

# **Installation** guide

40mm Standard Linear Shower Tray

90mm Substrate Element

## Important Information

**PLEASE READ THESE INSTRUCTIONS THOROUGHLY BEFORE STARTING INSTALLATION.**

If your product has slightly damaged edges, there is no need to return the product as these can easily be repaired and most minor damage will naturally be covered during installation. Should you need to patch a repair that won't be naturally covered you should do so in the same way as you would seal a joint with Waterproofing Tape (EMTM-05-0010) and Pro-DRY Tape Sealer (EMAS-10-0005).

**DO NOT PLACE STEP LADDERS OR HEAVY ITEMS ONTO THE SHOWER TRAY OR OTHER ELEMENTS PRODUCTS, PRIOR TO TILLING, AS THIS COULD PUNCH A HOLE THROUGH THE SURFACE.**

When you are ready to start, make sure that you have the right tools to hand and that the installation area is clean and dry.

When drilling or fixing into walls or floors it is essential that you check for pipes and wires before commencing.

**DO NOT CLIP THE WASTE INTO POSITION WITHIN THE TRAY UNTIL INSTRUCTED TO DO SO IN THE INSTRUCTIONS THAT FOLLOW; THE WASTE CLIPS INTO THE TRAY SECURELY AND IS NOT DESIGNED TO BE REMOVED, THEREFORE THIS MAY CAUSE DAMAGE TO THE TRAY LUGS AND/ OR WASTE IF THIS WARNING IS IGNORED. ABACUS ELEMENTS CANNOT BE HELD LIABLE FOR ISSUES ARISING DUE TO DAMAGE CAUSED IN THIS WAY.**

### Site Preparation

All floor types need to be clean, dry and dust free.

All floor types need to be as flat and level as possible.

Prior to installation you will need to have access to a wastepipe in the correct position. Please ensure that the wastepipe is accessible and any alterations to the floor are completed prior to installation.

If you are running your pipe work below the floor, the waste pipe must run in the same direction as your floor joists so please check your joists before starting installation.

When you are ready to start, make sure that you have the right tools to hand and that the installation area is clean and dry.

# Installation Instructions

## 40mm Linear Shower Tray

### Parts Supplied

Description		Qty
Shower Tray		1
Shower Tray Base		1

### Typical Parts Required (Fitting Kit)

Description		Qty
Shower Drain Base		1
Shower Drain Angled Coupler		1
Shower Drain Reducer		1
Shower Drain Stop End		1
Shower Drain Vertical Waste Elbow		1
Shower Drain Internal Bowl		1
Shower Drain Top		1
Shower Drain Bolts		
Shower Drain Finishing Grate		
Disposable Tiling Aid		1

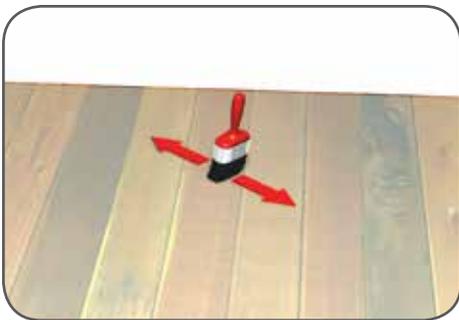
### Typical Materials Required

Description		Qty
Fix-KST Adhesive Bag (5kg)		2
Wood Floor Primer (250ml)		1
Fix-MD Adhesive Tube (310ml)		1
Waterproofing Tape (5m)		1
Pro-SEAL Pre-MIX 0.5L		1
Waterproofing Internal Corner		2
Notched Adhesive Trowel		1
Protective Gloves		1
Paintbrush		1

**Shower Trays can be installed two ways; with or without a Substrate Element. If your waste pipe cannot be run within the floor joists below you may require a Substrate Element to raise the Shower Tray. Substrate Elements of different sizes and depths are available.**

If you are installing a Shower Tray only (wastepipe installed in floor joists below) follow Installation A. (Page 3)  
If you are installing a Shower Tray and Substrate Element follow Installation B. (Page 9)

### **Installation A: Fitting A Shower Tray Only**



#### **Step 1**

(wood floors only)

If you are installing onto a wooden floor, make sure that the existing floor boards or sheets are fully secured down and as level and flat as possible. Paint the floor area where the shower will sit with wood floor primer.

