# Tile-Over Tray Installation Guide

**NOTE: PHOTOS ARE FOR ILLUSTRATION PURPOSES ONLY.**

**Your supplied items may appear different than in the images provided. Please follow instructions carefully.**

## IMPORTANT — READ BEFORE INSTALLATION

Installation must comply with relevant Australian Standards and building codes including:

- **AS3740** – Waterproofing of domestic wet areas
- **AS3500** – Plumbing and drainage
- **AS3958** – Ceramic tiling
- **AS1684** – Residential timber framing
- **AS2870** – Residential slabs and footings
- **National Construction Code (NCC)**

This product has been designed in accordance with principles outlined in **AS 3588 Shower Bases and Shower Modules.** Installation must comply with **AS 3740 Waterproofing of Wet Areas** and **AS/NZS 3500 Plumbing and Drainage.**

The tile-over tray **does not replace a compliant waterproofing membrane system**. The tray must be incorporated into a complete waterproofing system.

Failure to follow installation instructions may result in **water leakage, structural issues or voided warranty**.

Installation should be carried out by a **licensed tradesperson** where required by local regulations.

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## PRODUCT LIMITATIONS

**Maximum tray size**: 1150mm x 1950mm

**Minimum outlet setback**: 150mm from tray edge (outside edge to centre of outlet)



  

**Product thickness will vary depending on tray size.** Thickness ranges from 19mm to 45mm.

Each tray is manufactured with **integrated fall to the outlet**. Altering the tray level or installing on an uneven substrate will affect drainage performance.

Do not install trays that appear damaged or defective.

Inspect the tray prior to installation.

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**WHAT WE SUPPLLIED**

- Tile-Over Tray
- Selected outlet assembly
- Flashings for 3 sides (unless otherwise specified)
- 50mm PVC adapter

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**TOOLS & MATERIALS REQUIRED**

**Cleaning**

- Methylated spirits

**Bonding Adhesive**

- Wet Area Solutions suggests **Sikaflex 11FC**.

**Additional materials**

- Sanitary grade silicone.
- Self-levelling compound (if required).
- **Primer suitable for substrate and waterproofing system:** Ardex P9 Single Part Primer, Gripset Betta Prime All, Dunlop Primer & Additive, Ardex. WPM300 (with broadcast sand), Ardex Abapoxy (with broadcast sand), Aqua Blok moisture seal.
- Waterproofing membrane compliant with AS3740.



  

- Ardex CA20P, Mapeflex PU45 or Selly's Pro Series for expansion joints.
- Tile adhesive suitable for wet areas.

**Tools**

- Spirit level
- Straight edge
- Tape measure
- Notched trowel
- Vacuum or broom
- Distributed weights for curing
- Protective coverings

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**SUBSTRATE REQUIREMENTS**

The tile tray must be **fully supported across its entire footprint**.

**Do not install over:**

- voids
- unsupported spans
- flexible flooring
- contaminated surfaces

**Flatness tolerance**

Substrate variation should not exceed **3mm across the tray footprint**.

If the substrate is uneven, it must be corrected using **self-levelling compound** prior to installation.

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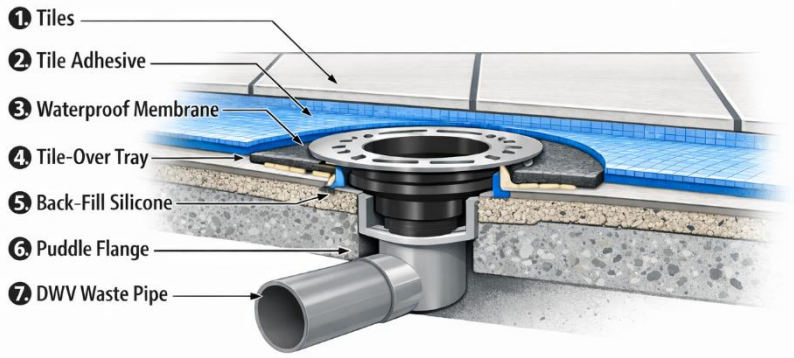
**WATERPROOFING REQUIREMENTS**

Waterproofing must comply with **AS3740** and manufacturer instructions.

**Typical waterproofing sequence:**

1 Primer
2 Joint tape installation
3 Waterproof membrane application
4 Membrane curing
5 Tile adhesive installation
6 Tile installation
7 Grouting

**Waterproofing membranes should integrate with the puddle flange and extend on to surrounding floor areas.**




Correct Waterproofing for Tile-Over Tray

**INSTALLATION OVER TIMBER FLOORS** **(SEE PG 6 FOR POSEY STRUTS)**

Timber floor installations must comply with **AS1684 framing requirements**.

