



Product Manual

SNC-02 Ceiling Mounted Shower Head

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1. Disclaimer

Every effort has been made to supply information within this manual which is correct. Wallgate Limited will not be liable for any damage or loss that arises if the person installing, operating or maintaining the unit has not read or not complied with the manual.

In any event, and without prejudice to any warranties in Wallgate Limited's terms and conditions of sale, Wallgate Limited's liability for all damages and losses (including negligence) shall not in any circumstances exceed the amount paid by the customer for the shower head.

Wallgate reserves the right to alter, update or improve its product specification at any time without prior notice. This manual is specific to the product that it has been supplied with at the date of supply.

Without prejudice to any warranties in Wallgate Limited's terms and conditions of sale, any warranty will be invalidated if the equipment is installed or serviced by unqualified personnel.

No part of this publication and the information contained may be reproduced, transmitted, stored in a retrieval system, used or disclosed wholly or partly without prior written permission from Wallgate Limited.

For full warranty details please see Wallgate Limited Terms and Conditions.

Please ensure this manual is passed to the end user. The manual forms an integral part of the product and should be kept for its working life. Additional copies of this and other supporting documents are available by contacting Wallgate Ltd or by visiting www.wallgate.com

2. Conventions

Certain conventions are used in this manual to make it easier to read and understand. They are given in the sections below.

2.1 Warning

A warning with red text on a white background is used to give information about hazards that can cause injury or death. Read and understand these warnings before you install and commission the shower. Failure to heed these warnings can have serious consequences.

WARNING! This is a warning!

2.2 Note

A note with yellow text on a white background is used to draw your attention to important and useful information.

NOTE: This is a note.

2.3 Numbered procedures

Steps in procedures are numbered, starting from 1.

1. This is step 1.
2. This is step 2 etc.

2.4 Bullet lists

- A bullet list is used to give information that is not sequential.

2.5 Menu items

Menu items, submenu items, and settings, where available, are given in bold.

3. Glossary

The glossary lists all words, abbreviations and technical terminology used in this manual, along with a short description of these terms.

Term	Description
TMV	Thermostatic mixer valve controls and maintains a mix of hot and cold-water temperature for safety and prevention possible scalding.
Anti-Ligature	Recently we have become aware that there is some inconsistency in the market as to the exact meaning of "anti-ligature". When we use this phrase about our products it means that we have designed and tested the product to reduce any risk of that product being used as a ligature attachment point.
BSP	The British Standard Pipe (BSP) thread is a family of standard screw thread types that has been adopted internationally for interconnecting and sealing pipe ends by mating an external (male) with an internal (female) thread. ¹

4. Overview

This product is an anti-ligature and highly robust stainless-steel flush fitting ceiling mounted shower head with anti-ligature/anti-tamper fixings and front facing removable shower plate.

¹ Description sourced from Wikipedia at http://en.wikipedia.org/wiki/British_standard_pipe_thread Description

5. Package Contents

Before you begin the installation, make sure that you have the following items:

- ✓ 1x Product manual
- ✓ 1x SNC-02 Ceiling Mounted Shower Head.
- ✓ 4x M5 Security Screws
- ✓ 1x ½" BSPP Female to 1/2" NPT Male (the US only)

NOTE: An electronic control unit, activation sensor and solenoid water valves with cables are supplied separately. Various other control options are available, contact the Wallgate sales for more information.

5.1 Mounting Guidelines

- The ceiling shower nozzle must be mounted to a flat surface.
- The nozzle must be fed by a blended supply that complies with the regulatory standards, set to the necessary temperature range(s). If a TMV is used it must be positioned before a solenoid valve.
- Measure, mark and cut aperture for the plate housing and fixings (as shown in figure 3, 4, 5 or 6 depending on fixing method).
- A mounting box is available for recessed precast concrete or fabricated ceiling mounting. Contact the Wallgate sales desk for more information.

5.2 Ceiling Mounted Shower Installation.

NOTE: The ceiling mounted shower requires installation following the guidelines in figures 3 - 6 depending on the mounting method.

NOTE: The following examples refer to the use of Hilti HUS3 masonry screws for a concrete ceiling. Refer to Hilti data sheet for full installation instructions of fixing system. If other fixings systems are used, refer to the manufacturer's literature for torque settings. Tighten sufficiently to prevent removal without tooling.

NOTE: Exceeding the torque setting for the M5 screws can result in damage to the mounting plate.

NOTE: It is recommended to apply anti-pick hard set mastic to shower nozzle plate edges against the wall, (i.e. Sikadur 33).