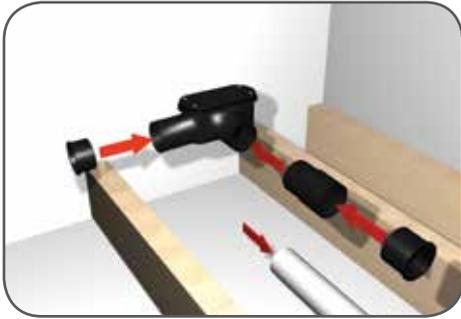
**PVA MUST NOT BE USED IN PLACE OF THE WOOD FLOOR PRIMER.**

Leave to dry for at least 2 hours.



#### **Step 2**

Remove flooring as necessary to carry out works to the wastepipe. Please note that if there is a joist in the way of the Shower Tray you will need to consult a professional joiner or structural engineer for advice.



### Step 3

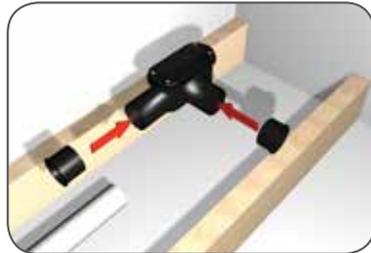
**Note: All solvent joints should be cleaned with an appropriate solvent weld cleaner prior to using solvent adhesive.**

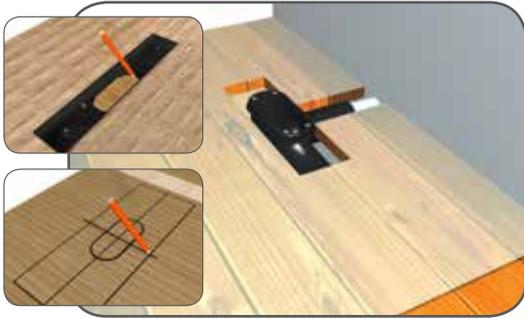
The waste has two outlets for multi direction waste flow. The outlet running at a ninety degree angle from the waste has a zero degree fall; this is to facilitate the fitting of the vertical waste elbow. If you plan to run the waste horizontally from this outlet you **MUST** fit the angled coupler supplied with the linear drain to achieve the required waste fall. Clean with Spread solvent weld adhesive around the outside of the coupler and push into the linear drain outlet with a twisting action, ensuring that the coupler is fit with the fall in the correct orientation by ensuring that the angled coupler is fitted with the 'up' text facing upwards.

**IMPORTANT: As the drain has two outlets, it is important that the outlet not being used is capped off using the stop end supplied. Spread solvent weld adhesive around the outside of the stop end and push into the linear drain outlet with a twisting action.**

The linear drain is also supplied with a 2" to 1 1/2" reducer for instances where you need to reduce to 1 1/2" waste pipe. Spread solvent weld adhesive around the outside of the reducer and push into the remaining linear drain outlet with a twisting action. If you have 2" waste pipe this part can be discarded and simply fit your waste pipe to the linear drain using solvent waste adhesive in the same manner as above. Once any solvent welds have set, pour water down the drain to check that the waste is not blocked and that there are no leaks.

**Note: The typical linear drain flow rate figure (42L/min) is based on using 2" waste pipe; by reducing the waste pipe diameter this will have an adverse affect on the flow rate achieved. For water to drain away properly, the waste pipe must have a fall of 3cm per metre.**



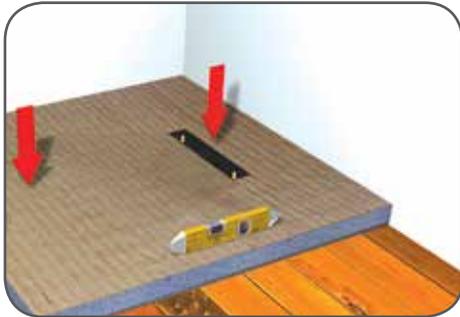
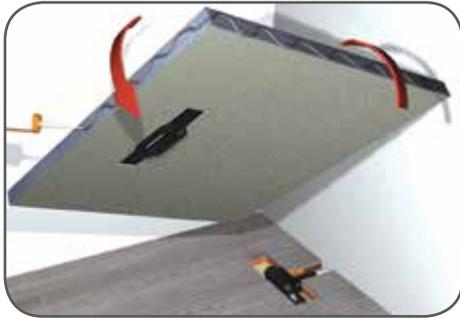


#### Step 4

Measure the shower drain base position on the floor and mark this onto the relevant flooring.