**Joists must be:**

- structurally sound
- level
- securely fixed

**Typical support requirements**

- Maximum **450mm joist centres**
- Additional support framing around outlet area
- Minimum **200mm support box around outlet**

Additional noggins or trimmers may be required to support tray edges.

**Uneven joists may cause distortion which can affect drainage performance.**

**Substrate Support Requirements**

Ensure the underside of the tray is fully supported by a flat and level substrate. The supporting surface must be structurally sound and reinforced where necessary.

**Floor framing or supports should be installed at maximum 300mm centres to adequately support the tile tray**. Additional trimmers or noggins should be installed where required to provide continuous support beneath the tray.

**Note: Due to the integrated flashing and tray design, checking the tray into the wall studs is not required.**



**Structural Support | Timber Floor Systems (Posey / Posi-Strut Joists)**

**Tile-over trays installed over timber floor systems must be supported by an adequately constructed and rigid subfloor framework. Where Posey (Posi-Strut) joists are used, the following requirements apply:**

- The subfloor must be fully sheeted with structural flooring (e.g. fibre cement sheeting, or equivalent approved substrate).
- Joist spacing and layout must comply with manufacturer span tables and NCC requirements.
- Additional noggings and/or trimmers must be installed to fully support:
- The perimeter of the tray
- The waste outlet area
- The substrate must provide continuous, even support across the entire underside of the tray.
- The floor system must exhibit no measurable deflection or movement under load.

**Failure to provide adequate structural support may result in:**

- Tile cracking
- Waterproofing failure
- Tray deformation

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**Waste & Services Integration (Posey Strut Systems)**

**Waste Positioning & Services**

The open-web design of Posey struts allows for compliant installation of plumbing services without modification to structural members.

- Waste pipes must be installed to maintain compliant falls **(1:80)**
- All plumbing must comply with AS/NZS 3500
- Cutting, notching, or altering joists is strictly prohibited unless approved by a structural engineer



  

- **Adequate clearance must be maintained around the waste to ensure:**
    - Correct installation of puddle flange
    - Proper waterproofing integration

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**Installer Responsibility & Compliance Notice**

**Installer Responsibility – Structural & Substrate Compliance**

Wet Area Solutions (AUST) Pty Ltd manufactures tile-over trays to meet design and compliance requirements; however:

The installer is solely responsible for ensuring that the supporting structure, including Posey/Posi-Strut floor systems, is constructed and prepared in accordance with NCC, relevant Australian Standards, and good building practice.

**This includes (but is not limited to):**

- Structural adequacy of the floor system
- Installation of additional supports (noggings/trimmers)
- Substrate preparation and levelling
- Compliance of plumbing and waste installation

**Wet Area Solutions accepts no liability for failure arising from:**

- Inadequate structural support
- Excessive movement or deflection
- Non-compliant installation practices

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**INSTALLATION OVER CONCRETE SLABS**

Concrete slabs must be:

- fully cured
- clean
- level
- structurally sound

The recess or void around the waste outlet must **not exceed approximately 300mm x 300mm**.

Large voids may result in insufficient support beneath the tray.

**The surrounding floor should fall towards the tray to comply with wet area drainage requirements.**

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**PRE-INSTALLATION CHECKLIST**

Before installing the tray confirm the following:

- Substrate is level and clean
- Waste plumbing is installed correctly
- Outlet location matches tray outlet position
- Tray dimensions match site opening
- Waterproofing system has been selected
- All tools and materials are available

Do not proceed until all items are confirmed.

**COMMON INSTALLATION ERRORS**

The following installation mistakes are commonly responsible for drainage issues, tile cracking, or waterproofing failure. These errors must be avoided.

**Insufficient substrate preparation**



  

Installing the tray over an uneven, contaminated or flexible substrate may result in tray movement and incorrect drainage.

The substrate must be clean, level and structurally sound before installation.

**Spot bonding or inadequate adhesive coverage**

Applying adhesive only in isolated spots may create voids beneath the tray.

This can cause tray flexing under load which may lead to:

• cracked tiles, grout failure, loss of fall to the outlet

Adhesive must be applied in **continuous 10mm beads across the entire tray footprint, with 100mm apart** to ensure full support.

**Incorrect outlet installation**

Failure to correctly seal or align the outlet assembly can lead to water leaks beneath the tray.

Outlet components must be installed square, watertight and connected in accordance with plumbing requirements.

Where required, installation should be carried out by a licensed plumber.

**Failure to conduct a drainage test**

A drainage test must be completed before permanent installation.

Failure to confirm water flow to the outlet may result in standing water after installation.

**Incorrect waterproofing integration**

The tile-over tray must be incorporated into a compliant **AS3740 waterproofing system**.

