Impey Aqua-Dec
Frequently Asked Questions

What is the Aqua-Dec?

The Aqua-Dec is often mistaken for a shower tray but it is a preformed floor former with built in gradient to create a consistent flow rate.
The Aqua-Dec is made from a GRP (Glass Reinforced Plastic) with a gel coat finish.
The Aqua-Dec is a solid core product and can, therefore, be trimmed along the edges without affecting the strength of the former. We recommend by no more than 30mm. The only exceptions are the AD4 (900 x 900) and AD5 (800 x 800).

Does it have to be sunk into the floor?

The Aqua-Dec has been designed to be level access. Therefore it must be recessed into the floor to a flush finish with the prepared floor.
In circumstances where the floor cannot be breached the entire floor can be raised to accommodate the Aqua-Dec, however, this could be time consuming and may affect the level access.

How thick is it?

The Aqua-Dec is 22mm thick around the perimeter with a built in gradient of 1:40 being 17mm from the edge to the waste position.
As the average floorboard is 18mm, additional over boarding with a tiles backer board or plywood would be required in preparation for the final floor covering. Various over boarding materials such as tile backer boards and plywoods are available from builders merchants and tile suppliers.
When this is the case the Aqua-Dec will need to be raised to maintain a flush level finish with the floor. Alternatively, you can replace the floorboards with 22mm plywood flooring (check adhesive manufacturer's recommendations).
Modern properties will have 22mm thick floorboards, usually chipboard sheets which mean vinyl floors will not require any further preparation.

Is it available in different sizes?

At present there are 11 different sizes which range from 800mm x 800mm to 1700mm x 1700mm in square design and 1300mm x 800mm to 1850mm x 900mm in rectangular design.

What types of floor drains are available?

To compliment the Aqua-Dec we have developed our own range of floor drains known as the DSS1/(H or V). It is a two part system comprising of the trap-a-dapta itself and a waste trap. They are available for both tiled and vinyl floors and come with either a horizontal or vertical gravity waste.
In addition we offer a 22mm pumped waste version.

Does it need to be fitted level?

It is extremely important that the Aqua-Dec is fitted level. This is easily checked by placing a spirit level on the 50mm flat perimeter that is present on all Aqua-Dec's. Because the gradient is built into the Aqua-Dec it will only function properly if it is level around its perimeter.

What size is the waste outlet of the gully?

Both the vertical and the horizontal outlet traps have 50mm solvent weld socket (BS5255). The horizontal being the more popular is supplied with a 50mm-40mm reducer.

How is the floor drain fitted?

The Aqua-Dec has a 200mm diameter circular rebate with a 160mm diameter hole in the centre.
The gully flange fits into the rebate making the top of the gully flange a flush fit with the surface of the Aqua-Dec.
Normally the trap part of the floor gully would be installed before the Aqua-Dec allowing for easy connection to the waste pipe. The Aqua-Dec would be then screwed to the joists and the trap-a-dapta fitted into the rebate and connected to the trap body from above. The trap-a-dapta is then secured in place by drilling the Aqua-Dec and using self tapping screws provided.

Is the floor drain cleanable from the top?

All our floor drains are top accessible, which means they can be cleaned from the top without removing the entire drain.
This is achieved by the removal of the grate (with the tool provided), followed by the dip tube, which then allows easy access to the sump of the trap for cleaning.

What about different thicknesses of tiles?

To compensate for different tile thickness we have developed a height adjustable ring (TAD/DV1). The height is adjusted by rotating the grating, as it is turned it will become taller. To fix the height simply apply solvent cement to the two parts set position and leave to cure for a few minutes. The orientation of the floor gully grate can then be set to align with the tiles.
The height adjustable ring can accommodate a tile thickness of 6 - 16mm. Included in the TAD/DV1 is a 10mm height extension ring, however, this should only be used if the tile thickness is between 17 – 26mm.
Please note: If the grate is too high for the tiles it could be due to the 10mm height extension ring.

