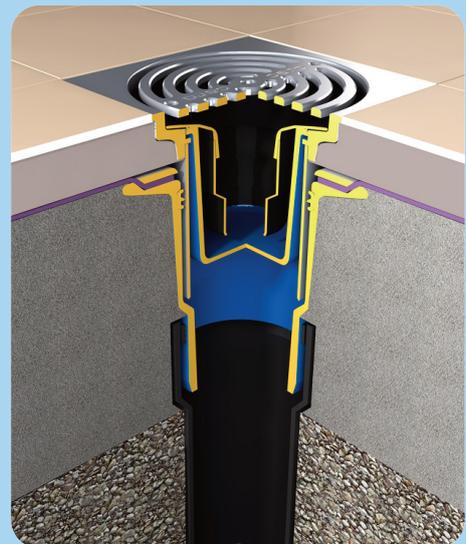
**ADV/SS/150C Caroflow** 150mm Circular Stainless Steel Advantage Trapped Grating Assemblies suitable for screeded floor finishes and simple connection to 110mm socketed pipe.



Typical detail showing ADVANTAGE Trapped High Quality Stainless Steel Grating Assembly (ADV/SS/150CF) for installation with and sealing to Vinyl Sheet Flooring – installed directly into soil pipe socket.



**ADV/100 Caroflow** 100mm Spigot Advantage Floor Body with Clamping Flange for connection to DPC and direct connection to Advantage Grating Assembly (supplied separately).



Typical detail showing ADVANTAGE Body (ADV/100) sealing to DPM with 150mm square (ADV/SS/150S) Trapped High Quality Stainless Steel Grating Assembly for Tiled Floor finish.

\* Length and material can be made to order

# Floor Drains

## Un-trapped Floor Drains



Caroflow Un-Trapped Floor Outlet body assemblies are manufactured in electrostatically coated, pre-treated, LM6 Aluminium (Corrosion Resistant) Silicon alloy, all with stainless steel fixings.

Each Body Assembly requires the specification of a separate Grating Assembly, as detailed on page 8.

All floor outlet bodies will enable a perfect seal between the water/damp proofing membrane and the drainage pipe work.

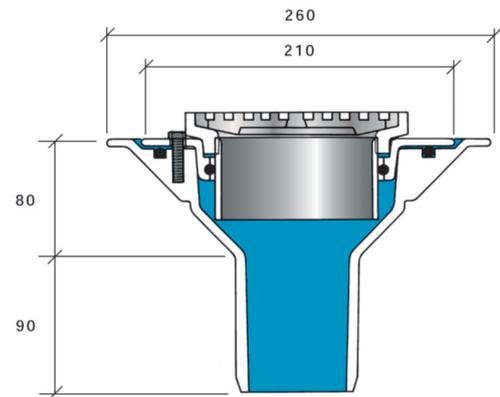
### Connections

Un-Trapped Floor Outlets are available with either a vertical or horizontal spigot that is suitable for direct connection to 75mm nominal bore uPVC pipework (82mm O/D)

Adaptors for connection to varieties of plain-ended 100mm (and other sizes) pipework, are available from Caroflow Limited.

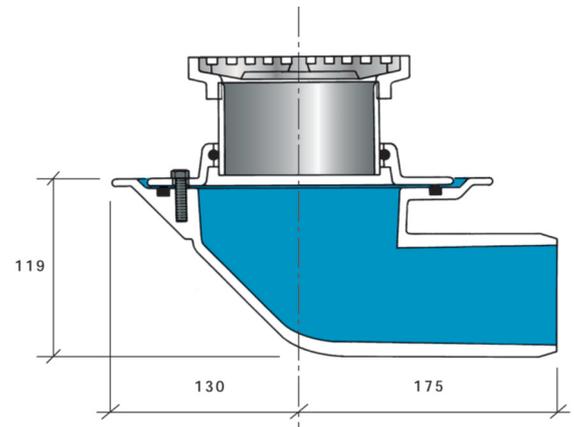
### Example specification

CAROFLOW Vertical Spigot Un-Trapped Floor Outlet Code UVS/75 with S/Steel 150mm x 150mm Square Grating Assembly with short spigot Code FD/SS/150S/SS for installation in tiled floor finish, elsewhere measured, all as manufactured by Caroflow Limited Tel: 01763 244446.



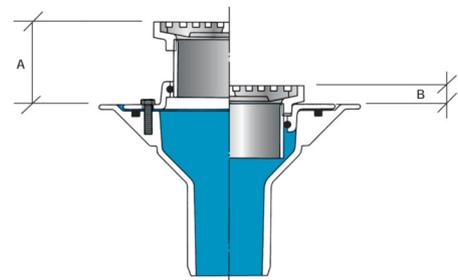
**Vertical Spigot Un-Trapped Code UVS/75**

Shown with FD/SS/150C/SS, 150mm dia. S/Steel circular grating assembly (short spigot) in clamping ring, lower position.



