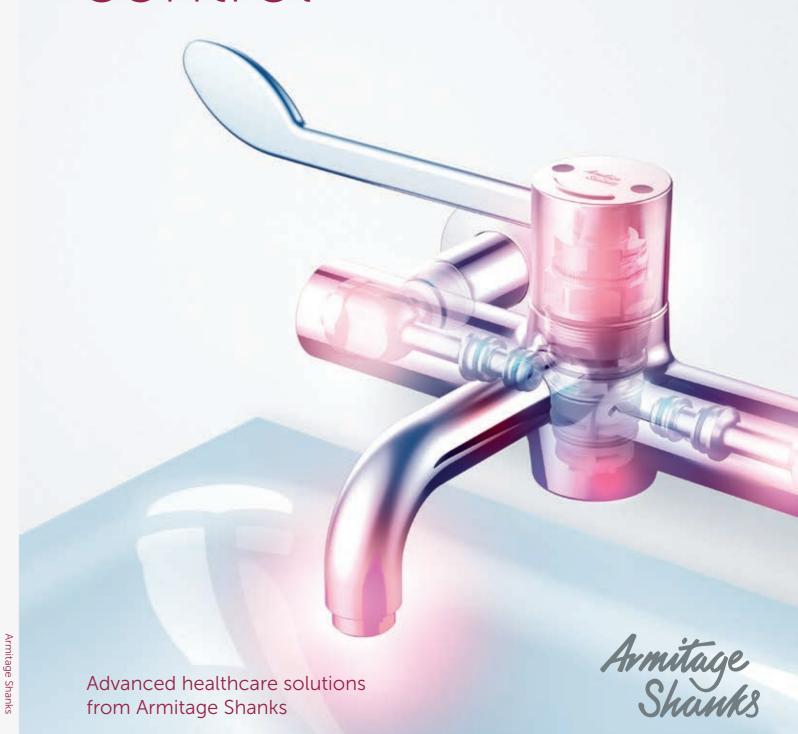
Nobody looks deeper into infection control

CONTOUR 21+ MARKWIK 21+



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www.armitage-shanks.co.uk



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For further information on any products; please call **0870 122 8822** or visit www.armitage-shanks.co.uk

The Armitage Shanks website provides links to our full technical on line catalogue – the UK's largest collection of bathroom and washroom products for specification. Log on to download detailed product drawings, BIM drawings and images or create your own specification using our specification system.

Technical helpline 0870 122 8822







Designed to defend

Pathogenic bacteria evolve fast. Infection control specialists know that winning the fight against them demands microscopic attention to detail.

This is why we design our products from the inside out. We explore in depth how the materials they are made of can inhibit the growth of harmful bacteria. We examine how to manage the flow of water so bugs cannot grow or be transmitted easily. And we look closely at the structure of our fittings so they are easy to dismantle and disinfect.

The MARKWIK 21+ and CONTOUR 21+ solutions from Armitage Shanks have been developed using this rigorous, scientific approach. Our most advanced healthcare solutions yet, they are the products of years of experience and research.

For healthcare professionals, they represent a powerful new ally in the fight against infection.

A proud history of healthcare innovation

From its beginnings in 1817, Armitage Shanks has always gone to great lengths to produce sanitaryware of exceptional quality. This attention to detail has led to numerous industry 'firsts' in healthcare.







1817

Armitage Shanks established



1911

Healthcare pioneers

Armitage Shanks was the first company to produce products specifically for hospitals.

1967

Rimless technology

A new flushing technology that flushed without a rim, making toilets easier to clean with no hidden spaces for bugs to collect and multiply. 2005

MARKWIK

On introduction, this brassware range set the standard for healthcare fittings. 2014

Antimicrobial bioguard outlet

This innovation uses an antimicrobial lining to reduce the risk of pseudomonas in healthcare environments.