The waterproof membrane must integrate with the puddle flange and wall junctions. The tray itself does **not replace the waterproofing membrane system**.

**Rigid perimeter fixing**

Rigid materials or mortar packed around the tray perimeter can prevent movement.



  

This may cause cracking of tiles or waterproofing membranes.

A **1–2mm expansion gap** must be maintained and sealed using sanitary silicone.

**Health & Safety**

Installation of tile-over trays should be performed using safe work practices.

Installers must comply with relevant workplace safety regulations and site requirements.

**Manual handling**

Tile trays may be fragile handle with care.

Use correct lifting techniques and seek assistance where necessary.

**Personal Protective Equipment (PPE)**

The following PPE is recommended during installation:

- Safety glasses
- Dust mask or respirator
- Protective gloves
- Hearing protection when cutting materials
- Protective footwear

**Cutting or trimming trays | SEE STEP 5**

Where cutting is required:

- Use a **diamond saw blade, a sharp utility knife or a jigsaw with a fine blade** suitable for composite materials
- Perform cutting in a well-ventilated area
- Wear appropriate PPE

Dust from cutting operations should not be inhaled.

**Adhesives and sealants**



  

Adhesives and sealants may contain chemicals that can irritate skin or eyes.

Always follow manufacturer safety instructions and refer to product safety data sheets.

Ensure adequate ventilation during installation.

**END OF COMMON ERRORS**

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**INSTALLATION — STEP BY STEP**

**Step 1 | Confirm Outlet Location & Dry Fit**

1 Position the tray in the intended location **without adhesive**.

2 Confirm outlet alignment with plumbing waste, and mark outlet cutout on the tile tray.

3 Ensure outlet is **minimum 150mm from tray edge**.

4 Confirm flashings are correctly orientated against wall framing.

5 Check tray sits flat with no rocking or movement. **Note: the base can expect a small amount of unevenness to a certain degree due to the built in fall to the waste. Once adhered and weighed down for the required time frame, the tray will then appear flat underneath.**

If excessive rocking occurs, rectify the substrate before proceeding. **SEE IMAGE IN STEP 2**

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**Step 2 | Mandatory Water Drainage Test**

Before fixing the tray permanently, conduct a drainage test.

1 Pour water across the tray surface.

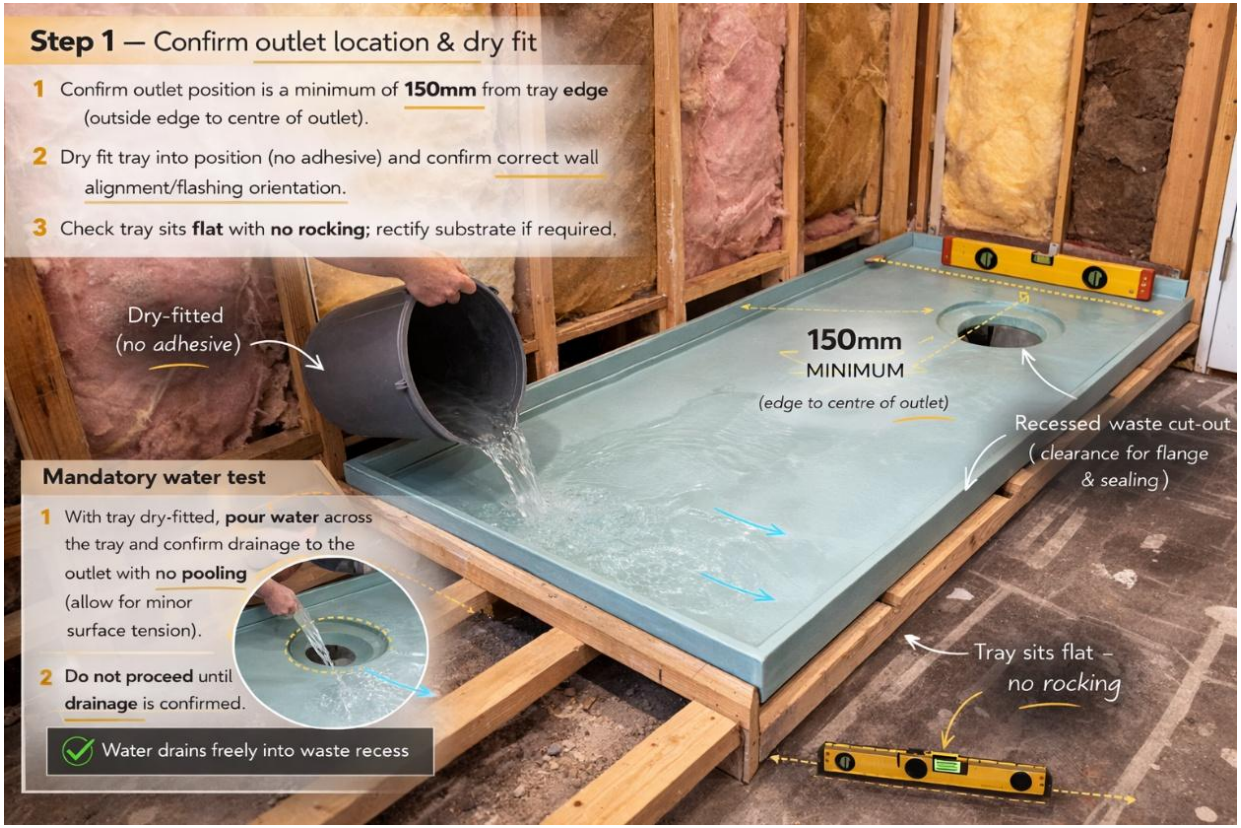
2 Confirm water flows freely to the outlet.

