



# SMARTDRAIN-U150

## Installation Instructions

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Stainless Steel 304L Decorative Smartdrain  
Urinal Trap Cover — Tile-Insert Design  
Hairline Finish



# Product Overview

The SMARTDRAIN-U150 is a premium AISI 304L stainless steel tile-insert drain cover designed for installation over a plastic pipe outlet in concrete floors.

Its recessed centre accepts a cut-to-size tile, creating a seamless, flush finish that blends with the surrounding tiled surface.

## Key Features

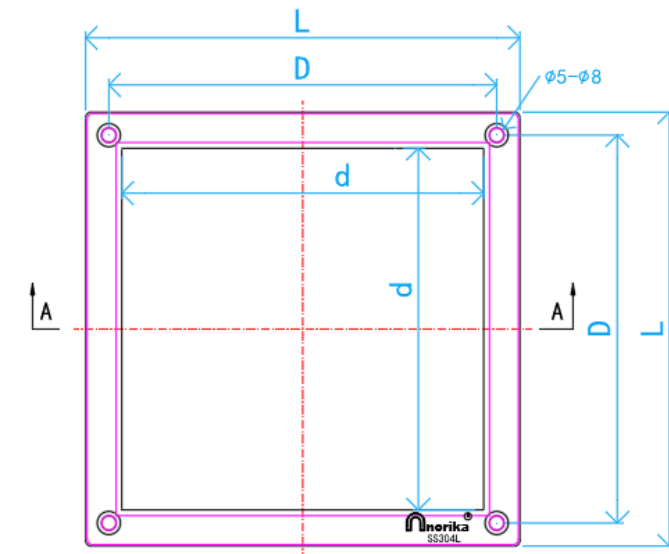
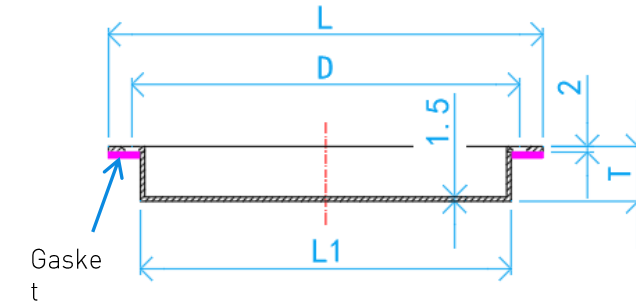
- AISI 304L stainless steel frame — corrosion resistant
- Tile-insert centre (125 x 125 mm) for seamless finish
- NBR gasket provides watertight seal to concrete
- Four corner fixing points — screws directly into concrete
- Hairline finish — elegant and easy to clean
- Suitable for urinal trap and floor drain applications



Installation Effect — Tile Inserted

# Technical Specifications

| Parameter                                 | Value                     |
|-------------------------------------------|---------------------------|
| SKU                                       | <b>SMARTDRAIN-U150</b>    |
| Frame Material                            | AISI 304L Stainless Steel |
| Gasket Material                           | NBR (Nitrile Rubber)      |
| Surface Finish                            | Hairline                  |
| Outer Length (L)                          | 150 mm                    |
| Screw Hole Center-to-center (D)           | 134 mm                    |
| Reserved dimension for cement trough (L1) | > 128 x 128mm             |
| Tile Opening (d)                          | 125 x 125 mm              |
| Overall Thickness (T)                     | 19 mm                     |
| Tile Recess Depth                         | 17.5 mm                   |
| Countersink Screw Hole Diameter           | φ5 - 8 mm                 |
| Unit Weight                               | 0.305 kg                  |
| Packing                                   | 20 pcs / carton           |



Technical Drawing — Cross-Sectional & Top View

# Tools & Materials Required

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## Tools

- Electric drill with masonry bit
- Hammer and centre punch
- Tile cutter or wet saw
- Spirit level
- Measuring tape and pencil
- Screwdriver (matching screw head)
- Clean cloths and sponge
- Dust mask and safety goggles

## Materials

- SMARTDRAIN-U150 drain frame (with NBR gasket)
- 4 x M6/7 PE raw plug
- 4 x stainless steel AISI 304 Self Tapping screws (M4 x25mm)
- Tile adhesive / thin-set mortar
- Grout (matching surrounding tiles)
- Cut tile piece ( ≤ 124 x 124 mm)
- Mild detergent for cleaning

# Safety Precautions

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## **WARNING — Read All Instructions Before Installation**

Always wear safety goggles and a dust mask when drilling the supporting substrate or cutting tiles. Ensure the work area is well ventilated. Disconnect or isolate any water supply connected to the urinal trap before beginning work.

## **NOTE — Supported Installation Surfaces**

The SMARTDRAIN-U150 is designed for secure fixing to concrete, wooden floors, and other structurally supported surfaces. Ensure the substrate is solid, level, and suitable for the specified screws and fixings. The frame must sit flat and be fully supported; provide structural backing where required.

## **CAUTION — Check for Concealed Services Before Drilling**

Check for concealed pipes, cables, or rebar before drilling. If you encounter an obstruction, reposition the frame slightly and remark the holes, provided the pipe outlet remains properly aligned.

