HIGH SECURITY AND SAFE ENSUITE WASHROOM SOLUTIONS



FRANKE WATER SYSTEMS

World leader in supplying healthcare solutions

66 Franke's brand promise is to 'Make It Wonderful', whether you are a business partner or an end user 99

Over 230 years of experience

Franke has been specialising in products for commercial washrooms for over 230 years and Dart Valley Systems are a market leader in the field of water saving products and automatic washroom solutions, supplying products into the healthcare market for over 35 years. Together Franke and DVS provide one wonderful solution to specialist applications.

Working closely with the NHS and other private healthcare partners, we have developed an extensive range of sanitaryware and accessories that are suitable for mental healthcare environments. Our ligature resistant and high security products available in GRP and stainless steel are suitable for all applications from low risk to high security, Franke Water Systems have designed a portfolio of products to provide a complete solution.



ACCREDITATIONS

CE/UKCA MARKING is applied to products to indicate conformity to the current regulations. Certifications can be found on our websites.

BREEAM Franke can assist specifiers in achieving BREEAM points for projects with a range of water and energy efficient products.

UNIFIED WATER LABEL Part of the BMA, the water efficient product label focuses on specific water saving products that are particularly water efficient.



TMV3 scheme ensures that products are suitable for healthcare environments and provide a safe water supply.



HOLDERS OF ISO9001 globally recognised rigorous set of standards for quality management.

HOLDERS OF ISO 14001 globally recognised rigorous set of standards for environmental management

ACCREDITED CONTRACTOR CHAS The Contractors Health and Safety Assessment Scheme improves health and safety standards across the UK.

SAFE CONTRACTOR APPROVED SafeContractor delivers a tailored health and

safety accreditation. **CONSTRUCTIONONLINE** Help buyers to

simplify and speed up their search, improving resource and cost efficiency through the validation of purchasing decisions. Based on suppliers completion of multiple document working to the PAS 91 criteria.

RIBA CPD We offer a choice of RIBA approved CPD interactive seminars - a must for anyone specifying washrooms for commercial projects.

BMA The Bathroom Manufacturers association acts as an information highway between Industry Government and the consumer on all issues that affect the bathroom business in the UK.

WELS Australian Standards relating to product quality, including health and safety efficiency.

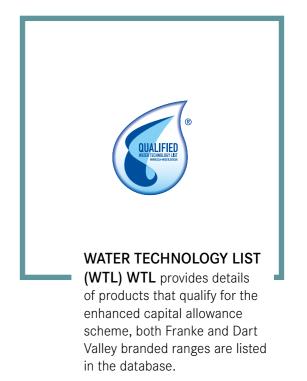


IHEEM

Institute of Healthcare Engineering & Estate Management is the UK's largest specialist Institute for the Healthcare Estates sector.



products listed and a range of corresponding BIM models available for both Franke and Dart Valley branded ranges.



MENTAL HEALTH FACILITIES

Specific issues and facts

Safe ensuite design solution

Designing products for mental healthcare environments is of paramount importance. Unlike classic sanitaryware, the DVS branded range of highsecurity and ligature resistant products are virtually unbreakable.

The safe ensuites feature Glass reinforced polyester (GRP) security basins, WCs, and accessories. This material is a single skin configuration which has three different weaves of glass fibre to give the product a good internal structural integrity, this is then impregnated with polyester resin to matrix it all together to produce the strong and extremely durable composite material.

This production technique is utilised in ballistic armour, finished with a thick white gelcoat which is extremely durable and used in the most demanding marine applications. The material is also fire retardant, making it ideal for mental healthcare environments.

Complete the safe ensuite with stainless steel ligature resistant shower heads, wave on/off flushing systems and behind the wall control systems.

There are several documents which outline guidance when designing these specialist washrooms, however there are no strict accreditations that they have to adhere to. The documents include:

- Health Building Note 03-01: Adult acute mental health units
- Health Building Note 03-02: Facilities for child and adolescent mental health services (CAMHS)
- Environmental Design Guide Adult Medium Secure Services
- BMA testing for robustness Find official title and date of publication.
- Informed Choices: Testing Guidance for Products in Mental Health **Facilities**

















MATERIAL TYPES

Highest quality materials

Stainless steel

Sanitary fixtures manufactured from stainless steel inhibit vandalism and are easy to clean, helping building operators to keep service and maintenance costs to a minimum.

Stainless steel is not only resistant to moisture and most acids, it also stands out due to its hardness, high tolerance of heat and cold and hygienic characteristics which makes it the first choice for hospitals and food processing plants. Dirt and oil can easily be washed from the smooth, pore-free surface without the need for harsh cleaning products.

Glass reinforced polyester

Glass reinforced polyester is a highly impact and corrosion resistant composite material. Although it is lightweight and makes it easy to mount on existing structures, it is also extremely robust.

When designing load bearing products such as WCs, GRP is perfect as its high strength properties can fulfil this need. GRP also allows for less material to be used than other structural materials. All of these properties make GRP a perfect product for use in safe ensuite environments ensuring ligature resistance and long lasting product life.