3 Ensure there is **no standing water or pooling**.

**Minor surface tension may occur** but water should drain toward the outlet.

Failure to perform this test may void warranty.

Airlocks can occasionally occur in new plumbing installations. If drainage appears restricted, the plumbing should be cleared prior to installation.



**Step 3 | Substrate Preparation**

1 Thoroughly clean the installation area.

2 Remove: dust, debris, oils, adhesives, contaminants.

3 Vacuum substrate.

4 Apply **self-levelling compound** if required to achieve a flat landing area.

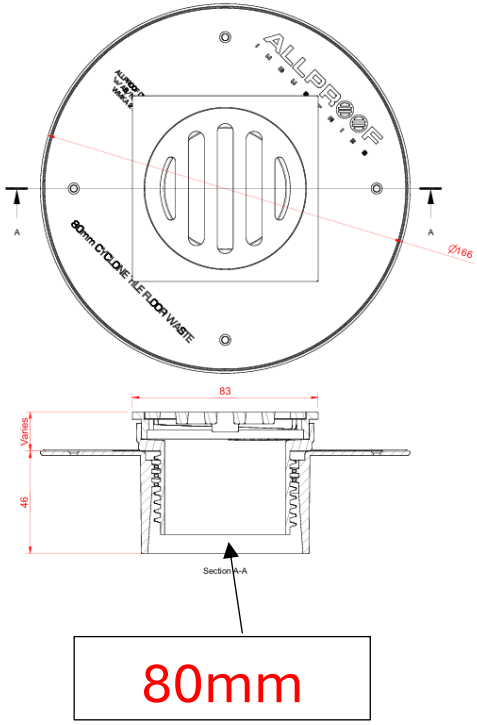
Allow levelling compounds to **fully cure for 24-48hours** before proceeding.

**Step 4 | Outlet Installation**

Installation should preferably be carried out by a **licensed plumber**.

Different outlet types may be supplied depending on project requirements.