The size of the cut-out needs to be 315mm x 90mm. Make sure that the drain's centre is in the middle of the cut-out.

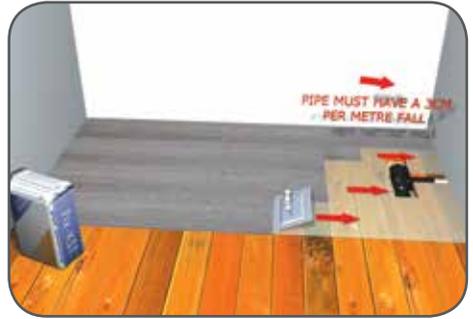
Using a jigsaw cut a hole in the plywood so that the shower drain base and shower drain connector will be exposed through the new floor.



#### Step 6

Apply a wavy line of Fix-MD adhesive across the edge of the shower tray base.

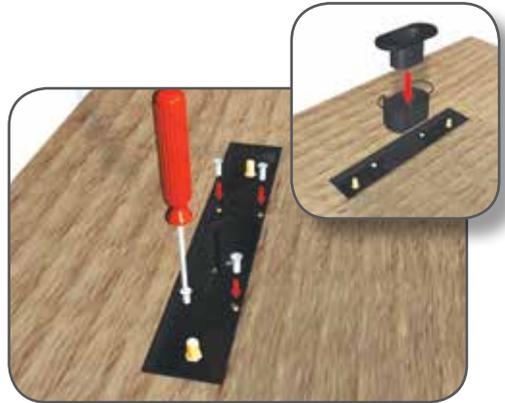
Place the shower tray into position and bed down onto the adhesive cement. Check that the shower tray is level in both directions using a suitable level.



#### Step 5

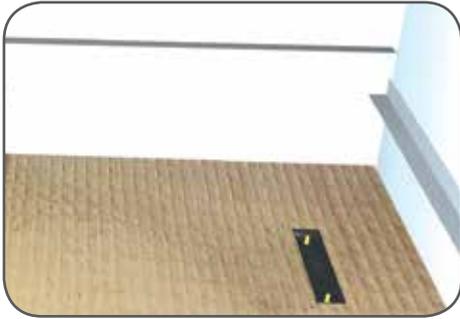
Put on the protective gloves and wear eye and breathing protection.

Mix a bag of Fix-KST adhesive with water, to the directions on the back of the bag, in a clean bucket which will give the adhesive a stiff consistency. Spread the Fix-KST adhesive onto the floor of the shower position and drag the notched adhesive trowel across the surface. The notched adhesive trowel will make a ribbed pattern which will leave just the right amount of adhesive on the floor.



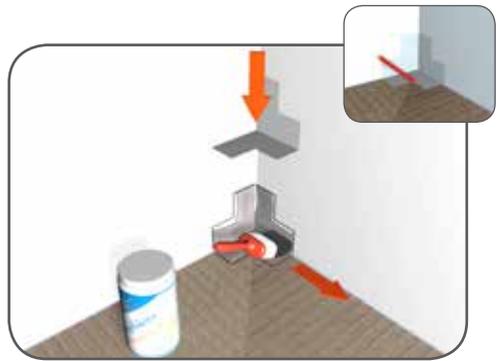
#### Step 7

Line up the linear drain bowl with the drain top pre-fitted within the shower tray and connect the two together using the four bolts provided and a suitable cross headed screwdriver. Ease the shower drain internal bowl into place then ease in the drain top as shown applying a little gentle pressure so that it seats correctly.



### Step 8

From a roll of waterproofing tape cut to suit the width of the shower tray and the length of the shower tray.

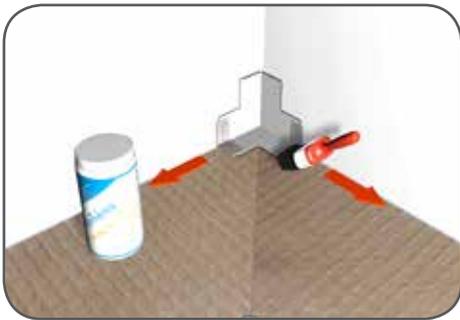


### Step 9

Temporarily place a waterproofing internal corner into position and mark around it with a pencil. Once marked it can be removed. This is to show where you need to apply Pro-SEAL tape sealer. Repeat for any other corners.