1848

Mass production of sanitaryware

Following the 1848 Public Health Act, we stepped up mass production of ceramic basins. At that time, UK life expectancy at birth was just 40 years. Together with a better understanding of sanitation, improved sanitaryware played a role in raising it toward today's level of 80+ years.



1912

Vitreous china

This new glaze was adopted from tableware to create a non-porous and more easily cleaned surface compared to the fireclay it replaced.



1993

Doc M packs

Armitage Shanks manufactured the first pack designed to comply with access regulations for the less-abled. 2007 CONTOUR 21

CONTOUR 21

The full CONTOUR 21 healthcare range is introduced for the first time.

2017

200 YEARS

Launch of the next generation of MARKWIK 21+ and CONTOUR 21+ – taking Armitage Shanks into the next 200 years of being at the forefront of healthcare sanitary innovation.

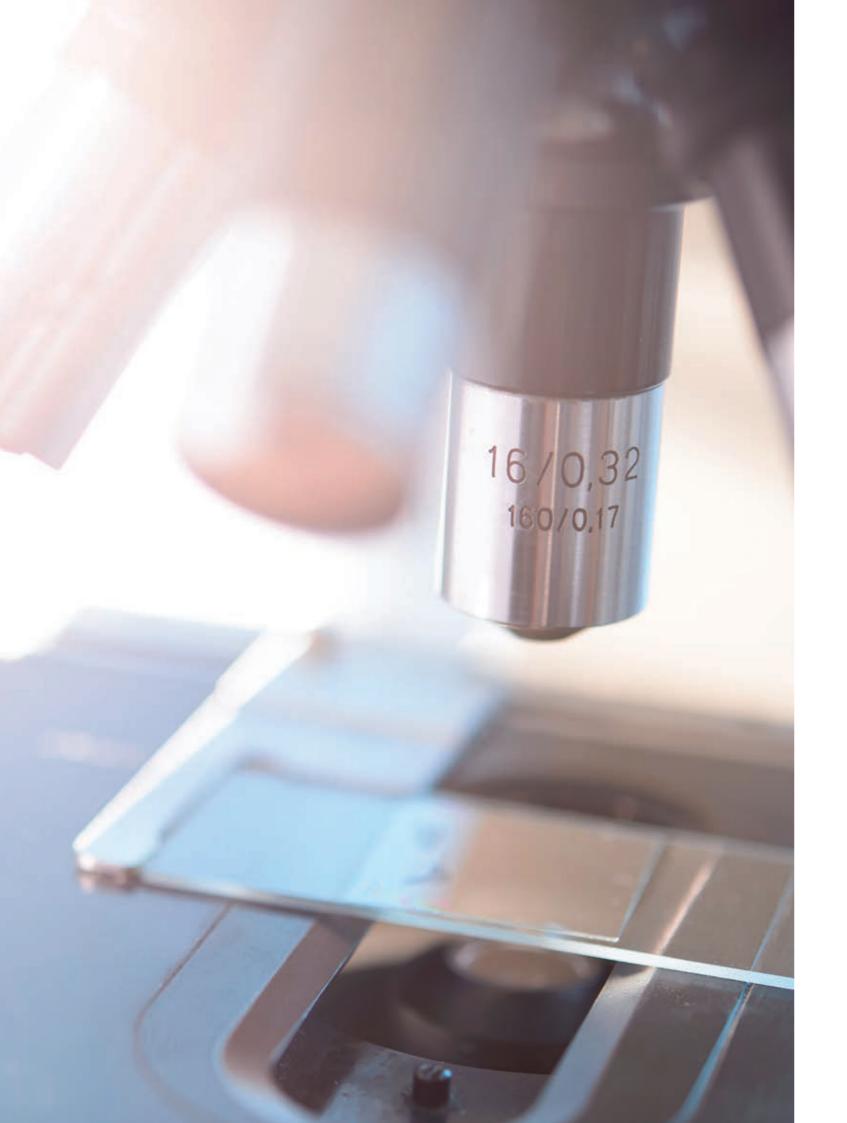












Science first

Throughout our history, science has been the spur for our innovations in healthcare. When we design new products, we work with experts to understand every aspect of the challenge.