**Image 1 | To suit tiling**



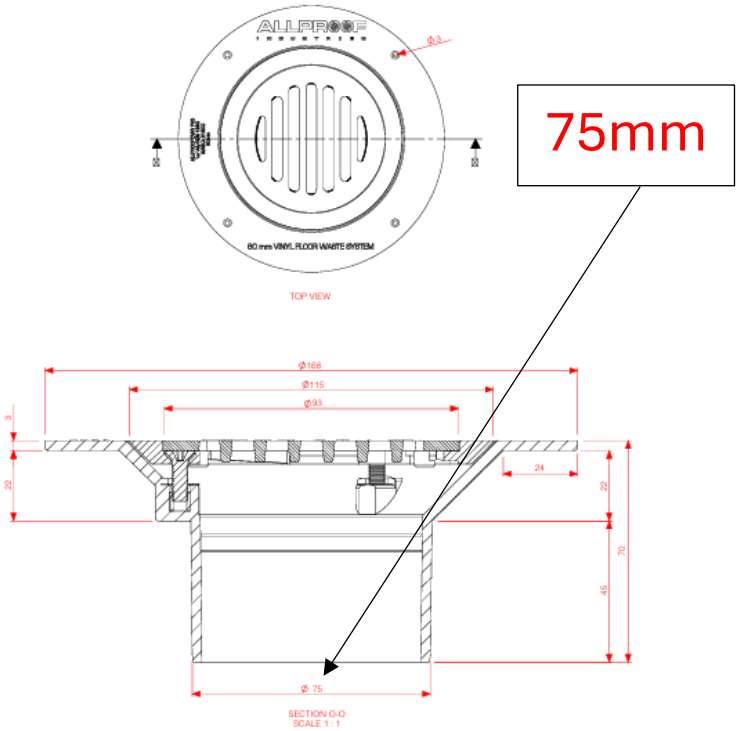

**Puddle Flange Outlet Installation**

1 Install the puddle flange so it sits **flush with the substrate**.

2 Ensure the flange is aligned with the tray outlet opening.

3 Apply sanitary silicone where required to achieve a watertight seal between tray and flange.

4 Ensure the waterproof membrane will later integrate with the puddle flange.



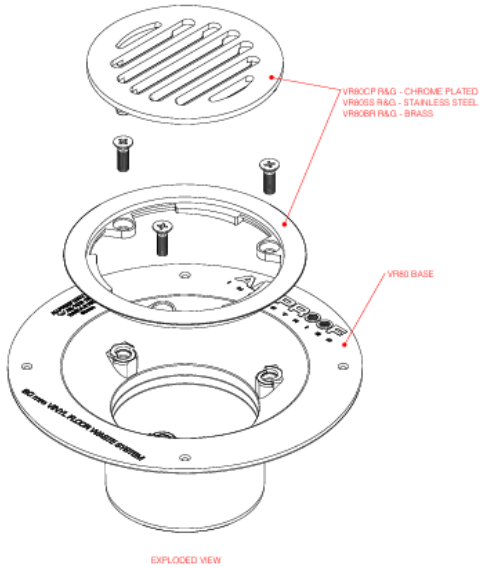



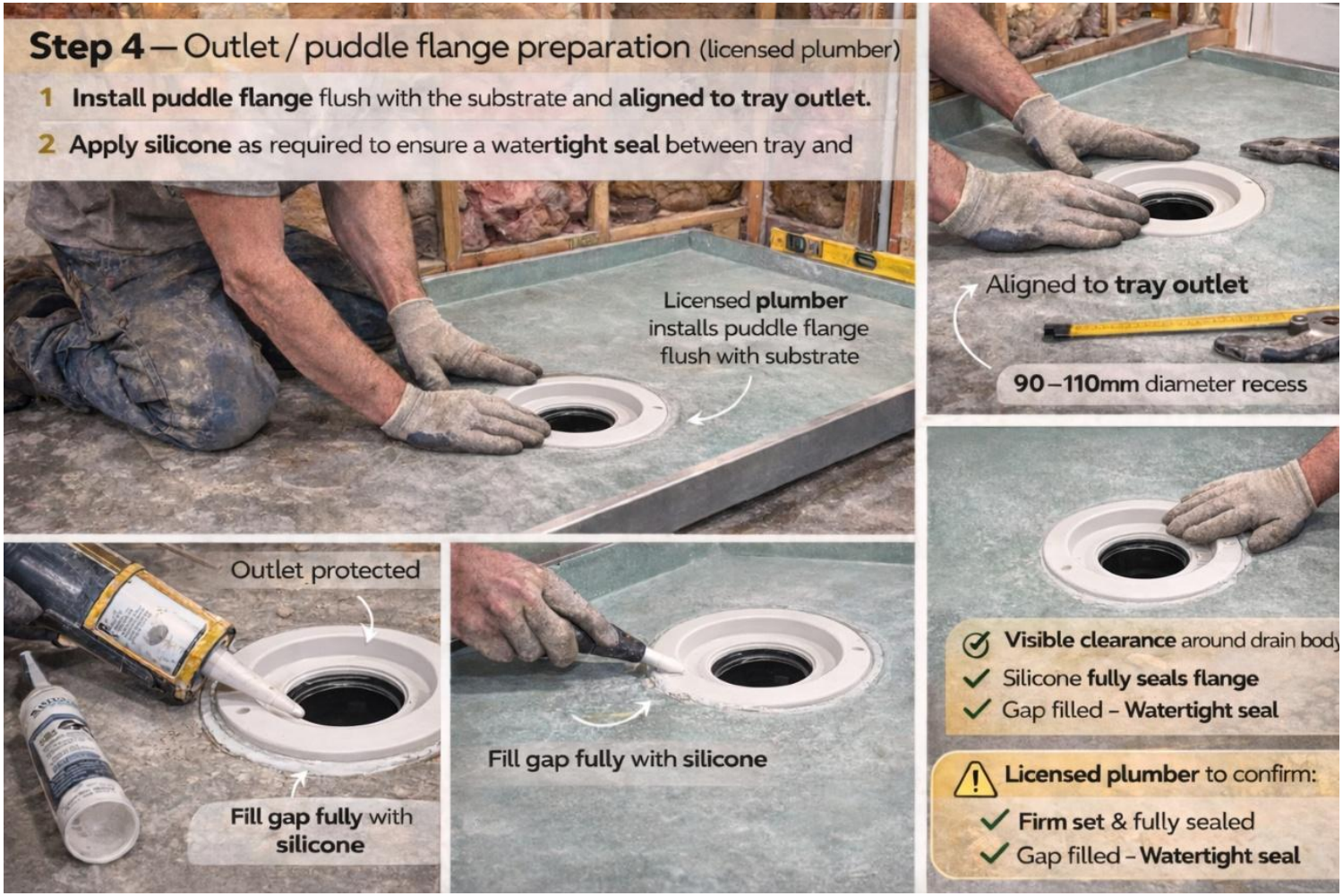

**Image 2 | To suit Vinyl**

**How to cut out the tile-tray outlet hole**

Use a hole saw. Do not apply pressure. Cut along the marked cutout.

**The puddle flange provides the primary waterproof connection between the waterproof membrane and the plumbing system.**

**Notes:** The tray cutout outline, is larger than the puddle flange itself, to allow flexibility if your pipe is off centre. This is based on the standard puddle flange with the square chrome outlet. Simply fit your outlet, and backfill any excess space with tile adhesive, then silicone to ensure a watertight and snug fit. The vinyl and square tile-in tray options will not have as much leeway in the tray cutout, this is to ensure a snugger fit.





**Square Tile Insert Outlet**

**(50mm-52mm wide)**

1 Place outlet body into tray opening to confirm fit.