# Installation Steps 1 - 2

1

## Prepare the Installation Site

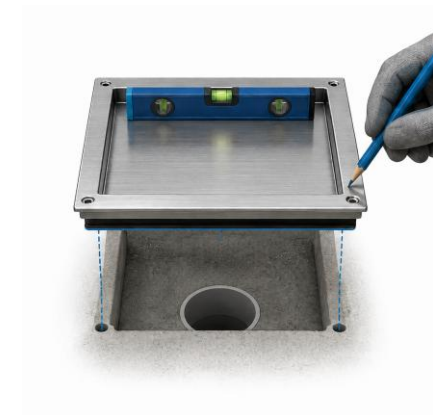
1. Ensure the plastic pipe outlet is correctly positioned, level, and protrudes no higher than the finished concrete surface. Trim the pipe if necessary.
2. Clean the concrete surface around the pipe opening thoroughly. Remove all dust, debris, grease, and loose material.
3. Verify the concrete is solid and capable of holding screws. Repair cracked or crumbling substrate before proceeding.



2

## Position and Mark the Frame

1. Place the frame over the plastic pipe outlet with the NBR gasket facing down onto the concrete.
2. Centre the frame so the pipe outlet aligns with the inner opening. Use a spirit level to confirm the frame is level in both directions.
3. Mark the four screw hole locations through the corner fixing holes onto the concrete using a pencil or centre punch.
4. Remove the frame and set it aside.



# Installation Steps 3 - 4

3

## Drill Fixing Holes

1. Wear safety goggles and a dust mask.
2. Drill four pilot holes using a  $\varnothing 6$  mm masonry bit.
3. Drill 25 - 30 mm deep, according to screw size. Remove all dust with a blower or vacuum.
4. Insert one PE raw plug 6MM into each hole and tap it flush with the concrete surface.



4

## Fix the Frame to Concrete

1. Reposition the frame over the pipe outlet, aligning the four corner holes with the drilled pilot holes.
2. Insert a no M4x25mm self Tapping screw through each corner hole and tighten by hand to hold the frame in place, ensure the sealing gasket is position.
3. Tighten all four screws evenly in a diagonal sequence (top-left to bottom-right, then top-right to bottom-left) to prevent twisting.
4. Do not over-tighten. The NBR gasket should be compressed evenly. Verify the frame remains level after all screws are tightened.

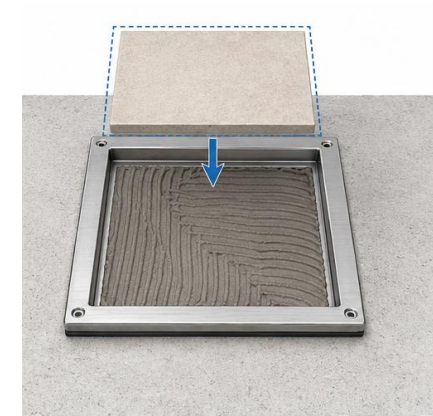


# Installation Steps 5 - 6

5

## Cut and Install the Insert Tile

1. Measure the tile opening (125 x 125 mm). Cut a tile to match, allowing 1 - 2 mm clearance on all sides for grout.
2. Dry-fit the cut tile into the recessed centre. The tile should sit flush with or slightly below the frame surface (recess depth 17.5 mm). Adjust if necessary.
3. Apply a thin, even layer of tile adhesive to the base of the recess. Press the tile firmly into the adhesive, ensuring it is level and fully seated.
4. Wipe away excess adhesive immediately. Allow to cure for 24 hours.



6

## Grout and Finish

1. Once the adhesive has cured, apply grout around the insert tile and between the frame and surrounding floor tiles, matching the existing grout.
2. Smooth the grout lines with a damp sponge. Remove any excess grout from the stainless steel surface immediately to avoid staining.
3. Allow the grout to cure according to the manufacturer's instructions.
4. Clean the entire stainless steel frame with mild detergent and warm water, then dry with a soft cloth to restore the hairline finish.



# Maintenance & Care

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## Regular Cleaning

Wipe the stainless steel surface with a soft cloth and mild detergent. Always wipe in the direction of the hairline grain. Avoid abrasive scouring pads, steel wool, or harsh chemical cleaners that may scratch the finish.

## Periodic Inspection

Check that the four fixing screws remain tight and the NBR gasket seal is intact. Re-tighten screws if any movement is detected. Remove the insert tile periodically to clean the trap below and ensure proper drainage.

## **AVOID — Do Not Use These on Stainless Steel**

Bleach, chlorine-based cleaners, acidic substances, and abrasive scouring pads may cause corrosion, discolouration, or scratching of the AISI 304L stainless steel surface.

**Tip:** For best results, clean the frame regularly with a dedicated stainless steel cleaner, always wiping in the direction of the hairline grain to maintain a uniform appearance.

# Troubleshooting

| Symptom                                | Possible Cause                                         | Solution                                                                                             |
|----------------------------------------|--------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Frame rocks or is not level            | Uneven concrete; debris under gasket                   | Remove frame, clean substrate, level concrete with suitable compound before re-installing.           |
| Water leaks around frame edge          | NBR gasket damaged; screws not tight enough            | Inspect and replace gasket if damaged. Tighten all four screws evenly to compress gasket uniformly.  |
| Insert tile is loose or cracked        | Insufficient adhesive; tile cut too large              | Remove tile, re-cut to correct size with clearance, re-bed with fresh adhesive. Allow full curing.   |
| Stainless steel discolouration or rust | Harsh chemicals; abrasive cleaning; iron contamination | Clean with stainless steel cleaner, wiping with the grain. Avoid bleach and chlorine-based products. |
| Concrete screws will not hold          | Holes too large; concrete crumbly or cracked           | Drill new holes at correct diameter. Repair unsound concrete first or use larger-diameter anchors.   |

**Norika — Quality Assured. Industry Standard Stainless Steel.**

Norika is constantly seeking product improvements. Therefore, its products are subject to change if deemed necessary.

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