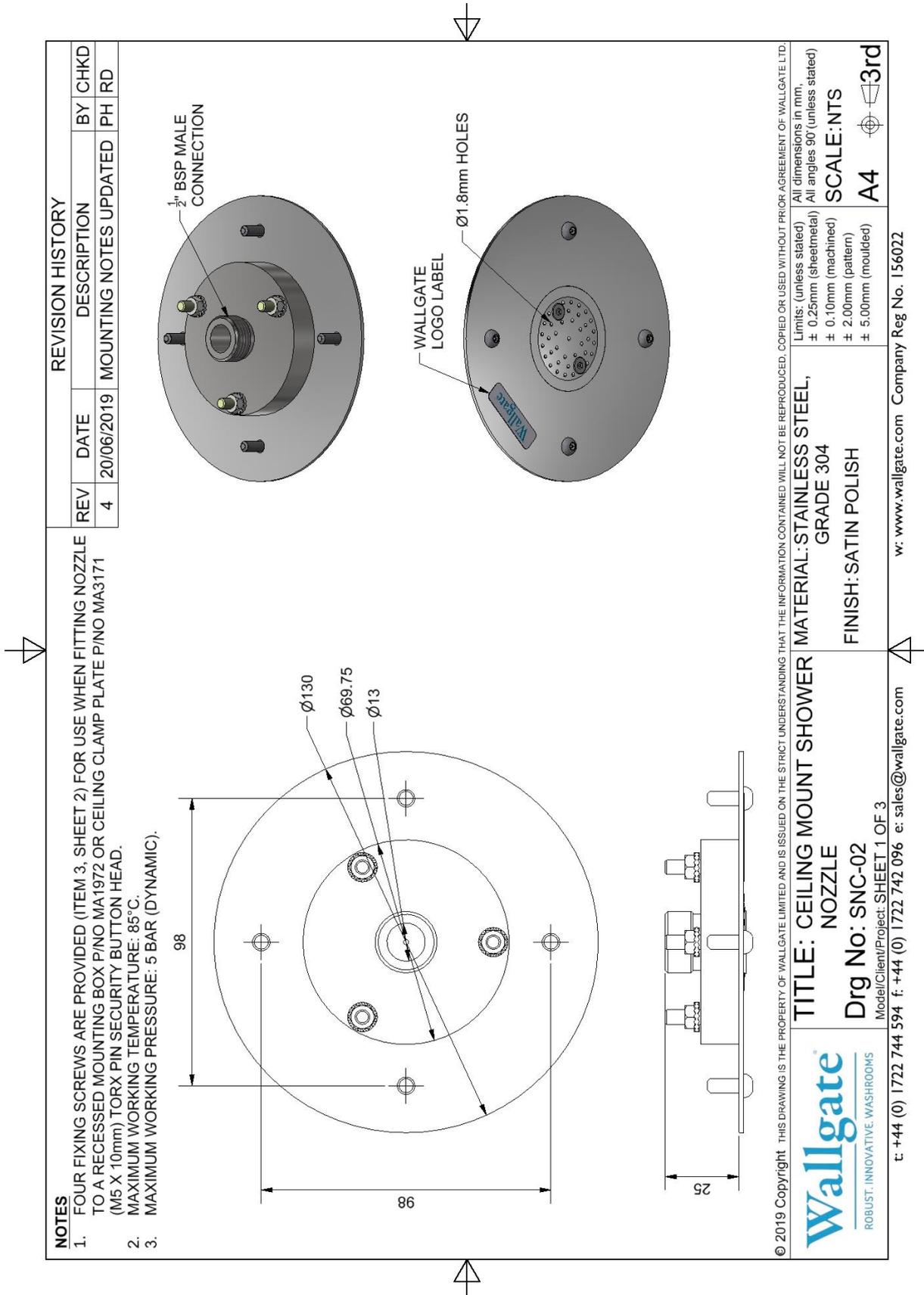


Figure 1: Ceiling mounted shower head.