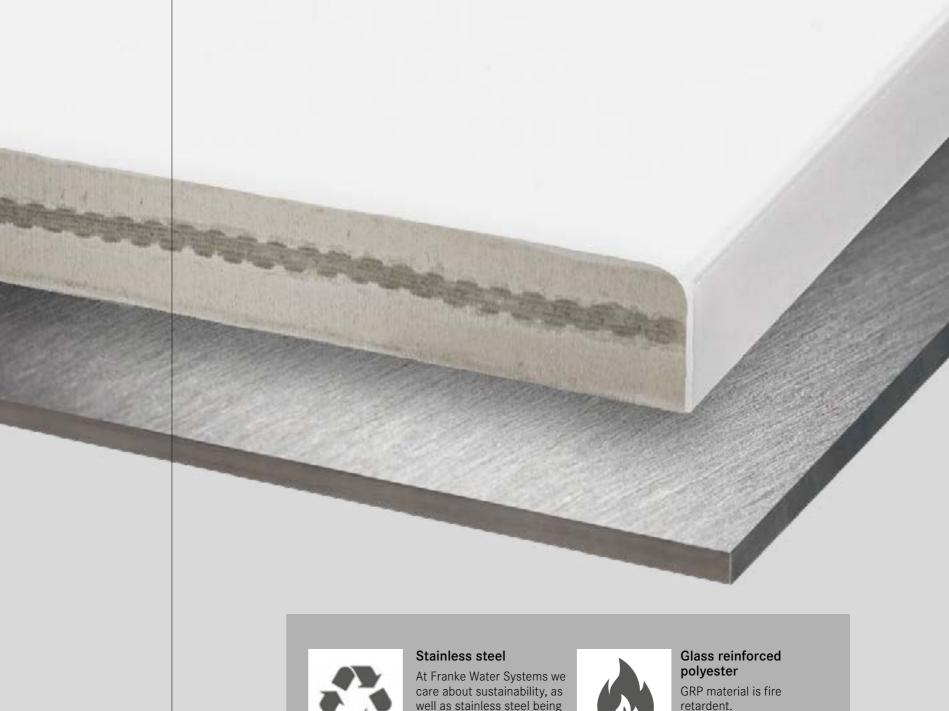




polyester









well as stainless steel being a high quality product, it is also 100% recyclable.



WASHROOM CONTROLS

Multi-channel control system box





MULTI-CHANNEL WASHROOM CONTROL BOX

The DVS multi-channel control system is suitable for; WC flushing, no-touch taps, showers & bath controls. The key switch enables control of water and lock-outs.

VR07-020	209.0606.405	Multi-channel control box
AC04-016	230.0625.725	Water control key switch



LIGATURE-RESISTANT WAVE-ON/OFF SENSORS

Wave-on sensors with hot or cold indications.

sor



LIGATURE-RESISTANT TACTILE SWITCHES

Tactile switches with hot or cold indications.

AC02-047	208.0606.406	Hot
	208.0606.407	Cold

SAFE ENSUITE DESIGN SOLUTION

The DVS multi-channel control system has been designed to control the washroom and is compatible with a range of products including WC flushing, no-touch taps, showers and bath controls. The control box can be fully programmed using the DVS handheld programmer and has been designed to meet the requirements for safe ensuite applications. Installation is simple with an easy access removable wiring platform, a fully hinged front cover allows full access to the sensor and valve plugs.

- Program 10 independent channels plus 2 flushvalves
- Compatible with sensors (12V) & tactile switches
- Settings are adjusted via hand-held programmer
- Compatible with 12 NC Solenoid Valves
- Powered via fused spur (230V AC)











PROGRAMMABLE ENSUITE SOLUTION

Control the washroom

Adjustment of Franke and DVS products such as taps, urinals, WCs, baths and showers is effortless with the control box and programmable remote control. The sensors can be optimised with various function and control options via the programmable remote. No control box is needed with the hand held programmer as it is possible to program per room and set different parameters in order to suit a users specific needs. Adjustable settings include; sensor range, flush time, purge, lockouts and more. DVS sensors are manufactured from robust stainless steel with a polycarbonate lens, the sensors have been designed to be almost unbreakable and are fireproof with a 316 stainless bezel.



upload via



data, purges



adiustable



DVS HAND-HELD PROGRAMMER WITH USB INTERFACE

Quick and easy adjustment of settings including; run-on time, range, purge and more.

AC01-001 208.0485.914



SHOWER SENSOR

Suitable for controlling up to two ensuites or individual items including taps, showers or

AC02-033 208.0630.420 Red (hot)



WC SENSOR

The programmable sensor allows quick and easy adjustment of settings including; run-on time, range, purge and more.