From big picture to fine detail

The infection control environment is constantly changing. Only by understanding this 'big picture' is it possible to design effective methods for preventing the spread of pathogens. One of the most important messages from the science of infection control is that there is no single solution – the risks can only be minimised when products work well together.

The attention to this important detail is evident in the MARKWIK 21+ and CONTOUR 21+ solutions range. To take just one example, the patented CONTOUR basin featuring Hydrofin technology is designed to work with the latest MARKWIK tap to significantly reduce splashing.

Armitage Shanks products are all designed to work in combination, both to meet regulations and to provide the highest levels of infection control.

Infection control: The 21st century battleground in healthcare

Bacteria are everywhere. Many are beneficial and pose little threat to a healthy individual. In a healthcare environment, however, this changes. Patients who are ill or recovering have compromised immune systems. That's why we've worked with healthcare professionals to identify where pathogenic bacteria are most likely to be transferred.

We designed clinical basins that minimise splashing and with back outlets that help reduce the risk of the aerosolisation of bacteria. We've also moved the trap and pipework to behind the panel, making for a more hygienic solution. And we've even done the same for deck mounted mixers, which are traditionally seen as too challenging.

Poor drainage within a basin itself or its pipework can lead to the growth of biofilm. So we've redesigned the shape of the basin so it drains more efficiently and the waste pipe behind the panel is vertical ensuring water is cleared instantly. We've also explored ways to reduce the amount of water left within the tap where bacteria might grow, by increasing the velocity of water running through it. We've also developed fittings that make it more difficult for bacteria to gain a foothold and we've cut down on the amount of plastics that bacteria might feed on.

The research behind our developments

Our partners

We have been working in partnership with leading scientists and specialists to develop CONTOUR 21+ and MARKWIK 21+.

Goodwin Hartshorn

Industrial designers at Goodwin Hartshorn helped us develop our revolutionary anti-splash Hydrofin for the CONTOUR 21+ basin.

Armitage Shanks Research and Development

Our Wittlich factory in Germany has been at the forefront of product innovation in taps and fittings, developing the first ever ceramic disc cartridge in 1969. Today we have a dedicated team of 32 product engineers across Germany and the UK, focused on product development, including the new MARKWIK 21+ fittings.

University research

Armitage Shanks has worked extensively with universities to increase its understanding of biofilm and bacteria growth.

Armitage Shanks has also used a number of tests that have taken place including measuring the aerosol effect of WC flushing, the cleanability of WCs and testing the new anti-splash technology.



Evolving threats

At Armitage Shanks, we constantly research the risks that water and sanitation systems can present in healthcare facilities. Recent findings confirm that more sophisticated solutions are needed to deal with the fast-changing threat environment.



The potential for water to be both a habitat and a delivery medium for harmful bacteria is well known. What we are discovering now is how tenacious and persistent certain pathogens can be, particularly in the way they develop biofilm. It's important for healthcare professionals to understand this and equip their facilities accordingly.





Biofilm

Bacteria excrete a layer called biofilm to protect their growth. This is a particular problem with pseudomonas aeruginosa, which is both resistant to antibiotics and associated with serious illnesses. Biofilm can build up on surfaces and within appliances.



Bacteria build-up

Unless taps and mixers can be dismantled and autoclaved, they are at risk of long-term colonisation by pathogens and biofilm build-up.



Hidden surfaces

If fixtures are difficult to clean, bacteria can proliferate in areas that are hard to reach and hard to see, for example under a WC rim.





Back outlet basin

If drainage water remains in pipework immediately behind the basin there is an opportunity for harmful bacteria to grow.