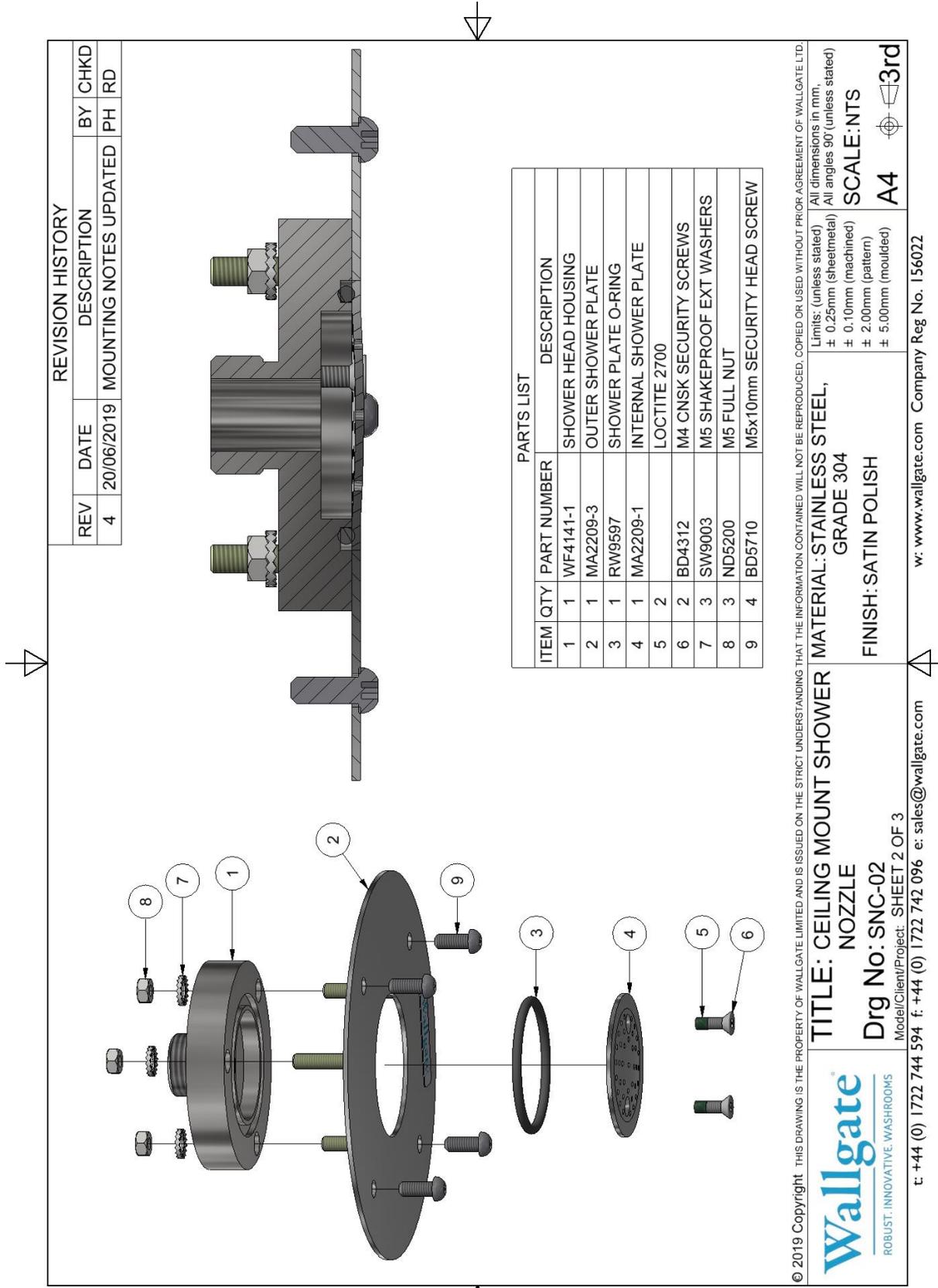


Figure 2: Ceiling mount shower head exploded view.

5.2.2 Method 1: Cast Concrete Ceiling Mounted

(See Figure 3):

1. Create $\varnothing 80\text{mm}$ clearance hole in the ceiling.
2. Mark fixing hole location with the shower head as a reference.
3. Use 4x pan head, security fixing screws suitable for concrete ceiling material (not supplied) to fix the shower head to the ceiling (e.g. Hilti HUS3 6mm concrete screw anchors). Drill ceiling holes as detailed in Hilti data sheet and then retain plate to the ceiling using installation torque of 25Nm. For alternative fixing systems, refer to fixing manufacturer's guidance for torque settings.
4. Ensure the plate is flush against the ceiling to maintain anti-ligature and vandal properties.