AC02-037 205.0643.148 Stainless



BASIN & BATH SENSORS

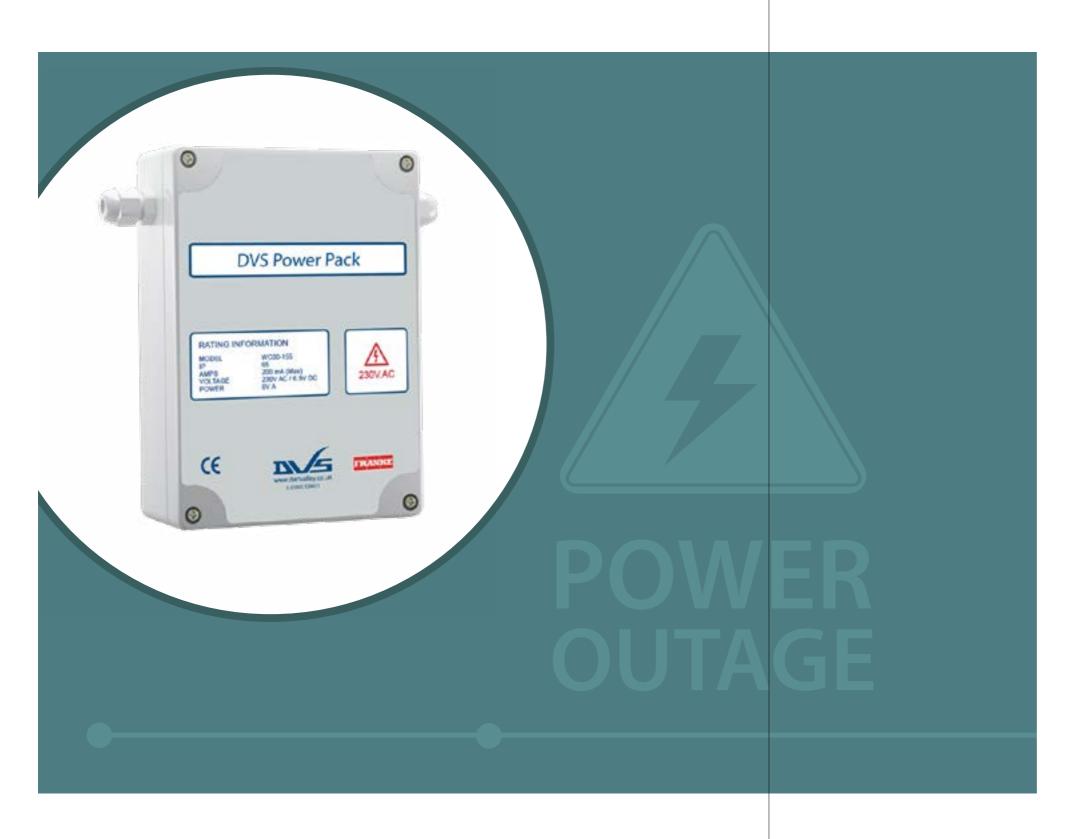
Sensors which can be optimised with hand-held programmer.

AC02-017	208.0606.395	Stainless tap sensor
AC02-024	208.0606.397	Blue (cold)
AC02-025	208.0606.398	Red (hot)
AC02-022	208.0606.369	Stainless bath sensor



POWER PACK

6V programmable





6V POWER PACK

The power pack is designed to continually supply power for up to 10 days depending on load if there is a power out.

WC00-155 208.0612.597



6V ISOLATION UNIT

The 6V Isolation System enables programmable taps, showers, urinals, WC's and baths to be isolated effectively, minimising the risk of the valves becoming latched on during operation.

AC04-030 212.0630.588



LOW VOLTAGE WC FLUSHVALVE KITS

Low voltage WC flushvalve kits, complete with programmable sensor and mains PSU.

WC03-013 209.0610.660 1 ½" base **WC03-014** 209.0611.269 2" base

POWER PACK

The DVS power pack is designed to provide power in the most demanding of environments, even those which are prone to power outages. The system features an on-board intelligent charger keeps the battery at an optimum charge level. In the event of a power out, the battery will continue to supply power for up to 10 days depending on

The 6 volt power pack is compatible with the DVS range of taps, programmable sensors and low voltage flushvalve controls. The power pack has the capability to power up to 5 products in series from one unit.









programmable to 5 products to 10 days

Can power up Power for up

SAFE ENSUITE BASINS

GRP security basins

Safe ensuite basins

The DVS safe ensuite range has been designed for the toughest environments and manufactured using advanced technologies. This range is robust, vandal-resistant and avoids ligature points where possible including a concealed waste outlet and removable rubber plug. The GRP material with a polyester gelcoat finish is highly resistant to cyclical stresses and impact. The design is aesthetically pleasing and can be used in conjunction with our latest range of floor and wall mounted WC pans, providing the ideal safe ensuite package solution for use in many sectors. These basins can be fully programmable with features such as lock outs, run on times, purge and sensor range control. They are also designed to allow thermostatic control of water temperature.





anti-shatter











fixings



*VR01-030, VR01-085 only



HIGH SECURITY BASIN WITH BACKPLATE

Aquarius wall mounted straight surgeon scrub up tap with extended run time and pex hoses.

VR01-030 203.0612.738 **VR01-039** 203.0643.150



SAFE ENSUITE IN WALL BASIN

Vandal-resistant, ligature resistant, in wall basin manufactured from GRP material.

VR01-085 208.0597.160



SAFE ENSUITE LOW PROFILE BASIN

Manufactured from GRP, with or without tap holes.

VR01-081	203.0616.261	No tap holes
VR01-082	203.0630.343	Left tap hole
VR01-083	203.0630.318	Right tap hole
VR01-084	203.0630.317	2 tap holes



HIGH SECURITY HIGH-SIDED INTEGRATED BASIN

Manufactured from GRP material with two integrated stainless steel water spouts and moulded soap shelf.

VR01-080 203.0643.149



SAFE ENSUITE WCS

GRP WCs

Safe ensuite WCs

The DVS high security range of WC pans have been designed and tested to be vandal-resistant and avoid ligature points wherever possible. The techniques employed to construct these pans are used very successfully in the field of ballistic armour manufacturing, this results in unrivalled impact resistance. A high-grade non-porous polyester gel coat surface in all white comes as standard, and also available with coloured gel coat rim to assist partially sighted users. The gel coat has been specially formulated to resist chemicals and ultraviolet rays. This GRP white glossy material also makes the washroom look conventional, providing a familiar environment for the users.





anti-shatter













STANDARD BACK TO WALL WC 420MM

High-security WC pan, manufactured from high performance composite material.