Put on the protective gloves and wear eye and breathing protection.

Using Pro-SEAL Pre-MIX tape sealer and a paintbrush, apply a thin layer of Pro-SEAL tape sealer to the internal corners of the shower tray, slightly bigger than the pencil line marked earlier.



### Step 10

Place the waterproofing internal corners into the internal corners of the shower tray and push firmly into the Pro-SEAL tape sealer. Apply a further thin layer of Pro-SEAL tape sealer over the edges of the waterproofing internal corners.



### Step 11

Where the shower tray meets the wall apply a thin layer of Pro-SEAL tape sealer to the shower area and the adjoining wall approximately 60mm wide on both.

**Leave to set for approximately 3 to 5 hours after which the tray is ready for tiling.**

**When sticking the tray down, it is a good practice to put some heavy weights (i.e. a bag of tile adhesive) on the tray whilst the adhesive cures. This ensures that the base sticks evenly to the floor.**



### Step 12

Place the strips of waterproofing tape previously cut in step 8 along the edges of the shower tray, folding half up the wall and half on the shower tray as you go. Press firmly into the Pro-SEAL tape sealer and the tape should also overlap the waterproofing internal corners. When you have finished you can remove the protective gloves and eye and breathing protection.

### Step 13

**IMPORTANT!** Apply a further thin layer of Pro-SEAL Tape Sealer over the tape & corners to fully impregnate the tape.

### Step 14

Leave to set for approximately 12 hours after which the tray is ready for tiling.

**Please leave the weights on the tray while its curing to maintain the contact with the adhesive.**

Steps 15, 16, 17 & 18 are after the Important Tiling Advice.

## Important Tiling Advice

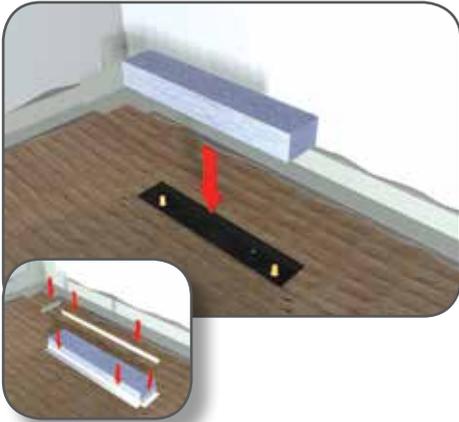
**IT IS ESSENTIAL THAT YOU DO NOT USE A READY MIXED TILE ADHESIVE.**

**FLEXIBLE CEMENT BASED POWDERED ADHESIVE MUST BE USED WITH SHOWER CONCEPT TRAYS.**

The shower tray has slopes towards the drain pre-formed into the tray and these must be maintained when tiling as does the slope on the shower tray extension.

If you use tiles that are larger than 100mm it is necessary to cut the tiles along the same lines as are pre-formed into the shower tray to maintain the slope. For best results and ease of installation we would recommend mosaics or tiles of 50mm to 100mm.

Elements shower trays are perfect for use with electrical under tile heating due to its excellent thermal properties. It is however essential that you check with the manufacturer that their product is entirely suitable for the area that you intend to install it in. If you are installing under tile heating it is essential that you consider any areas that will need products fixed to the floor for example shower screens. Avoid installing under tile heating directly below any fixing point to avoid the risk of screwing through the heating.



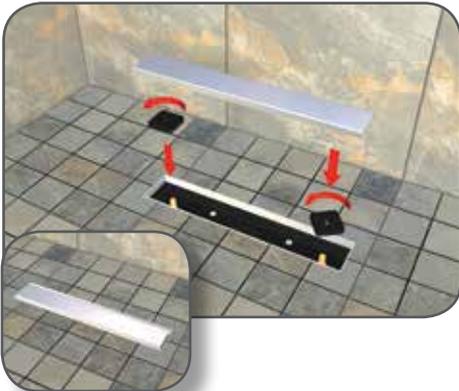
### Step 15

Place the disposable tiling aid into the shower drain hole on the shower tray. The tiling aid provides the edge that needs to be tiled up to whilst protecting the drain from debris. At this stage we recommend fitting tile trim to create a clean finished edge for the waste cover.