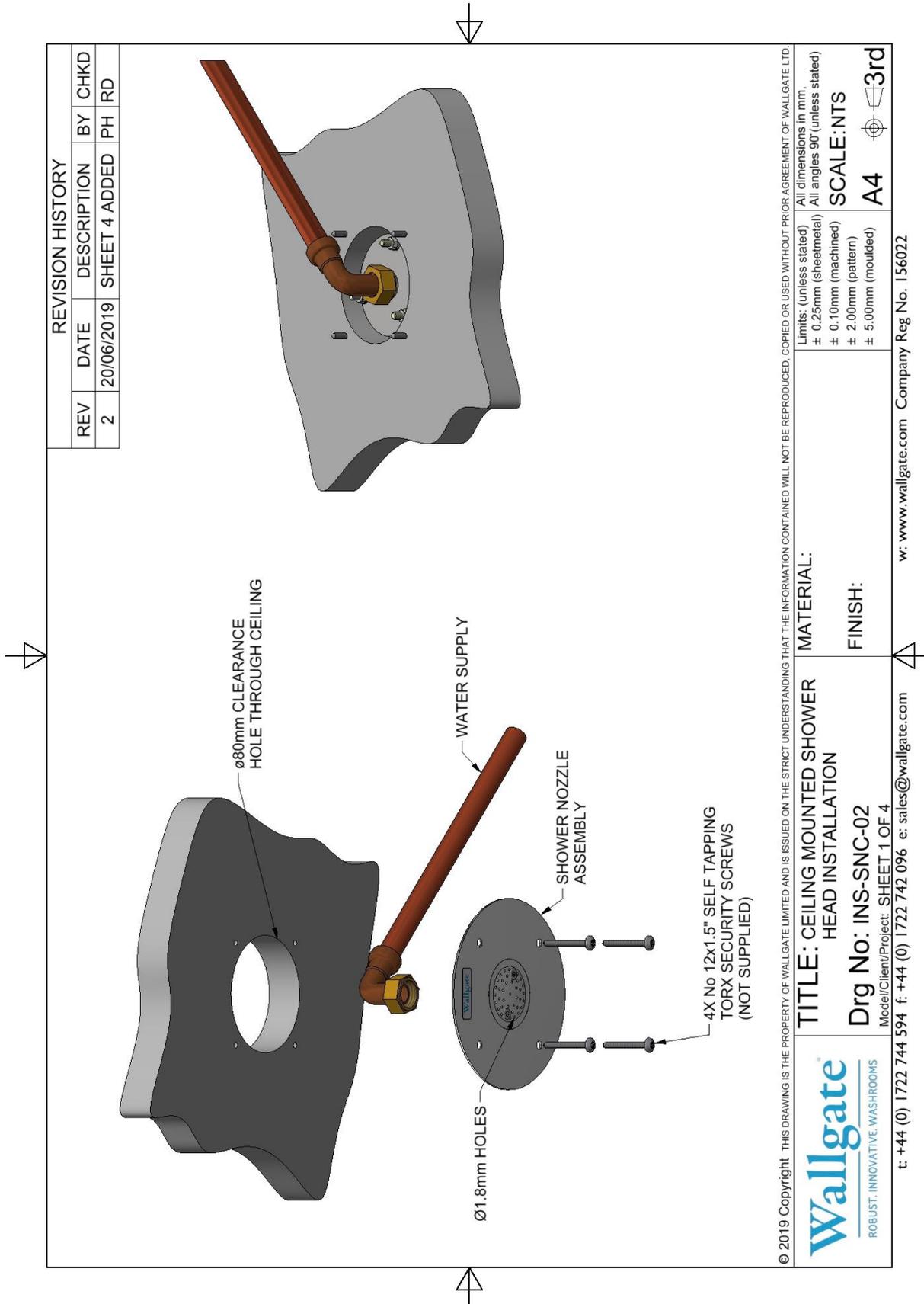


Figure 3: Ceiling mounted shower head installation (Method 1).

5.2.3 Method 2: Fixing Box

(See Figure 4):

1. Create 85mmx85mm clearance hole in the ceiling.
2. Create $\varnothing 120\text{mm} \times 2\text{mm}$ recess for the nozzle box flanges.
3. Using the mounting box as a reference, mark 4x $\varnothing 6.5\text{mm}$ clearance holes for the threaded fixings on the back box.
4. Use 8x pan head, security fixing screws suitable for concrete ceiling material (not supplied) to fix the shower head to the ceiling (e.g. Hilti HUS3 6mm concrete screw anchors). Drill ceiling holes as detailed in Hilti data sheet and then retain plate to the ceiling using installation torque of 25Nm. For alternative fixing systems, refer to fixing manufacturer's guidance for torque settings.
5. Fit the 4 x M5 screws (Item 3, Fig: 2) through shower plate into ceiling mounting box. Tighten each screw to a torque of 3.5Nm, a thread lock can be applied (Loctite 222).