Dimensions: 400 x 420 x 510mm (w x h x d)

VR01-010 205.0630.320



LESS-ABLED BACK TO WALL WC 480MM

High-security WC pan, manufactured from high performance composite material with a blue top.

Dimensions: 400 x 480 x 510mm (w x h x d)

VR01-035 205.0606.433 WC

VR01-012 205.0606.435 Spacer block



WALL HUNG WC PAN

High security wall hung WC pan, manufactured from high performance composite material.

Dimensions: 400 x 370 x 510 (w x h x d)

VR01-017 205.0630.392

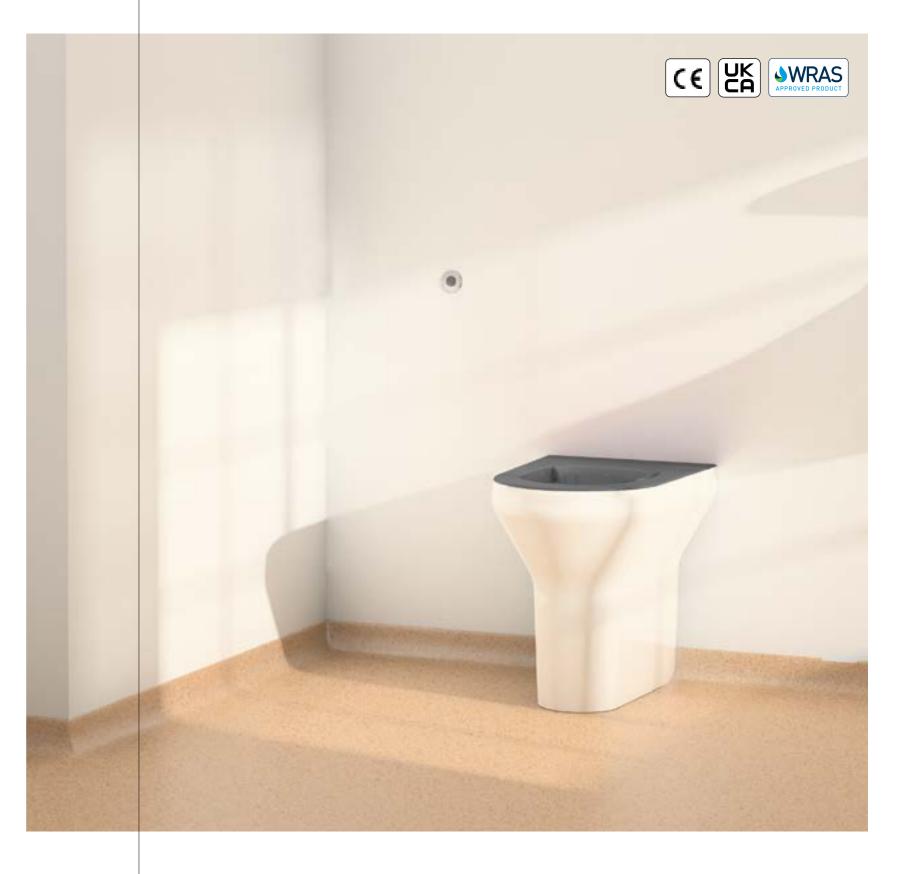


HIGH SECURITY WALL HUNG WC PAN

High security wall hung WC pan, manufactured from high performance composite material with blue top.

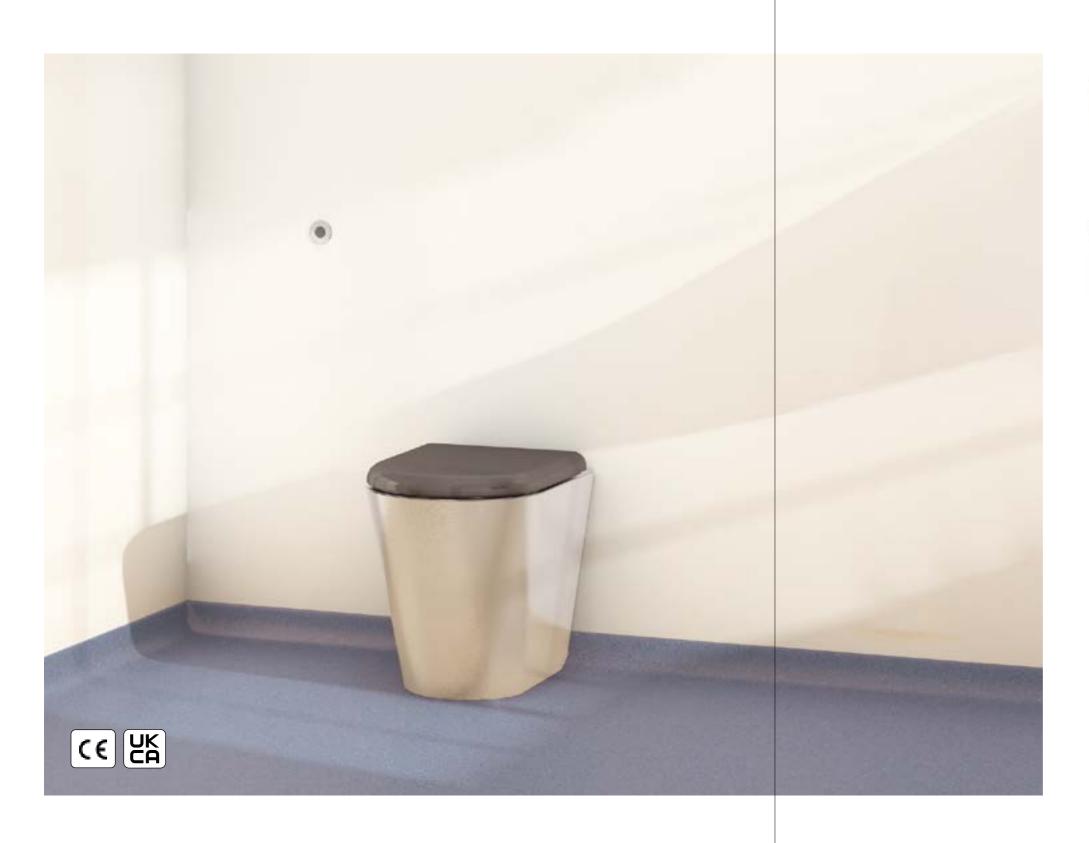
Dimensions: 400 x 370 x 510 (w x h x d)