What if there is a joist in the way of the trap?

You may think that when this occurs there isn't anything that can be done as the joist must never be notched to allow installation of the trap.
In fact various options are available. The first and simplest option is to turn the Aqua-Dec around 180 degrees which in most cases will reposition the gully.
Of course this will only help if the joists run in the right direction (normally lengthways to the Aqua-Dec).
If the joists are running widthways the option is to move the Aqua-Dec sideways until the trap no longer collides with the joist. As the trap is only 90mm in diameter the side step should be no more than 45-50mm either left or right.
If the Aqua-Dec must be moved towards the wall rather away from the wall it is possible to cut the side of the Aqua-Dec to allow for repositioning.
The only exceptions are the AD4 (900 x 900) and AD5 (800 x 800); these have been specifically designed for corner drainage and cannot be trimmed. These Aqua-Decs have a 6mm structural up-stand on two sides both of which must, when installed, be against a wall and must be chased into the wall to ensure a flush finish.
Although every effort has been made within the design to prevent the gully conflicting with a joist, all buildings are different. In these cases you will need to reposition the Aqua-Dec until the trap is clear of the obstruction.
You could then build a boxing off the wall or create a false wall to fill any gap.

What is the Tilesafe Membrane?

The Tilesafe Membrane is self adhesive bitumen matting that is relatively simple to apply. When fully installed it renders the floor completely watertight even without the tiles fitted.
Silicon must not come into contact with the Tilesafe Membrane as it will have an adverse reaction to the membrane over a period of time; usually the first indication that there is a problem will be black spots appearing in the tile grout. Only use the jointing compound, putty and primer that is provided in the kit.

Where should Tilesafe be used?

Tilesafe will provide a lifetime-warranty watertight seal to the area it is applied to. We recommend that Tilesafe is fitted to the entire bathroom floor area.
When installed the joint tape supplied should return up the wall by 75mm, therefore, creating an entirely "tanked" area.
Please note if using Tilesafe any further up the wall, it has a vertical load limit of 20kg per sqm.

What is the putty for?

The putty is used to repair any minor damage that may occur to the membrane during installation. It is also used to seal around any pipe work that beaches the floor, giving a seal to protect the membrane from hot pipes.
The putty can also be used to fill any gaps between the Aqua-Dec and the existing floorboards.

Does the primer need mixing?

The primer is applied on to the floor neat. There is no mixing required, however, the bottle needs to be shaken prior to application. The primer is used everywhere that the Tilesafe Membrane is to be used, even in the Dec area.

How long does the primer take to dry?

The primer takes about 30 minutes to dry, however, the Aqua-Dec area does not completely dry off and will remain slightly tacky.

What is the date on the primer?

The date on the primer is a production date, not an expiry date; there is no expiry date for the primer.

The jointing compound does not dry off?

The jointing compound does not set hard – it is designed to remain permanently flexible; therefore, care should be taken not to over apply the product. Only a thin bead, 2mm, is required otherwise it will start to mix with the tile adhesive when it is applied.

The Tilesafe Membrane will not stick or is too sticky?

The Tilesafe Membrane can be sensitive to extreme weather conditions; if it is too hot the membrane can become very hard to manage and if it is too cold the membrane could appear non-sticky.

Do I need to use the Tilesafe Membrane on a concrete floor?

It is advisable to use the Tilesafe Membrane on concrete installations as it will need to be dressed into the waste. The tiles will adhere better to the Aqua-Dec and should the water penetrate the grout or tile adhesive it will prevent water going through to the damp course.

Can Tilesafe be used with slip resistant vinyl?

When slip resistant flooring is installed properly there should be no need for additional waterproofing membrane as all the joins and corners would be hot welded and therefore be self waterproofing.

Can under tile floor heating mats be fitted on the Aqua-Dec?