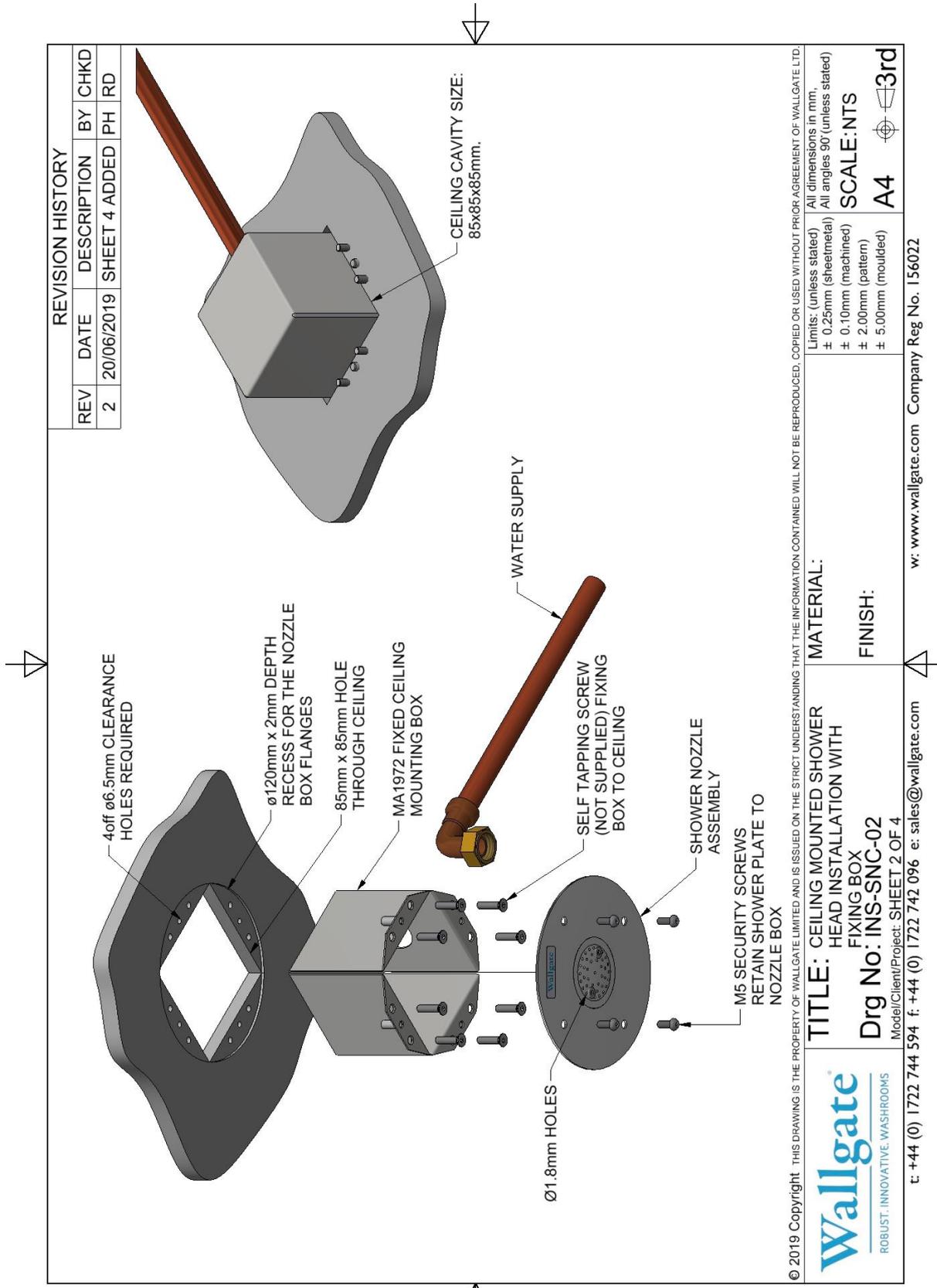


Figure 4: Ceiling mounted shower head installation with fixing box (Method 2).

5.2.4 Method 3: Cast in Box

(See Figure 5):

1. Cast ceiling mounting box into ceiling ensuring flanges are flush with the ceiling.

NOTE: Box size: 80x80x65mm.

2. Fit the 4 x M5 screws (Item 3, Fig: 2) through shower plate into ceiling mounting box. Tighten each screw to a torque of 3.5Nm, a thread lock can be applied (Loctite 222).