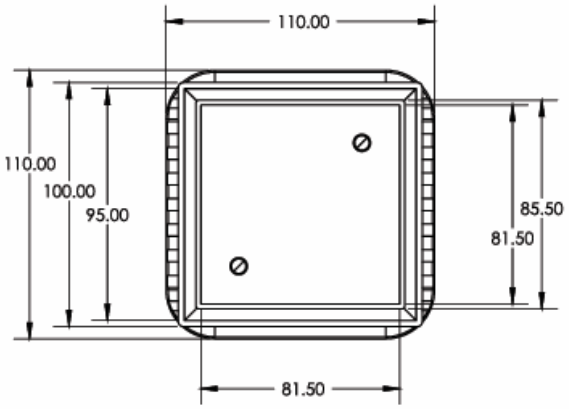
2 Remove outlet.

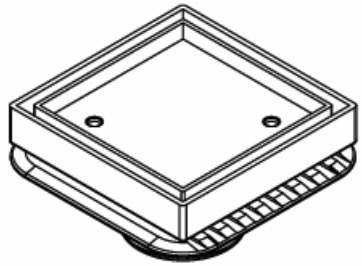
3 Apply PVC primer where required to flange connection.

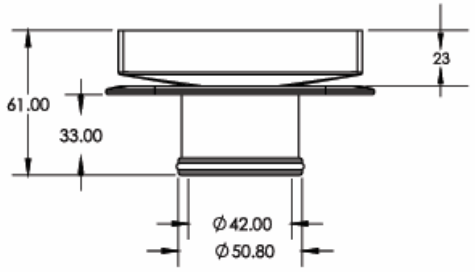
4 Apply Sikaflex 11FC around outlet seating surface in 10mm thick beads.

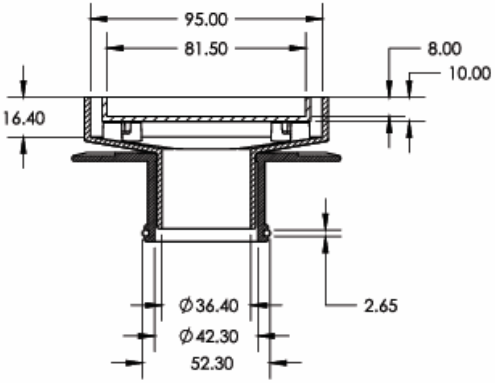
5 Insert outlet assembly and press firmly into place.

6 Ensure outlet sits flush with tray surface.






**Notes:** The vinyl and square tile-in tray options will not have as much leeway in the tray cutout, this is to ensure a snugger fit.

**Drain Tray Preparation**

1 Ensure tray outlet recess is clean and dry.

2 Apply adhesive within the outlet recess.

3 Apply spot adhesive evenly around flange lip, the puddle flange is then installed into the substrate.

4 Adhere the 50mm PVC to the underside of the channel grate using Selly's Grey Flexiseal Polyutherane Sealant or Selly's Araldite adhesive.

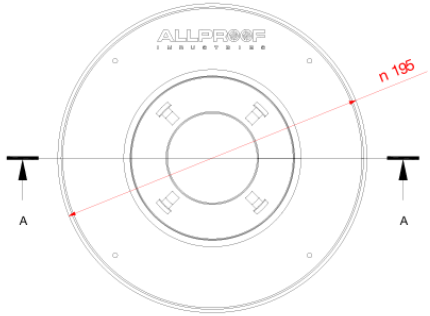
5 Install the channel grate component and press firmly into the tile tray position once tile tray is adhered and fitted.