VR01-036 205.0630.394



STAINLESS STEEL WC PANS

Vandal resistant, robust WCs





ACCESSIBLE WC

Floor standing disabled persons WC pan, manufactured from grade 1.4301 (304) stainless steel - satin polish finish, material thickness of 1.5mm for the pan and shroud with a stainless steel P trap.

G21748N	205.0607.272	Duct mounted inlet
G21748NT	205.0607.186	Top inlet



HEAVY DUTY BOLT FIX WC PAN

Heavy duty campus wall mounted bolt fix WC pan. Manufactured from 1.5mm thick grade 1.4301 (304) stainless steel with a satin polish finish.

HDTX597	205.0000.028	WC only
HDTX597S	205.0000.030	With grey seat pads
HDTX597B	205.0000.029	Black seat and lid

STAINLESS STEEL WCS

Franke Water Systems have a wide range of vandal resistant WCs that have been specifically designed for use in all types of public and commercial buildings, but particularly vandal prone areas such as low category prisons and court areas. The range includes heavy duty bolt fix WCs with optional seats or pads and an accessible range with duct or top inlet.

The range of WCs comform to BS EN997 standards and are manufactured from durable high quality stainless steel which is able to withstand high temperatures and vandalism. The heavy duty option has been designed to be bolt fixed through the wall, making it ideal for low category and resettlement prison environments, preventing the fixing elements being accessed or vandalised by the user.





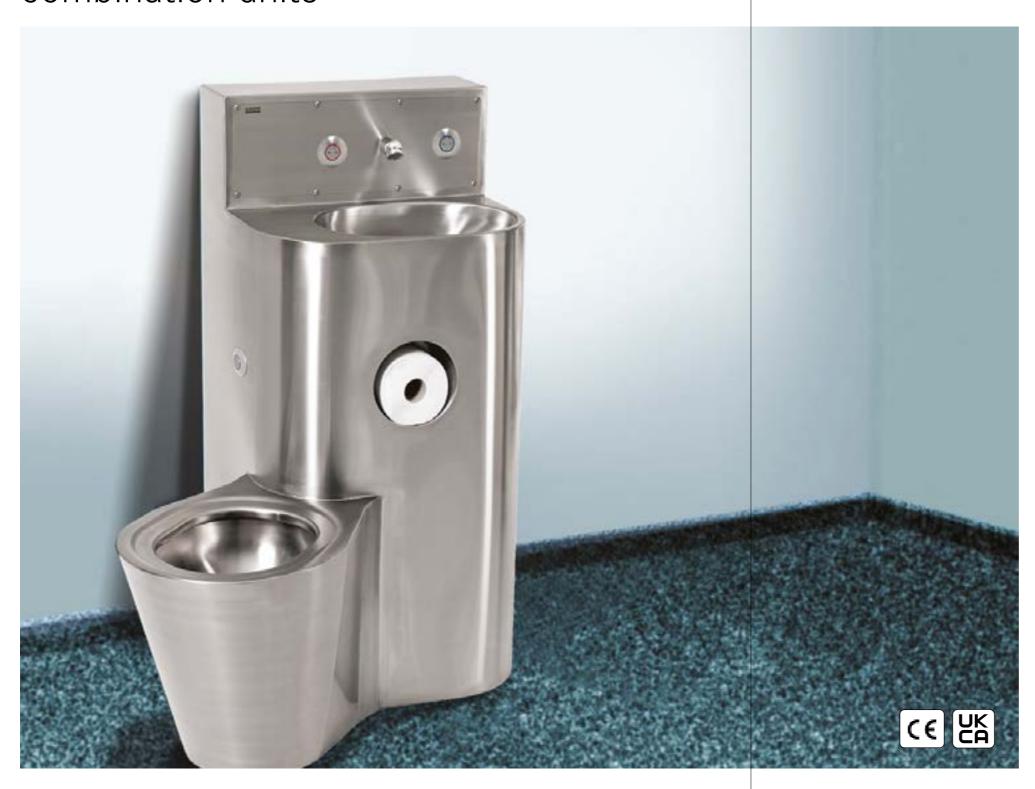




Robust stainless steel material maintenance

STAINLESS STEEL COMBINATION **UNITS**

High-security WC and washbasin combination units





WC WASHBASIN COMBINATION UNITS

Stainless steel WC washbasin combination unit with a satin finish. Designed with electronic spout, controlled via the Dart Valley branded washroom control box (included).