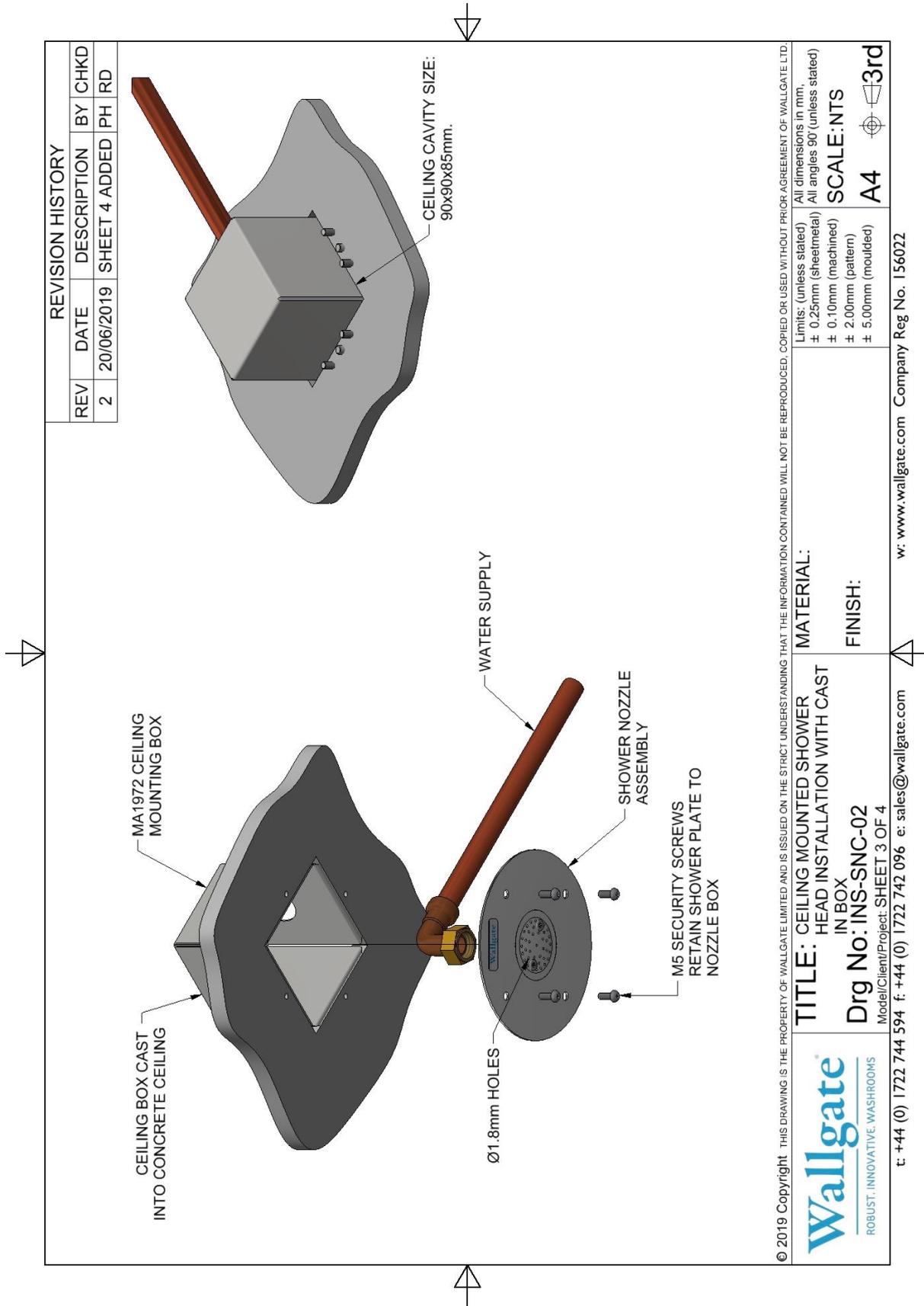
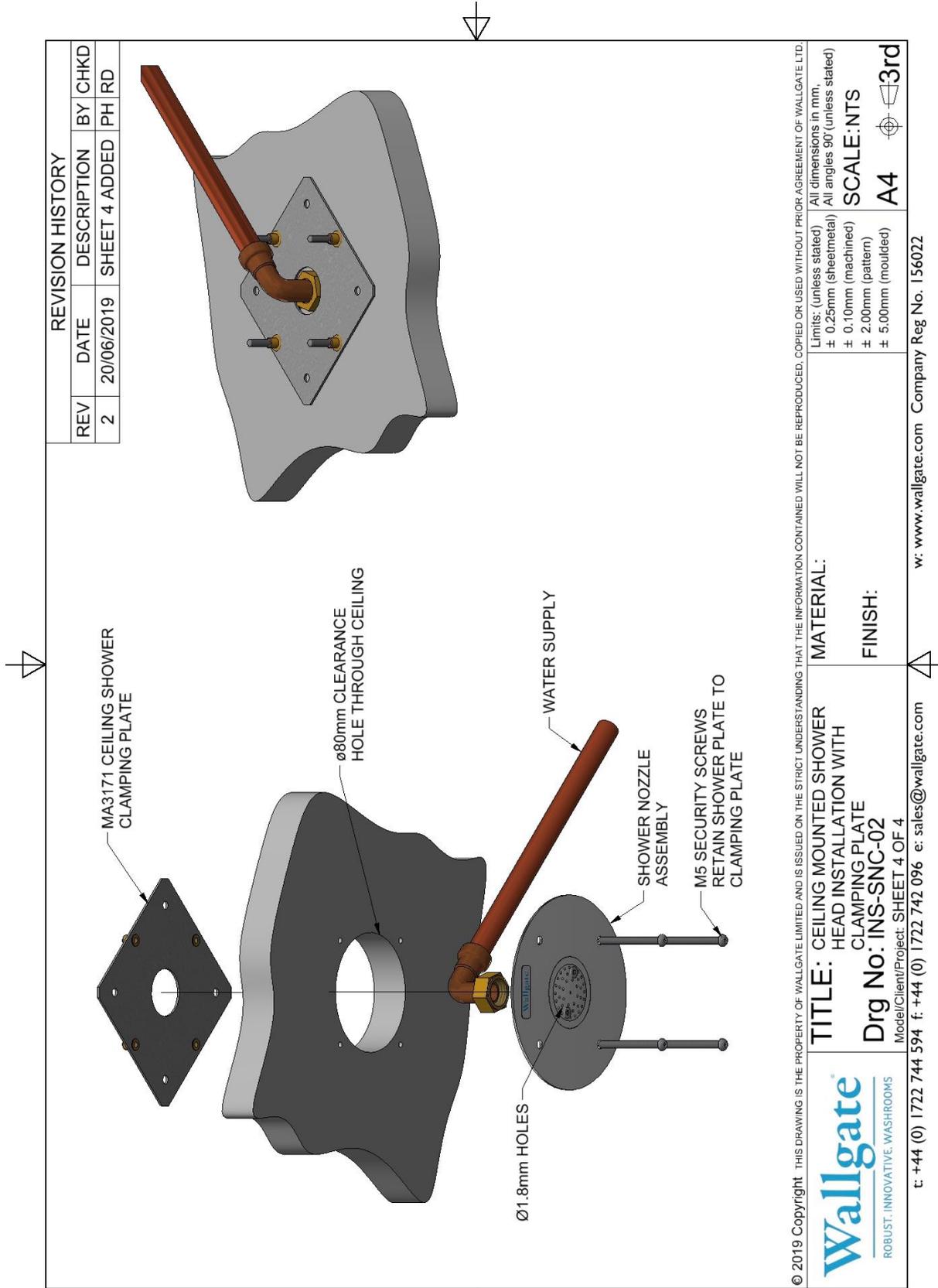


Figure 5: Ceiling mounted shower head installation with a cast in box (Method 3).