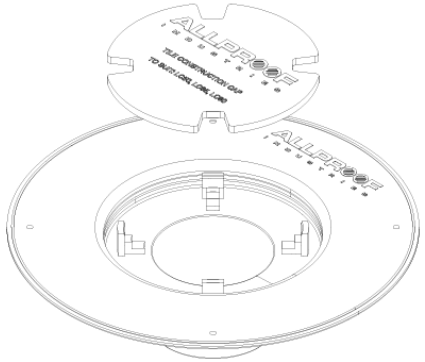
**Do not apply continuous rigid adhesive lines around outlet components.**

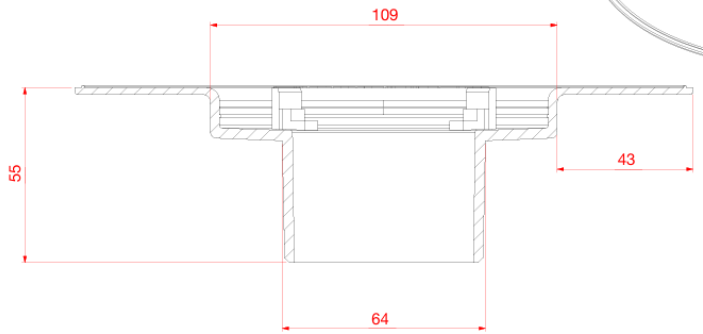
**Tea Staining**

Common in shower drain trays.

Regularly wash the grate with soap and warm water, then dry it. Avoid Abrasives.



**Step 5 | Tray Trimming**

The tile-over tray is manufactured with **three or four perimeter lips** to allow flexibility when positioning the tray within the shower area.

Where required, the tray edges may be **trimmed to suit the installation layout**.

**Trimming instructions**

1. Determine which tray edges need to be removed to suit the shower configuration by having the tray dry fitted in position.
2. Mark the trimming line clearly before cutting.
3. Trim the tray using an appropriate cutting tool such as:
   • a **sharp utility knife** for shallow scoring
   • a **jigsaw fitted with a fine blade** for longer strides when trimming
4. Ensure the tray is **securely supported while cutting** to maintain a clean edge.

Trimming the perimeter lips **does not affect the structural performance or durability of the tray** when carried out correctly.

Always wear appropriate **personal protective equipment (PPE)** when cutting.

**Step 6 | Apply Adhesive & Install Tray**

1 Apply Sikaflex 11FC adhesive across the substrate.

Adhesive should be applied in **continuous beads approximately 10mm thick spaced 100mm apart** to provide full support.

**Avoid spot bonding.**

2 Carefully lower the tray into position.

3 Ensure tray is correctly aligned with walls and outlet.

4 Press tray firmly into adhesive.



5 Backfill the expansion joint with Ardex CA20P, Mapeflex PU45 or Selly's Pro Series.

6 Seal the expansion joint using waterproof tape in a continuous strip.

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**Step 7 | Flashing Installation**

Handle the flashing carefully during installation to maintain its shape and ensure an accurate fit. Avoid twisting or bending the flashing unnecessarily.

The flashing is pre-fitted during manufacturing, however minor adjustment may be required on site to achieve proper alignment with the wall framing.

**Flashing Installation Steps**

1. Apply a continuous bead of silicone sealant along the contact surface.
2. Position the flashing firmly into place against the wall framing.
3. Secure the flashing using galvanised clout nails.
4. Install one nail into each wall stud to ensure the flashing is properly supported.
5. Apply silicone over each nail head to maintain water resistance.
6. Apply waterproof tape over the flashing and tile tray joints in a continuous strip.

**Proper installation of the flashing helps ensure correct waterproof integration with the surrounding wall and waterproofing membrane system.**

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**Step 8 | Apply Weight During Cure**

Place **distributed weights** across the tray surface to ensure full contact with adhesive.

Avoid concentrated point loads.



  

Allow adhesive to cure for **24–48 hours** or as specified by the adhesive manufacturer.

Do not proceed with tiling or waterproofing until adhesive has cured.

Protect tray surface during this period.

**END OF TILE-OVER TRAY INSTALLATION**

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**MOVEMENT JOINTS**

Movement joints must comply with **AS3958**.

Movement joints are typically required:

- at wall-floor junctions
- along perimeter walls
- over structural joints
- around penetrations
- at substrate changes
- every **4.5 metres** in large tiled areas

Movement joints should be filled using **flexible sealants such as sanitary silicone**.