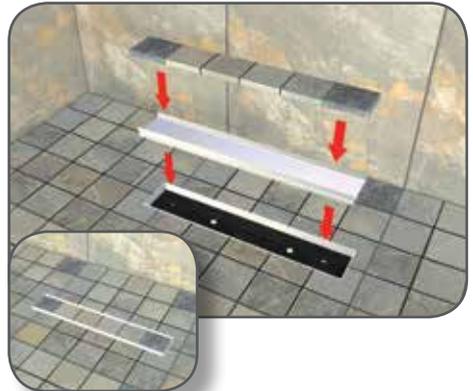
### Step 16

After tiling the base of the shower area, we recommend that you add a further narrow border of tiles approximately 30mm to 40mm wide, along the top of the outside edge to act as a water retainer, stopping water running out of the shower area. The tiling aid can now be removed and disposed of.



### Step 17

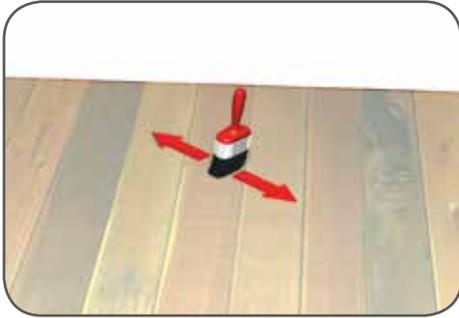
The linear drain is supplied with 2 No. square black plastic height adjustment nuts. Screw these on to the protruding bolts pre-fitted within the linear drain and adjust to suit your thickness of tile and adhesive. The drain should aim to be fitted flush with the finish tile.



### Step 18

Various options are available to accessorise the linear drain including a tileable drain cover option and several finishes of toughened glass drain cover to give a more bespoke finish to your shower room. These are installed in the same way as above; just adjust the black plastic height adjustment nuts to suit. Leave for at least 24 hours before using the shower.

## Installation B: Fitting A Shower Tray and Substrate Element



### Step 1

(wood floors only)

If you are installing onto a wooden floor, make sure that the existing floor boards or sheets are fully secured down and as level and flat as possible. Paint the floor area where the shower will sit with the wood floor primer.

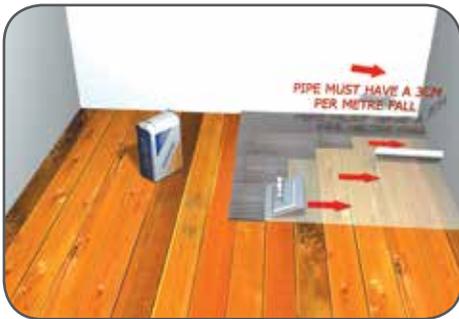
PVA MUST NOT BE USED IN PLACE OF THE WOOD FLOOR PRIMER.

Leave to dry for at least 2 hours.



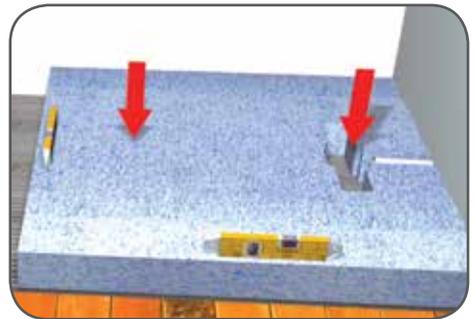
### Step 2

The linear drain has two outlets to allow multi directional waste flow. First decide in which direction the waste pipe work needs to follow then cut a channel out of the substrate as applicable carefully with a hand point saw. Put on the protective gloves and wear eye and breathing protection.