5.2.5 Method 4: Clamping Plate

(See Figure 6):

1. Create $\varnothing 80\text{mm}$ clearance hole in the ceiling.
2. Offer shower plate up to opening and mark 4x fixing points.
3. Drill 4x holes to a suitable clearance diameter for M5 machine screws.
4. Fit 4 x M5 button head security screws with a suitable length to pass through ceiling thickness into ceiling clamping plate. Tighten each screw to a torque of 3.5Nm, a thread lock can be applied (Loctite 222).



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TITLE: CEILING MOUNTED SHOWER HEAD INSTALLATION WITH CLAMPING PLATE
Drg No: INS-SNC-02
Model/Client/Project: SHEET 4 OF 4

MATERIAL: All dimensions in mm.
± 0.25mm (sheetmetal) All angles 90° (unless stated)
± 0.10mm (machined)
± 2.00mm (pattern)
± 5.00mm (moulded)

FINISH: SCALE: NTS
A4 3rd

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Figure 6: Ceiling mounted shower head installation clamping plate (Method 4).

5.3 Water Connections

NOTE: Before you carry out the following steps, flush the water supply pipes to remove any debris and trapped air.

NOTE: Fit a Y strainer in the water supply feed pipes prior to connection of solenoid valve, especially on older installations where loose particles from ageing water pipes can cause a blockage and/or damage to the outlet or solenoid valves.

NOTE: The shower nozzle must be fed by a blended supply that complies with the regulatory standards, set to the necessary temperature range(s). If a TMV is used it must be positioned before a solenoid valve.

NOTE: Use of any pipe sealing compound should be avoided to prevent blockages and damage to the shower nozzle and water solenoid valves.

NOTE: It is recommended to fit a service isolating tap on the water supply feed before solenoid valve. This allows for ease of maintenance when required. The isolating taps are not supplied by Wallgate and should be purchased separately.

1. Connect ½" BSP female fitting to male ½" BSP thread on shower nozzle housing.
2. Figures 3, 4 and 5 are for illustration only, installation should be made in accordance with site-specific plumbing requirements.

5.4 Ceiling Shower Spray Pattern

The ceiling shower will have varying spray pattern dimensions depending on mounting height and water flow rate. Figure 7 on the following page has a table indicating the various spray diameters at two different flow rates, 6lpm and 8lpm.

