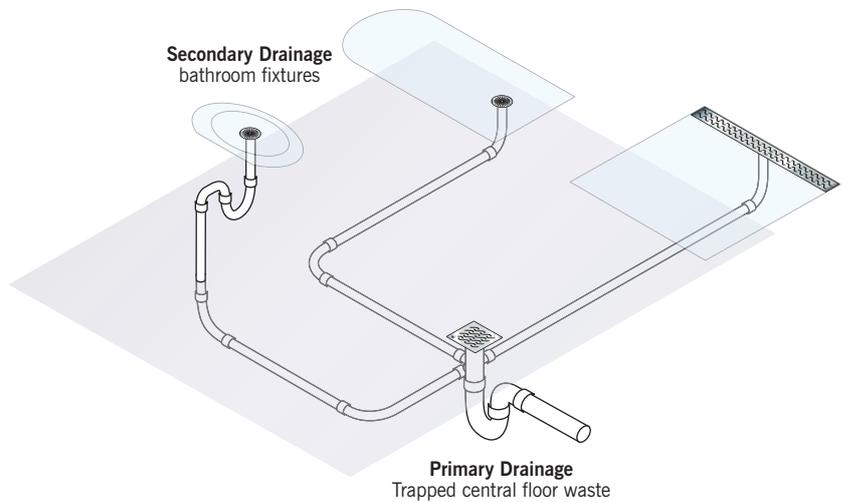


## Determining type of drainage

### An interconnected system

One of the most important decisions to consider with a bathroom, is how to incorporate drainage into the design. The solution must fit the bathroom floor layout to ensure it functions properly.

For a bathroom with a single primary drainage trap, there are two types of bathroom drains. A trapped central floor waste (overflow gully) and other waste outlets from a bathroom's fixtures (showers, basins, bathtubs etc.). The drains from these fixtures (secondary drainage) are connected to the central floor waste (primary drainage). These form part of a bathroom's interconnected pipe system.

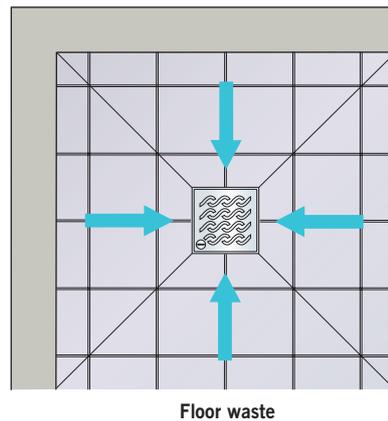


Some bathrooms are plumbed with separate traps to each fixture.

### Traditional floor wastes

Floor wastes offer a point outlet, typically located at the centre of the shower area and/or bathroom floor.

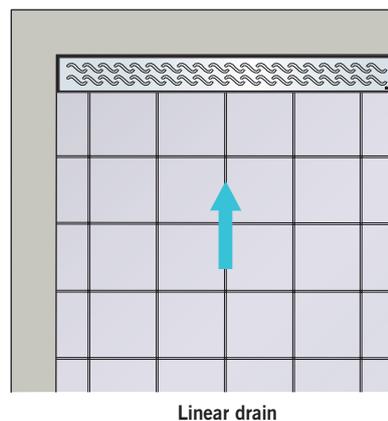
- Generally a cheaper initial product cost
- Usually not appropriate for level threshold applications
- Requires traditional tiled threshold step/hob to contain water
- Tiling can be complex, typically requiring careful 4-way grading of the floor
- Increased tile wastage due to diagonal cutting and lipping requirements to AS3958
- Higher flooring cost due to extra time required to produce a 3D floor plan



### Linear drains

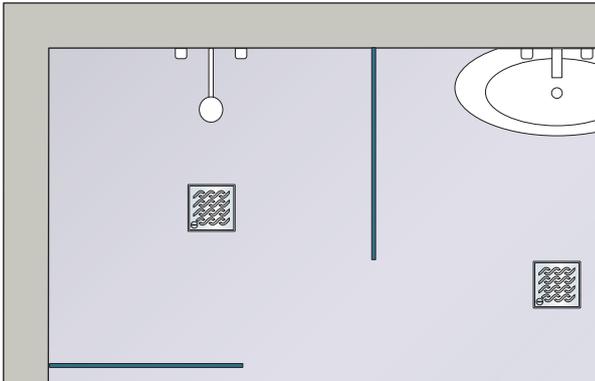
A linear grate and channel can be located anywhere within the shower area and requires simple 2D grading of the floor towards the channel.