Dimensions: 810 x 1050 x 780mm - Right & left hand WC Dimensions: 500 x 1050 x 890mm - Centre WC

AC04-040	206.0639.096	Right hand outlet
AC04-041	206.0639.097	Left hand outlet
AC04-042	206.0640.217	Centre outlet



WC WASHBASIN COMBINATION UNITS

Stainless steel WC washbasin combination unit with a satin finish. Designed with electronic spout, controlled via the Dart Valley branded washroom control box (included).

Dimensions: 700 x 1000 x 670mm - Right & left hand WC Dimensions: 390 x 1000 x 780mm - Centre WC

AC04-043	206.0639.099	Right hand outlet
AC04-044	206.0639.100	Left hand outlet
AC04-045	206.0639.261	Centre outlet

STAINLESS STEEL COMBINATION UNITS

The combination units feature an integrated WC and washbasin with a range of water controls and cisterns. These units have been installed in over 100 locations worldwide in secure washrooms, prisons, police stations and custody areas. The units are made of 2mm thick, grade 304 Stainless Steel and prevent the user from concealing drugs, dismantling or tampering with the unit and have several ligature-resistant features. The WC is approved to EN- 997 for 6 litre flushing performance.

- All welded construction with satin polished finish
- Grated waste outlet
- All pipework provided
- Left, centre or right WC options
- Integrated toilet roll holder













FLUSH VALVES AND CISTERNS

Water saving flush valves and cisterns

Flush valves

The DVS branded flush valves are an ideal choice for all high usage washrooms, providing reliable water saving benefits. The flush valve can be set to flush automatically or by wave operation which reduces the risk of cross-contamination. Both auto and wave options have dual flush capability although a single 4 litre flush is recommended. The flush valve has been designed to be compatible with most WC cisterns on the market therefore there is no need to change the existing plumbing as it can be retrofit to existing installations.

















Low voltage WC flushvalve kit with programmable sensor.

WC03-013 209.0610.660 1 ½" base **WC03-014** 209.0611.269 2" base



CONCEALED CISTERN KIT

Kit includes WRAS approved side entry valve, flush pipe, back to pan connector, concealed cistern and blanking plug.

WC02-011	209.0610.921	1 1/2"
WC02-012	209.0610.922	2"

^{*}Programmable sensor options only



WC FLUSHVALVE KIT WITH WAVE-ON SENSOR

Standard WC Flushvalve kit with vandal resistant wave-on sensor and 3m cable.

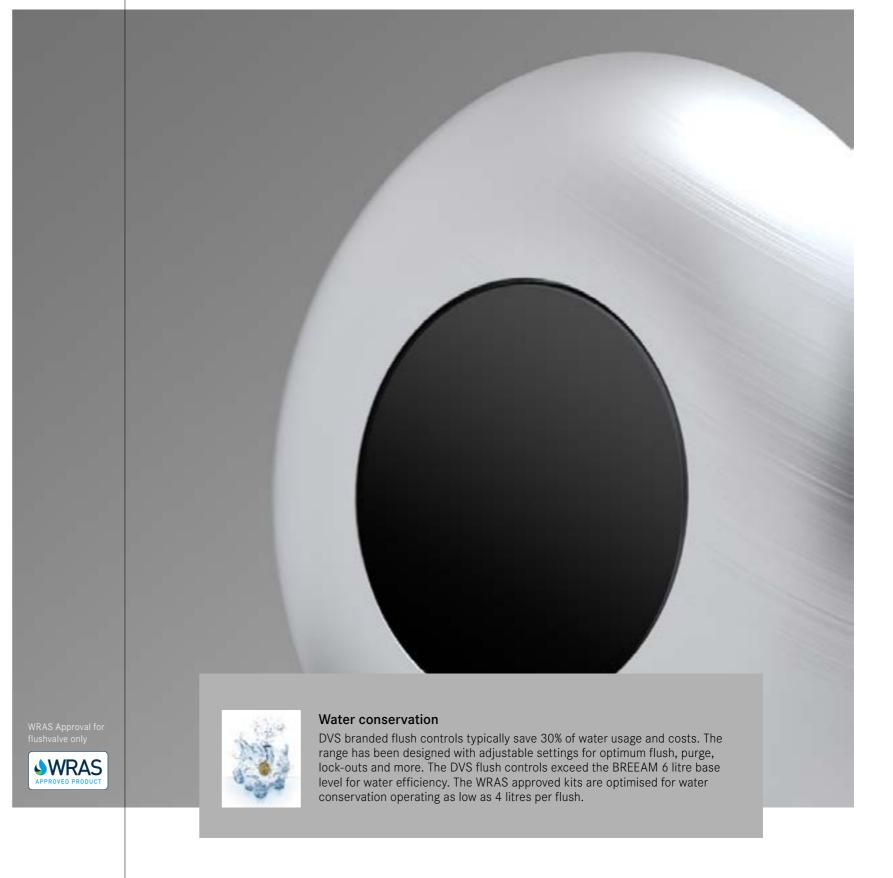
WC03-022 209.0606.400 1 ½" base **WC03-023** 209.0643.162 2" base



CONCEALED CISTERN KIT VERTICAL

Kit includes WRAS approved side entry valve, flush pipe, back to pan connector, concealed cistern and blanking plug.