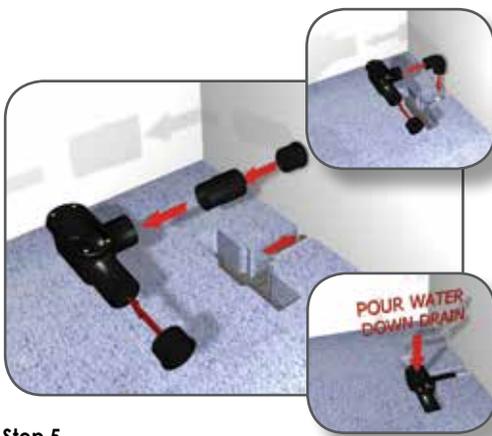
### Step 3

Mix a bag of Fix-KST adhesive with water in a clean bucket in line with the directions stated on the bag. Spread the Fix-KST adhesive onto the floor of the shower position and drag the notched adhesive trowel across the surface. The notched adhesive trowel will make a ribbed pattern which will leave just the right amount of adhesive on the floor.



### Step 4

Place the shower tray base into position and bed down onto the adhesive cement. Check that the shower tray base is level in both directions using a suitable level.



### Step 5

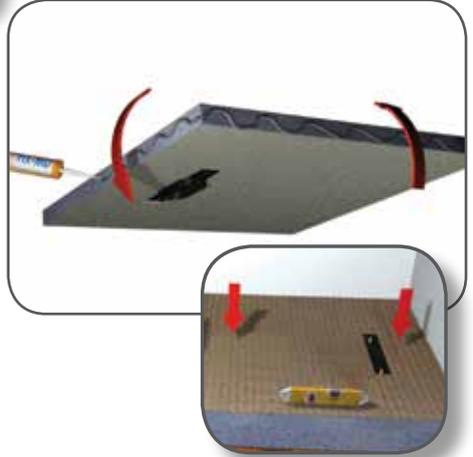
**Note: All solvent joints should be cleaned with an appropriate solvent weld cleaner prior to using solvent adhesive.**

The waste has two outlets for multi direction waste flow. The outlet running at a ninety degree angle to the waste has a zero degree fall; this is to facilitate the fitting of the vertical waste elbow. If you plan to run the waste horizontally from this outlet you **MUST** fit the angled coupler supplied with the linear drain to achieve the required waste fall. Clean with Spread solvent weld adhesive around the outside of the coupler and push into the linear drain outlet with a twisting action, ensuring that the coupler is fit with the fall in the correct orientation by ensuring that the angled coupler is fitted with the 'up' text facing upwards.

**IMPORTANT: As the drain has two outlets, it is important that the outlet not being used is capped off using the stop end supplied. Spread solvent weld adhesive around the outside of the stop end and push into the linear drain outlet with a twisting action.**

The linear drain is also supplied with a 2" to 1 1/2" reducer for instances where you need to reduce to 1 1/2" waste pipe. Spread solvent weld adhesive around the outside of the reducer and push into the remaining linear drain outlet with a twisting action. If you have 2" waste pipe this part can be discarded and simply fit your waste pipe to the linear drain using solvent waste adhesive in the same manner as above. Once any solvent welds have set, pour water down the drain to check that the waste is not blocked and that there are no leaks.

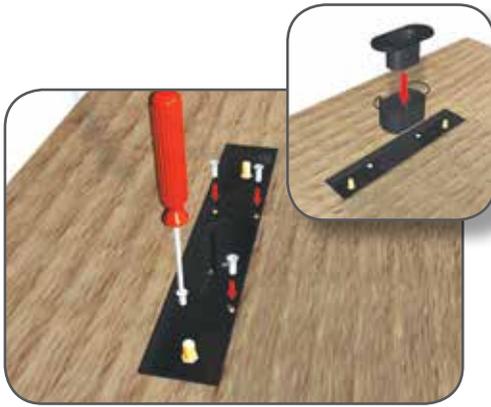
**Note: The typical linear drain flow rate figure (42L/min) is based on using 2" waste pipe; by reducing the waste pipe diameter this will have an adverse affect on the flow rate achieved. For water to drain away properly, the waste pipe must have a fall of 3cm per metre.**



### Step 6

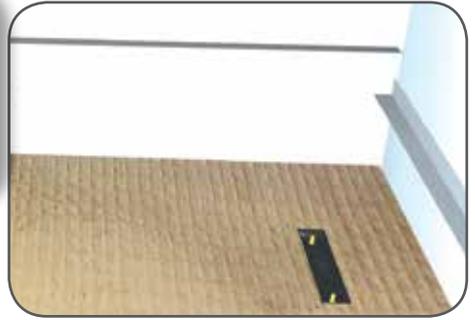
Spread Fix-KST adhesive across the surface of the Substrate Element using a notched adhesive trowel to leave just the right amount of adhesive on the shower base.