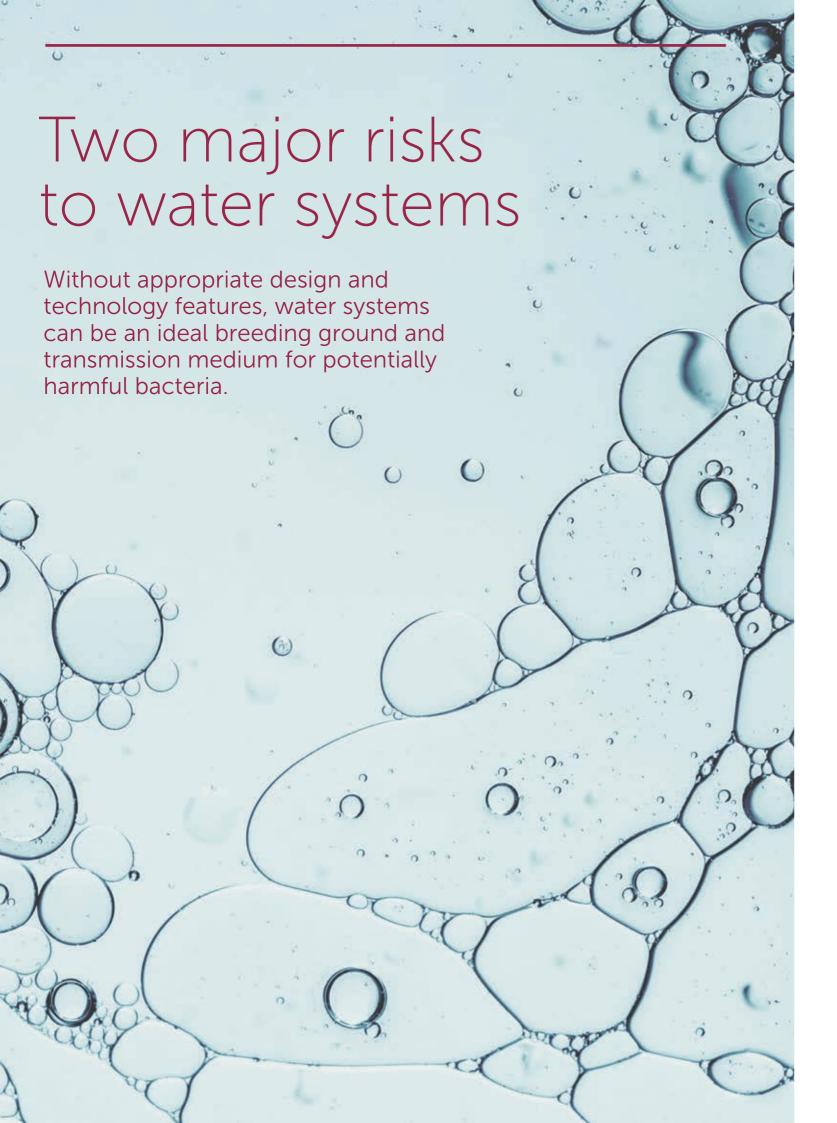
Splashing

When water splashes out of basins when water is running, it can spread bacteria up to two metres away, potentially contaminating drug trays, clinical tools and patients themselves.

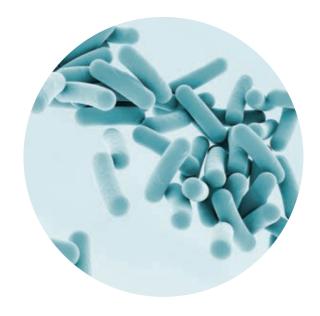


Stagnant or pooling water

If appliances are not used regularly there is a high risk of bacteria multiplying in pooling water. Even a day without use creates a risk of biofilm build-up. It can cost hospitals huge amounts of money in personnel and heating costs flushing taps and showers to prevent this.