WC02-013 209.0583.507 1 ½" **WC02-014** 209.0610.923



SHOWERHEADS

Ensuite showers





ONE PIECE ANTIMICROBIAL SHOWERHEAD

The antimicrobial showerheads have a removable brass front cover with a chrome finish, and brass backplate. The four colour quarterly cleaning regime and push-fit connection ensures excellent levels of hygiene.

SH07-095 210.0606.437



HIGH-SECURITY WALL MOUNTED SHOWERHEAD

Aquarius WM straight tap spout.

SH07-040 210.0606.451



HIGH-SECURITY CEILING MOUNTED SHOWERHEAD

Aquarius WM straight tap spout.

SH07-046 210.0606.449 Ceiling mounting **SH07-047** 210.0606.452 Flush mounting



TEMPERATURE BLENDING VALVE ADJUSTER

Ligature-resistant temperature blending valve.

SH00-011 210.0642.185

ENSUITE SHOWERHEADS

The range of antimicrobial and high-security showerheads are designed for excellent hygiene in mental healthcare environments and allow for easy maintenance. The one-piece shower head (SH07-095) has a push-fit connection and four coloured replacement heads to promote a quarterly cleaning regime. The high-security showerheads are designed with a one-piece antimicrobial ABS outlet. Replacement of the antimicrobial outlet is straightforward via the tamper-proof security screw without the need to remove the whole showerhead.



material



4 different

flow rates



Ligature

resistant







asy cleaning regime

ning Fully

SHOWERING SOLUTIONS

Ligature resistant, durable and hygienic shower panels



DUAL-OUTLET STANDARD TOWER WITH HIGH- SECURITY SHOWERHEAD

Assisted and unassisted showering with fixed head or quick release hose. The temperature and flow are independently controlled (NSF approved valve).

SH01-013 210.0606.443

CEILING HEIGHT TMV3 TOWER WITH HIGH-SECURITY SHOWERHEAD TACTILE BUTTON

Fits flush against the wall & ceiling, designed with a single piece outer case. Operated via a tactile button with auto switch off.

SH01-005 210.0611.633

CEILING HEIGHT TMV3 TOWER WITH HIGH-SECURITY SHOWERHEAD WITH PROGRAMMABLE SENSOR

Fits flush against the wall & ceiling, designed with a single piece outer case. Operated via a programmable sensor.

SH01-061 208.0611.634

HIGH-SECURITY SHOWERS

The DVS branded range of shower towers are available in stainless steel or powder coated and create water efficient showering for a wide range of environments. The range includes ligature resistant antimicrobial showers which have been designed for high security areas. The touch-free DVS shower panels can save up to 50% of water when compared to manually operated showers.

The shower tower range is flexible with a choice of programmable wave on sensors, self-closing or manual functions. The touch-free shower towers are pre-set to run for 1 minute and can be easily customised using the hand-held programmer in order to achieve optimum water conservation and functionality.





approved



resistant







asy to

Pre-set/

BATH FILLING STATION

Ligature-resistant bath spouts and backplate





HIGH SECURITY BATH FILLING BACKPLATE

Ligature resistant backplate with polyester gelcoat finish. Manufactured from glass reinforced polyester for a modern finish.

VR01-111 208.0643.165



HIGH SECURITY WALL MOUNTED TAP SPOUT

316 stainless steel ligature resistant spout, 5 litres per minute flow rate.

AT07-043 208.0630.398



LIGATURE RESISTANT BATH SPOUT

316 stainless steel ligature resistant deck mounted spout.

AT07-059 208.0630.400

HYDROTHERAPY

The HBN 00-03 guidance document states "Consideration should be given to providing controls that minimise the risk of overflowing baths and showers." DVS have designed a bath filling station along with high-security and ligature resistant spouts.

The high-security bath filling backplate uses the same robust, vandal-resistant construction as the rest of the safe ensuite sanitary-ware range. The design incorporates a modern aesthetic, easy to clean gel coat finish and integrated stainless steel spouts. The electronically controlled bath filling backplate can also limit the time in which water is allowed to flow, preventing any overflowing.

The 316 Stainless Steel bath spout provides a minimal and hygienic easy to clean design, whilst the standard 3/4" BSP brass tail allows straight forward removal and exchange of the spout during maintenance.













material steel spouts

LIGATURE-RESISTANT **ACCESSORIES**

Robust GRP accessories

Accessories

DVS have a full range of ligature resistant accessories designed for custodial, healthcare and mental healthcare applications. The range includes shelves, soap dishes, mirrors, hooks and more that have all been designed with a high quality GRP composite material and with the users safety in mind.

Features

- Ligature resistant design
- Impact resistant GRP moulded frame
- Poly-carbonate mirror insert
- Moulded soap dish for easy cleaning
- Hygienic, easy to clean gel coat finish
- Easy and secure method of fixing



material







AAMHU



gelcoat finish



LIGATURE RESISTANT SHELF

VR01-108 201.0630.225



HIGH SECURITY MIRROR WITH FRAME

VR01-025 201.0630.413 Without shelf **VR01-037** 201.0630.412



LIGATURE RESISTANT SHOWER GEL/ SHAMPOO SHELF

VR01-067 201.0630.415



HIGH SECURITY CORNER SOAP DISH

VR01-026 241.0630.411



LIGATURE RESISTANT HOOK

VR01-054 201.0630.414



LIGATURE RESISTANT TOILET PAPER HOLDER

VR01-055 201.0630.419



TDV & TMV

Prevents biofilm reducing the risk of water-borne pathogens*

Thermal disinfection and thermostatic mixing valves

The DVS thermal disinfection valve (TDV) has been designed to prevent biofilm, reducing the risk of water-borne pathogens by allowing thermal disinfection from the TMV through to the outlet (1 x TDV is required per TMV). The valve is suitable for taps, showerheads and other washroom equipment fitted with a TMV.