Apply a wavy line of Fix-MD adhesive across the edges of the shower tray base. Lower the shower tray onto the shower tray base and push firmly into position. Check with a level that the edges of the shower tray are level in both directions.



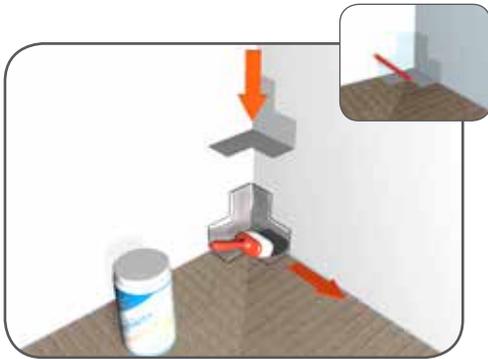
### Step 7

Line up the linear drain bowl with the drain top pre-fitted within the shower tray and connect the two together using the four bolts provided and a suitable cross headed screwdriver. Ease the shower drain internal bowl into place then ease in the drain top as shown applying a little gentle pressure so that it seats correctly.



### Step 8

From a roll of waterproofing tape cut to suit the width of the shower tray and the length of the shower tray.

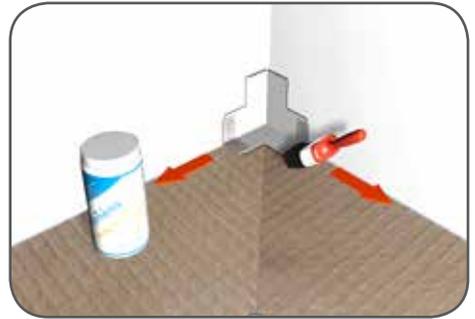


### Step 9

Temporarily place a waterproofing internal corner into position and mark around it with a pencil. Once marked it can be removed. This is to show where you need to apply Pro-SEAL tape sealer. Repeat for any other corners.

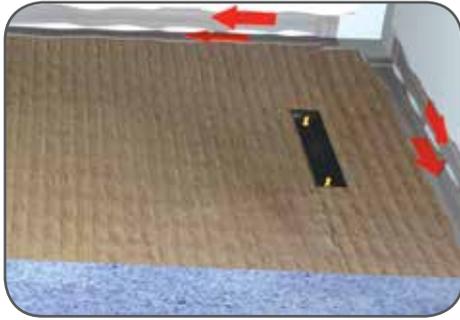
Put on the protective gloves and wear eye and breathing protection.

Using Pro-SEAL Pre-MIX tape sealer and a paintbrush, apply a thin layer of Pro-SEAL tape sealer to the internal corners of the shower tray, slightly bigger than the pencil line marked earlier.



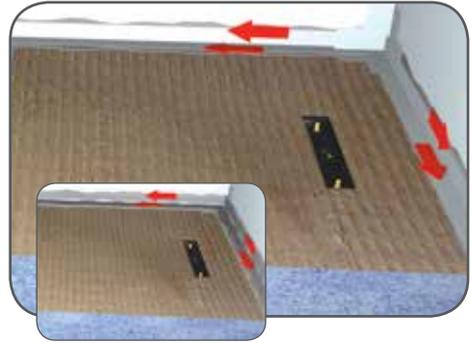
### Step 10

Place the waterproofing internal corners into the internal corners of the shower tray and push firmly into the Pro-SEAL tape sealer. Apply a further thin layer of Pro-SEAL tape sealer over the edges of the waterproofing internal corners.



### Step 11

Where the shower tray meets the wall apply a thin layer of Pro-SEAL tape sealer to the shower tray and the adjoining wall approximately 60mm wide on both.



### Step 12

Place the strips of waterproofing tape previously cut in step 8 along the edges of the shower area, folding half up the wall and half on the shower tray as you go. Press firmly into the Pro-SEAL tape sealer and the tape should also overlap the waterproofing internal corners. When you have finished you can remove the protective gloves and eye and breathing protection. When sticking the tray down, it is a good practice to put some heavy weights (i.e. a bag of tile adhesive) on the tray whilst the adhesive cures. This ensures that the base sticks evenly to the floor.