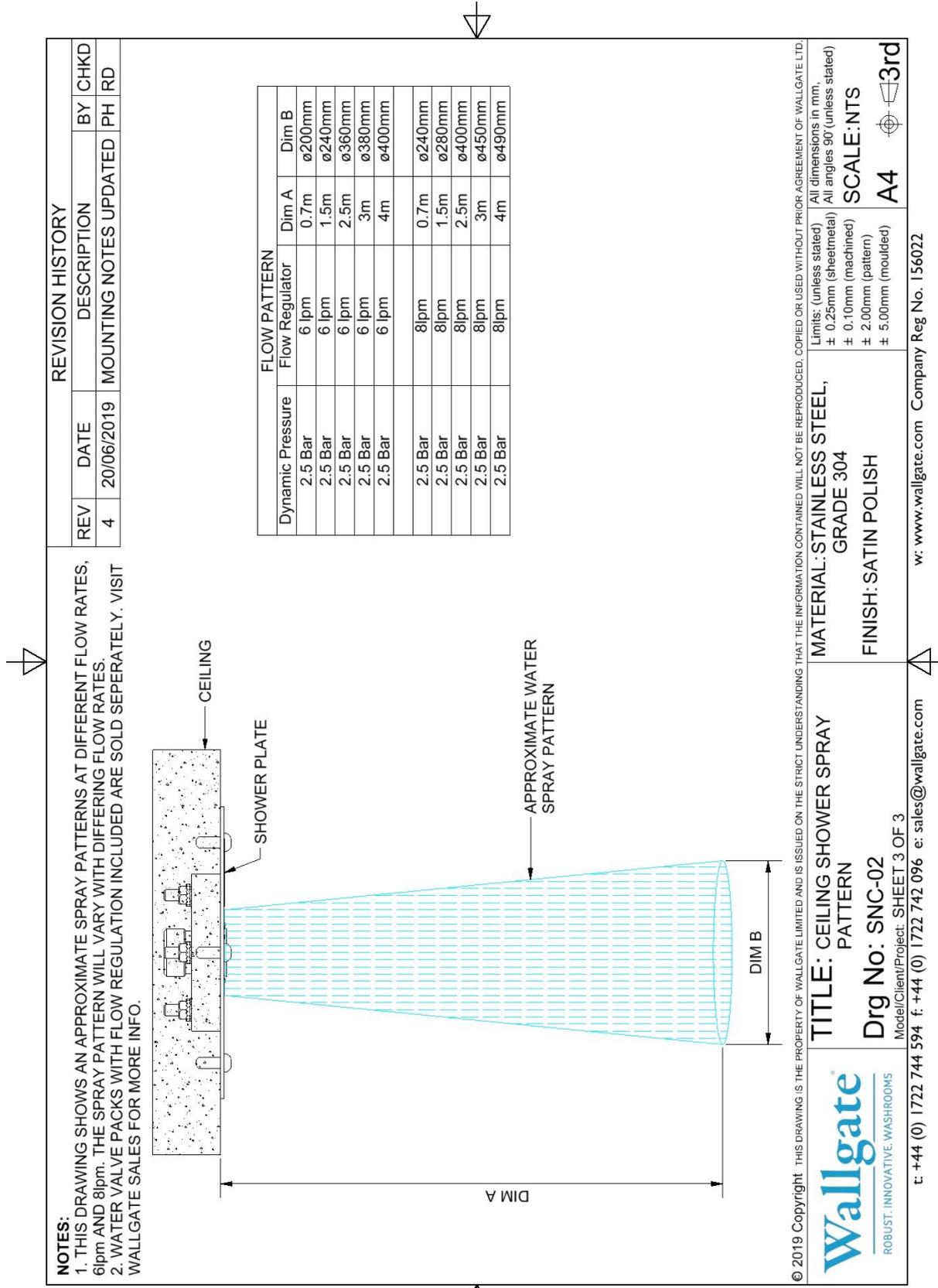


Figure 7: Ceiling shower spray pattern.

5.5 Commissioning for Use

1. Fully open the water supply isolating tap. Check the system for leaks.
2. Operate the all shower outlet supplies available. Operate the water several times to make sure all air has been purged from the system.
3. Ensure that the flow rate is correct, and the shower nozzle's pattern is fully filled.
4. Where a thermostatic mixer valve (not supplied) is fitted to the plumbing system for the outlet, you may have to adjust the valve to set the correct hot water temperature. If so, you should do so in accordance with the instructions supplied by the manufacturer of the thermostatic mixer valve.
5. Leave a copy of this Product Manual with the person responsible on site.

5.6 Technical Specifications

Table 1. Technical specifications

Ceiling Shower Technical Specification	
Weight	0.5 Kg
Dimensions	ø130mm (W) x 27mm (H) (1.8mm dia outlet holes).
Maximum Operating Water Temperature	+85°C
Water Supply	Minimum pressure: 2 Bar (Static) Maximum Operating Pressure: 5 Bar (72psi, 500kPa) (Dynamic). Supply pipe size ½" BSP

6. User and Maintenance Instructions

The ceiling shower nozzle is designed and manufactured from high-quality materials. With correct installation, operation and maintenance, as described by the instructions given in this manual, the unit will give reliable, efficient service. If you need any further information or advice, please contact Wallgate customer services.

Wallgate offers a comprehensive service package, details of which can be obtained from our customer service department.

6.1 Operation

1. Fully open the water supply isolating tap.
2. Operate the shower.
3. If the shower is activated by Wallgate controls, i.e. WDC100 or WDC200 the default run time for the shower is 60 seconds.

NOTE: Further settings can be found in the WDC product manuals which are also available on the Wallgate website.

NOTE: This product offers no form of temperature control.

6.2 Maintenance

The ceiling shower plate is polished stainless steel and can be cleaned using warm soapy water or a stainless-steel cleaner. A suitable limescale remover applied to the manufacturers guidelines is also a safe method for cleaning.

NOTE: Bleach, spray cleaners and abrasive cleaners may damage the surface and internal parts of the shower.

For ease of cleaning, the spray plate can be removed from the external plate. The assembly is shown in figure 2.

1. Unscrew the 2x security screws to release the internal plate and an O-ring. This can be cleaned separately following the guidelines above.
2. After cleaning reinstall the O-ring, plate, and screws. To do this set the O-ring on the underside of the internal plate.
3. Push the plate and O-ring into the opening, aligning the 2x holes in the plate with those on the housing.

NOTE: For maximum vandal resistant properties it is recommended to reapply Loctite 2700 WRAS approved thread sealant to M4 screws before refitting.

4. Hold the plate in place and screw in 2x screws. Equally tighten to 3Nm.

NOTE: Ensure O-ring is seated in groove correctly, countersunk screws are flush with the internal plate. The internal plate must flush with external plate to maintain water seal and anti-ligature properties.

6.3 Spare Parts List

Table 2 Spare Parts List

Part Number	Description.
RW9597	Shower plate O-ring
MA2209-1	Internal Shower Plate
BD4312	M4 C/Sunk Security Screws
BD5710	M5 Pan Head Security Screws

7. Related Documentation

Additional information on the WDC controller or shower controls can be found in product manuals on the Wallgate website.



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