**Horizontal Spigot Un-Trapped Code UHS/75**

Shown with FD/SS/150C/SS, 150mm dia. S/Steel circular grating assembly (short spigot) in clamping ring, higher position.



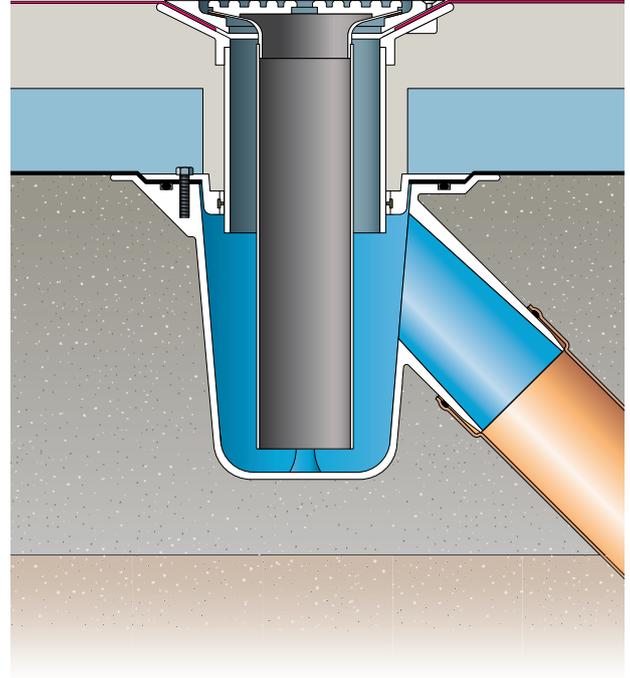
For height adjustability please refer to page 4.

# Floor Drains

## Application Details

### Trapped 45 Degree Spigot Outlet – Flexible Sheet Flooring

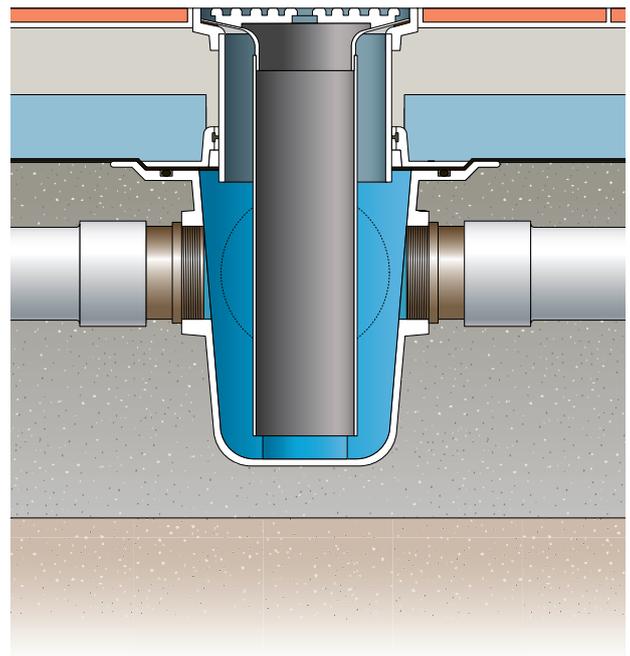
- Connect spigot of outlet body to exposed end of main pipe. Ensure the outlet flange is level with finished slab prior to casting in.
- Lay damp proofing membrane over concrete slab and outlet body. Fix clamping ring\* into position. (D.P.M. can remain uncut over outlet to give protection to drainage from debris/waste etc., until screeding is ready to be laid, then the membrane can be cut out with a knife).
- Lay insulation.
- Remove Trap from Grate assembly. Insert bezel into clamping ring (using suitable lubricant to ease insertion/ movement) Adjust height to finished screed level.
- Lay screeded floor finish flush to top edge of grate flange.
- Lay flexible sheet flooring and cut out hole approx. 135mm dia. directly above outlet.
- Secure clamping ring of grate assembly to seal sheet flooring to outlet.
- Measure the distance that the trap projects above the grating, when inserted. Trim off this distance to allow it to sit within the bezel and re-fit grating.