### Step 13

**IMPORTANT!** Apply a further thin layer of Pro-SEAL Tape Sealer over the tape & corners to fully impregnate the tape.

### Step 14

Leave to set for approximately 12 hours after which the tray is ready for tiling. Please leave the weights on the tray while its curing to maintain the contact with the adhesive.

Steps 15, 16, 17 & 18 are after the Important Tiling Advice.



## Important Tiling Advice

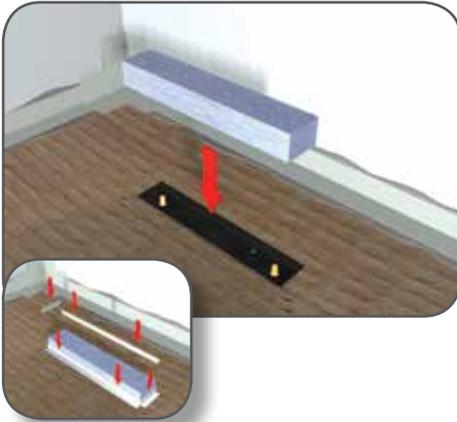
**IT IS ESSENTIAL THAT YOU DO NOT USE A READY MIXED TILE ADHESIVE.**

**FLEXIBLE CEMENT BASED POWDERED ADHESIVE MUST BE USED WITH SHOWER CONCEPT TRAYS.**

The shower tray has slopes towards the drain pre-formed into the tray and these must be maintained when tiling as does the slope on the shower tray extension.

If you use tiles that are larger than 100mm it is necessary to cut the tiles along the same lines as are pre-formed into the shower tray to maintain the slope. For best results and ease of installation we would recommend mosaics or tiles of 50mm to 100mm.

Elements shower trays are perfect for use with electrical under tile heating due to its excellent thermal properties. It is however essential that you check with the manufacturer that their product is entirely suitable for the area that you intend to install it in. If you are installing under tile heating it is essential that you consider any areas that will need products fixed to the floor for example shower screens. Avoid installing under tile heating directly below any fixing point to avoid the risk of screwing through the heating.



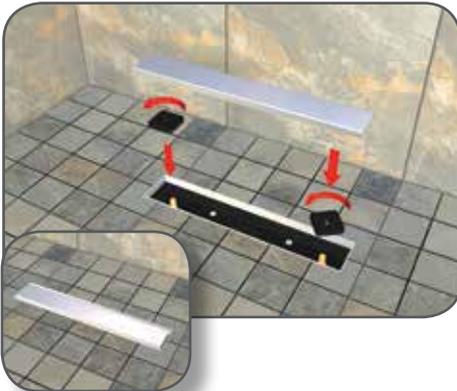
### Step 15

Place the disposable tiling aid into the shower drain hole on the shower tray. The tiling aid provides the edge that needs to be tiled up to whilst protecting the drain from debris. At this stage we recommend fitting tile trim to create a clean finished edge for the waste cover.



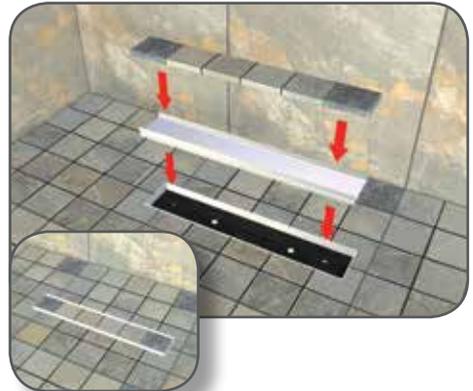
### Step 16

After tiling the base of the shower area, we recommend that you add a further narrow border of tiles approximately 30mm to 40mm wide, along the top of the outside edge to act as a water retainer, stopping water running out of the shower area. The tiling aid can now be removed and disposed of.



### Step 17

The linear drain is supplied with 2 No. square black plastic height adjustment nuts. Screw these on to the protruding bolts pre-fitted within the linear drain and adjust to suit your thickness of tile and adhesive. The drain should aim to be fitted flush with the finish tile.



### Step 18

Various options are available to accessorise the linear drain including a tileable drain cover option and several finishes of toughened glass drain cover to give a more bespoke finish to your shower room. These are installed in the same way as above; just adjust the black plastic height adjustment nuts to suit. Leave for at least 24 hours before using the shower.





MADE IN THE UK