- Usually a higher initial product cost, but reduced tiling cost due to decreased installation time
- Level threshold can be created for easy wheelchair/disabled access
- Can be used to separate wet from dry areas
- Can be used with any type of tiled shower configuration
- Tiling is simplified with minimal cuts required and less wastage
- Easy to use with any tile size and material

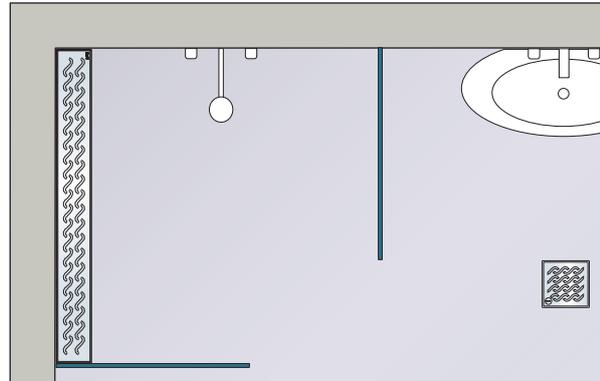


## Drainage planning information

### Choosing a primary and secondary drainage combination



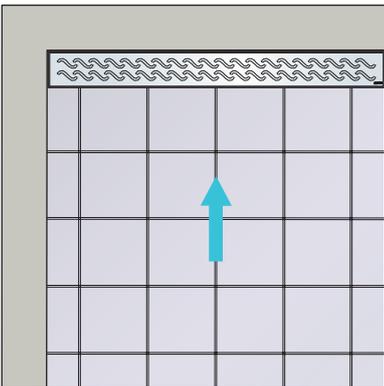
Using two floor wastes – shower and central bathroom



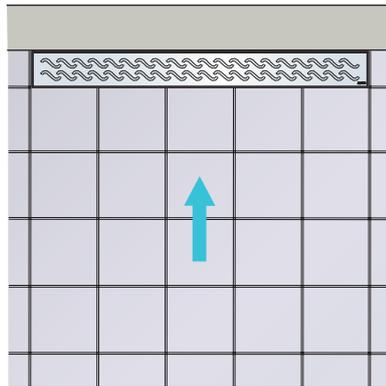
Using linear shower drainage and central bathroom floor waste

### Choosing a position for a linear drain

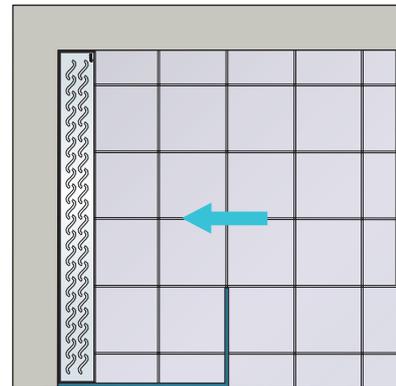
#### (i) Floor sloping towards the wall



**Installation against the wall**  
Slope in one direction – slope away from the bathroom. No risk of bypass.

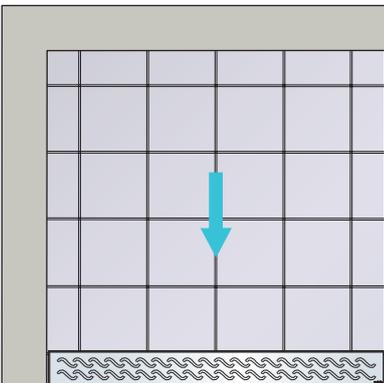


**Walk-through: Installation against the wall**  
Slope in one direction – just shower area or whole bathroom floor can be sloped towards channel.

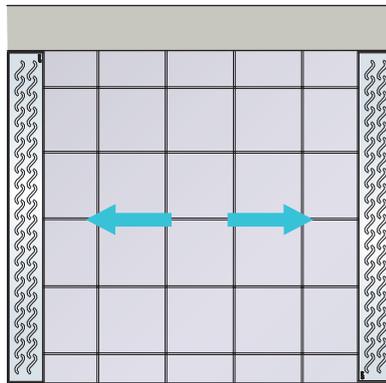


**Walk-in: Installation against the wall**  
Slope in one direction – slope away from the bathroom. No risk of bypass.

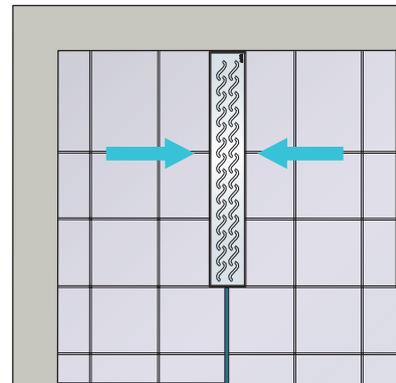
#### (ii) Floor sloping away from the wall



**Installation at shower entrance**  
Slope in one direction, towards the bathroom – allows for possible risk of bypass. Slope of bathroom floor towards shower area is recommended to contain possible bypass. Channel length should exactly fit the shower opening.



**Walk-through: Installation with two channels**  
Two directional slope towards the bathroom. Channel length should exactly fit the shower opening.



**Walk-in: Installation at the entrance**  
Two directional slope towards the channel. Channel length should exactly fit the shower opening.

Note: Linear drains are not only restricted to shower areas, but can also be used in bathroom floors, e.g. alongside a wall.