TS/75 Body Assembly with FD/150CF Grate Assembly

### Trapped Horizontal Spigot Outlet with inlets – Tiled Floor Finish

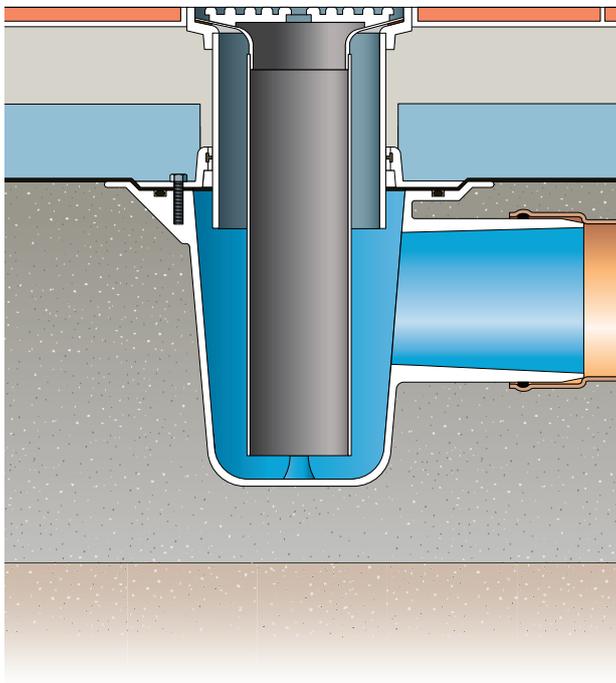
- Connect spigot of outlet body to exposed ends of pipes directly or using coupling/adaptors. Ensure the outlet flange is level with finished slab prior to casting in.
- Lay damp proofing membrane over concrete slab and outlet body and fix clamping ring\* into position. (D.P.M. can remain uncut over outlet to give protection to drainage pipe work from debris/waste etc., until screeding is ready to be laid, whereupon the membrane can be cut out with a knife).
- Lay insulation.
- Remove Trap from Grate assembly. Insert bezel throat into clamping ring (using suitable lubricant to ease insertion/ movement) and adjust height to finished screed level.
- Lay screeded floor finish flush to a height below the grate level, that will allow for tiling to be laid flush with the grating and then lay floor tiles.
- Measure the distance that the trap projects above the grating when inserted and trim off this measured distance to allow it to sit within the bezel and re-fit grating.



THSA/100 with FD/150S Grate Assembly

### Trapped Horizontal Spigot Outlet – Tiled Floor Finish

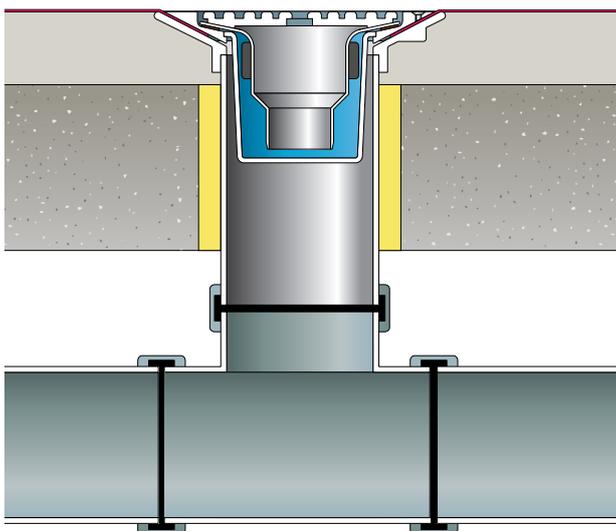
- Connect spigot of outlet body to exposed end of pipe directly or using coupling/adaptors. Ensure the outlet flange is level with finished slab prior to casting in.
- Lay damp proofing membrane over concrete slab and outlet body and fix clamping ring\* into position. (D.P.M. can remain uncut over outlet to give protection to drainage pipe work from debris/waste etc., until screeding is ready to be laid, whereupon the membrane can be cut out with a knife).
- Lay insulation
- Remove Trap from Grate assembly. Insert bezel throat into clamping ring (using suitable lubricant to ease insertion/ movement) and adjust height to finished screed level.
- Lay screeded floor finish flush to a height below the grate level, that will allow for tiling to be laid flush with the grating and then lay floor tiles.
- Measure the distance that the trap projects above the grating, when inserted, and trim off this measured distance to allow it to sit within the bezel and re-fit grating.



THS/100 with FD/150S Grate Assembly

### Advantage Trapped Grate Assembly – Suspended Floor – Flexible Sheet Flooring

- After completion of slab installation, form an opening to allow Advantage assembly to be installed (approx 165mm – 170mm diameter gives sufficient clearance to allow retardant foam to be used).
- Locate the Advantage assembly in the opening and, temporarily, secure so that the grate will finish level with the finished screed.
- Connect spigot/throat of Advantage to pipework with proprietary coupling.
- Infill gap between Advantage spigot and concrete slab with fire retardant foam.
- Lay screeded floor finish flush to top edge of grate/bezel flange.
- Lay flexible sheet flooring and cut out hole approx. 135mm dia. directly above outlet.
- Secure clamping ring of grate/bezel assembly to seal sheet flooring to outlet.



ADV/150CF/CI Advantage Trapped Grate Assembly  
with thin wall Cast Iron throat

\*The clamping ring, on the Trapped Floor Drains, is manufactured with a small "weep" hole to allow any trapped water within the screed to drain into the outlet body. If pressure testing of the drainage system will be required, ensure that the bung supplied has been left in place to seal the "weep" hole.