The thermostatic mixing valve (TMV) has been designed for use with basins, showers and baths. The valve is manufactured to control water outlet temperature to fall within +/-2C regardless of fluctuations in temperature and pressure of hot and water supplies. The valve will shut the mixed water outlet immediately if hot or cold water were to fail. The TMV from Dart Valley Systems is WRAS approved under the TMV3 scheme to the DO8 specification.

Thermal disinfection is enabled manually via a hex socket key with guarter turn operation. The integral non-return valves prevent a backflow of water ensuring excellent levels of hygiene. Manufactured from DZR brass which is highly resistant to corrosion and is compatible with 22mm or 15mm pipework (3 x 15mm reducers required).

TDV features

- Reduces risk of water-borne pathogens
- Simple, single quarter turn operation
- Integral non-return valves to prevent backflow
- Corrosion resistant DZR brass body
- Suitable for 22mm and 15mm pipework
- Compliant with water regulations and by-laws
- WRAS approved

AC17-080 208.0606.554 Thermal disinfection valve 201.0000.161 Thermostatic mixing valve





regulations

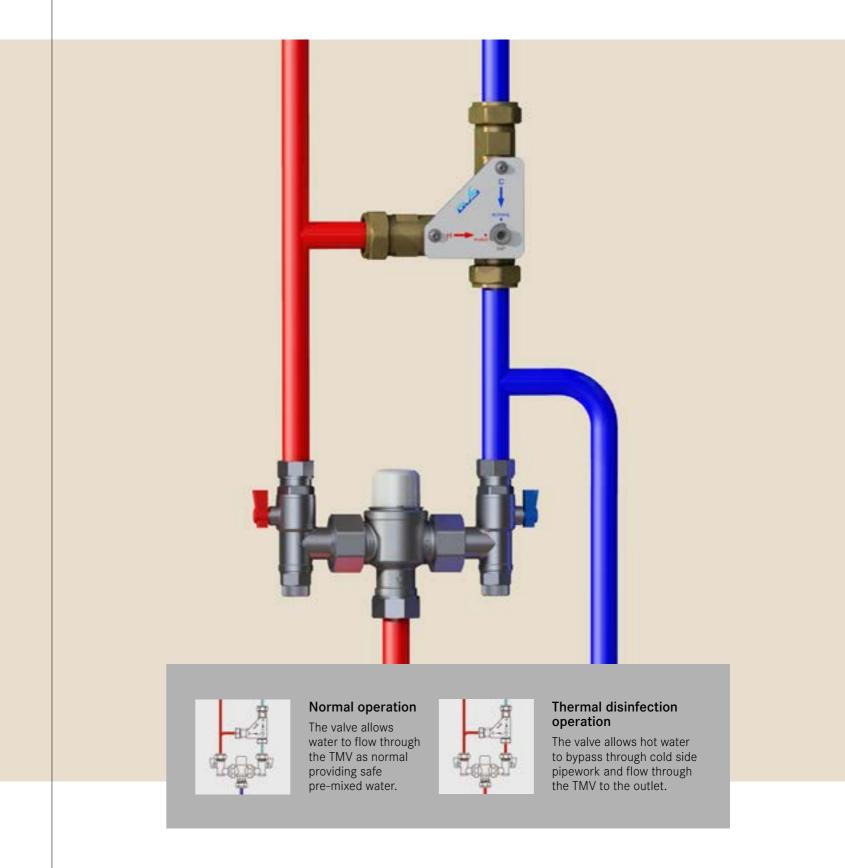






WRAS

*If installed and maintained to the manufactures instructions



JANITORIAL AND MULTI-PURPOSE

Cleaning and maintenance for any environment

lanitorial and clinical sinks

Franke clinical sinks are manufactured from robust 1.2mm thick stainless steel with a satin polish finish. The turned down edges prevent water from dripping onto the floor and walls, keeping hygiene to a maximum. The bowl is prepared for a 38mm waste outlet and the sink top can either be mounted on wall brackets or front leg supports (sold separately). Manufactured in accordance with HBN 00-10, Part C guidance.



















NON-CLINICAL SINKS

Non-clinical sinks without tap holes to be mounted on wall brackets or via front leg supports (sold separately). Manufactured from stainless steel.

G22002N 215.0000.015 SK1 Single bowl **G22004N** 215.0000.017 SK2 Double bowl





CLINICAL SINKS

Clinical sinks to be mounted on wall brackets or via front leg supports (sold separately). Manufactured from stainless steel.

G22006L 215.0000.022 STA 1200mm **G22010L** 215.0000.023 STC 1800mm





DUHS HOSPITAL DISPOSAL UNIT

DUH and DUHS hospital disposal units, manufactured from stainless steel.

207.0000.065 Left hand drainer G22018L G22018R 207.0000.067 Right hand drainer G22043N 207.0000.076 No drainer with grid



JANITORIAL UNIT

Floor standing stainless steel janitorial unit complete with monobloc mixer tap. Manufactured in accordance with HTM 64 / HBN 00-10, Part C Standards.

G20055N 207.0000.059





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