An under tile heating mat can be used but it is essential that it is laid on top of the Tilesafe Membrane. If the heating mat were to be fitted under the membrane it could eventually damage it. We only recommend the use of the Devi-Mat with the Tilesafe Membrane, as it has been tested, and does not exceed the 32°C tolerance of the membrane. Also be aware that 100W per square metre is the maximum recommended for timber floors.

Can the underfloor heating go into the Dec area?

The underfloor heating is placed over the Tilesafe Membrane and can go on to the Aqua-Dec area. Do not take the matting too close to the waste, (leave at least 125mm), this ensures that the gradient around the waste has a good slope around the drain to allow the water to run off quickly.

Can I use a levelling compound over the Devi-Mat?

A levelling compound can be used over the Devi-Mat to smooth out the ridges of the matting, however, extreme care must be taken not to get this on the Aqua-Dec as it could reduce the gradient.

What type of tile adhesive should be used?

Any proprietary tile adhesive can be used with Tilesafe. The adhesive must be a single-part flexible cement-based adhesive and must not be a ready mix (do not use polyurethane or epoxy-based adhesive or grout).
Always refer to the adhesives manufacturer's recommendations before use.

What water flow rate can the Aqua-Dec take?

This will depend on the size of the Aqua-Dec, choice of tiles and other site conditions such as the position of the shower outlet. Generally the maximum flow rate will be 22 Litres/min.

What size of tiles is best to use on the Aqua-Dec?

Mosaic tiles are easiest to lay on the Aqua-Dec as they naturally follow the fall in the gradient. The larger the tiles the more work that needs to be taken in the planning and cutting to ensure that they follow the fall of the gradient.
Care must be taken with larger tiles to ensure that the 1:40 gradient is not reduced by either the cut of the tile or tile adhesive as the performance of the Aqua-Dec will be reduced.

Can you use pumped waste?

We have designed a range of very shallow pumped waste floor gullies (DSS2&DSS4) to compliment the Aqua-Dec; these are for use with our Dry-Deck 20 waste pump. This is a self priming pump rather than a macerator type pump.
Please note: Maximum flow rate 20Litres/min.

Can it be fitted in timber floors?

The Aqua-Dec was designed entirely because of the difficulties encountered when creating gradients in timber floors.

A basic installation would involve removing the existing floorboards, creating a solid platform of 18mm plywood between the joists, installing the waste plumbing, fixing the Aqua-Dec in position by drilling and screwing, and connecting the trap to the trap-a-dapta.

Can it be fitted in screeded concrete floors?

The Aqua-Dec can be fitted into screeded floors.

In fact, fitting the Aqua-Dec in a concrete floor can often be quicker than a timber floor as you don't have to construct any timber platforms. After breaking up the screed and installing the waste pipe the Aqua-Dec is simply bedded down level like a large paving slab. You can use sand and cement to bed it down but we do state that it is also fixed with screws and rawl plugs after the bedding has fully hardened (normally the following day). This will prevent any risk of movement in the future.

Can it be fitted in structural concrete floors?

The floor may need to be raised to accommodate the Aqua-Dec in structural floors as breaking up the floor is normally not permitted. This is because you could weaken the structural integrity of the floor slab.

What is the best tool to cut it with?

The most efficient way to cut the Aqua-Dec is with an angle grinder fitted with either a diamond or masonry cutting disk. It is also possible to use a circular saw (we would recommend using an old blade since cutting the dec will blunt the blade).

A hand saw can also be used but it is not recommended because this will be time consuming.

A jigsaw can also be used with a ceramic tile cutting blade but this may prove time consuming.

Can I use silicon to fill the gap between the Aqua-Dec and the floorboards?

Silicon should not be used anywhere near the Tilesafe Membrane as it will have an adverse reaction to the bitumen. If there is a gap between the Aqua-Dec and the existing floorboards the putty supplied with the kit should be used.

For further advice call our technical department on 01460 256080.