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**TILE INSTALLATION**

Tiles must be installed using **flexible tile adhesive suitable for wet areas**.

Suitable adhesive classes include:

C1S1
C2S1
C2S2



  

Adhesive should be applied with notched trowel and tiles pressed firmly into adhesive.

Tiles should be slid across adhesive ridges to collapse lines and ensure full coverage beneath tiles.

Minimum adhesive coverage should comply with **AS3958 tiling standard**.

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**GROUTING**

Tiles may be grouted using:

- Flexible cement-based grout
- Epoxy grout (recommended for wet areas)

Grout additives may be used to increase water resistance.

Note: grout itself is **not waterproof**.

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**PERIMETER SEALING**

Maintain **1-2mm expansion gap** between tray edges and surrounding walls.

Seal perimeter with **sanitary grade silicone**.

Do not fill perimeter gaps with rigid materials.

This allows movement and prevents tile cracking.

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**FINAL INSPECTION**

Upon completion of installation:

- confirm correct falls to outlet
- inspect tile adhesion



  

• confirm outlet is watertight
• ensure silicone joints are complete

**Conduct final water test prior to shower use.**

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**Compliance Notice**

The Wet Area Solutions Tile-Over Tray has been manufactured in conjunction with applicable Australian product and construction standards when installed in accordance with these installation instructions.

This product is designed for use within domestic wet area shower installations and must be installed as part of a **complete waterproofing and drainage system**.

Installation must comply with the following standards and regulatory requirements where applicable:

• **AS3740** — Waterproofing of domestic wet areas
• **AS3500** — Plumbing and drainage
• **AS3958** — Ceramic tiling
• **AS1684** — Residential timber framing
• **AS2870** — Residential slabs and footings
• **National Construction Code (NCC)** and any relevant local building regulations

This product has been designed in accordance with principles outlined in **AS 3588 Shower Bases and Shower Modules.** Installation must comply with **AS 3740 Waterproofing of Wet Areas** and **AS/NZS 3500 Plumbing and Drainage.**

The tile-over tray is manufactured with an integrated fall to the outlet to assist drainage performance when installed on a **level and structurally sound substrate**.

The tile-over tray **does not replace the requirement for a compliant waterproofing membrane system**. A waterproofing membrane compliant with **AS3740** must be installed by a qualified installer and integrated with the waste outlet system.

All plumbing connections must be completed by a **licensed plumber where required by state or territory regulations**.

**The installer is responsible for ensuring that:**



  

• the substrate is suitable for installation
• the tray is fully supported across its entire footprint
• the waste outlet connection is watertight
• the waterproofing system is compliant with AS3740
• falls to the waste outlet are maintained

Wet Area Solutions (AUST) Pty Ltd manufactures the tile-over tray in accordance with industry standards; however, **installation workmanship, waterproofing systems, plumbing connections and site conditions are outside the manufacturer's control**.

Failure to install the product in accordance with these instructions and relevant Australian Standards may result in **non-compliance with building regulations and may void the product warranty**.

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**Warranty Conditions**

Wet Area Solutions (AUST) Pty Ltd warrants that the tile-over tray has been manufactured to meet applicable product standards.

This warranty applies only where the tray has been installed in accordance with the installation instructions provided.

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**The warranty may be void if:**

• the tray is installed incorrectly
• installation does not comply with relevant Australian Standards
• the tray is installed on an unsuitable substrate
• waterproofing is not installed in accordance with AS3740
• the outlet connection is incorrectly installed
• the tray is modified or altered after manufacture
• damage occurs due to structural movement or incorrect installation

**The installer is responsible for ensuring that:**

• all plumbing connections are watertight
• the waterproofing system complies with AS3740



  

• the tray is fully supported
• correct falls are maintained to the outlet

**Wet Area Solutions (AUST) Pty Ltd is not responsible for installation workmanship or waterproofing system failures.**

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**Any warranty claim must be submitted with:**

• proof of purchase
• installation documentation
• photographs of installation

**Inspection may be required before warranty claims can be assessed.**

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**INSTALLER SIGN-OFF**

Installer Name: _____

Company: _____

Phone / Email: _____

Licensed Plumber (if applicable): _____

Installation Address: _____

Installation Date: _____

Water Test Completed: Yes ☐ No ☐

Signature: _____

**FINAL NOTES & FAQs**

- **Can underfloor heating be used?** Wet Area Solutions (AUST) Pty Ltd has not undertaken formal testing of underfloor heating in conjunction with this product. As such, its use is not recommended. If considered, it should be approached with caution and at the installer's discretion. Underfloor heating in wet areas is generally discouraged.