Legionella

These bacteria, which can cause Legionnaire's disease, colonise water systems. Legionella proliferate at temperatures between 20°C and 45°C and careful system design and risk assessment is needed to manage this pathogen. Control measures include:

- Sood overall maintenance and hygiene for water systems
- Appropriate temperatures: cold water should be delivered to the point of mixing below 20°C, and hot water above 55°C
- Cleaning of outlets, including autoclaving detachable spouts and dismantling taps for full disinfection
- ▶ Hot water should be stored at or over 60°C and hot and cold supplies should be kept separately
- In high-risk areas, fittings should have thermal disinfection capability and the use of medical filters should be considered

Pseudomonas aeruginosa

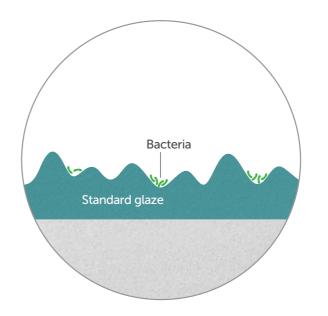
Pseudomonas aeruginosa is a common bacterium that is able to thrive on most surfaces. While healthy individuals can usually fight it off, immune-deficient or immunosuppressed people, can be vulnerable to pseudomonas. This bacterium can thrive in water systems, especially the last two metres before the outlet, which means pipes, isolation valves, strainers and the tap itself can become contaminated. Protecting a facility against pseudomonas needs a range of actions, which include:

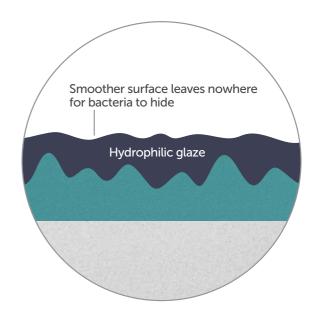
- Regular checks of the water supply
- Frequent flushing of water systems
- Cleaning of outlets
- Infection control procedures where appropriate
- The use of medical filters in high-risk areas

Supporting the battle against infection

Introducing SmartGuard and SmartGuard+
– our innovative antimicrobial glaze
that offers built-in product protection
against bacteria.







Standard Glazes

Standard glazes are often surprisingly uneven when examined under a microscope giving an almost textured appearance. This can leave pockets for bacteria to grow in as well as being more difficult to clean.

SmartGuard and SmartGuard+

SmartGuard is an antimicrobial agent that is incorporated into the ceramic glaze. It contains ionic silver, which is proven to inhibit the growth of bacteria. As the antimicrobial is built into the glaze, the effects will last the lifetime of the product providing protection day in, day out.

To provide an even more hygienic surface we have introduced SmartGuard+. This combines the benefits of SmartGuard antimicrobial glaze with a far smoother glass like surface.

The "textured" appearance of standard glazes has the dual effect of reducing the efficiency of water drainage from the surface and gives more opportunities for bacteria to adhere to the surface and grow. During the firing process, the additional thin surface layer on the SmartGuard+ flows freely and fills any microscopic indentations in the substrate.

This additional glaze has hydrophilic properties incorporating a very low contact angle with water compared to standard glazes. Effectively water is "pulled" into closer contact with the surface, increasing the surface area being activated by the silver ions and increasing the antimicrobial effect of the glaze surface, as well as promoting a route by which the water can get underneath the dirt – rather than passing over the top.

The clinical solution that leaves nothing to chance



CONTOUR 21+ basin

Infection control professionals know that hygiene depends on rigour.

That's why we developed our MARKWIK 21+ and CONTOUR 21+ ranges to work together – to meet regulations and provide the highest levels of infection control.

Our CONTOUR 21+ basin with SmartGuard+ has a smooth hydrophilic glaze containing antimicrobial additives, and this, together with an innovative shape, makes it our most advanced basin for healthcare yet.

1. Anti-splash design

The CONTOUR 21+ basin features our patented Hydrofin to significantly reduce splashing.

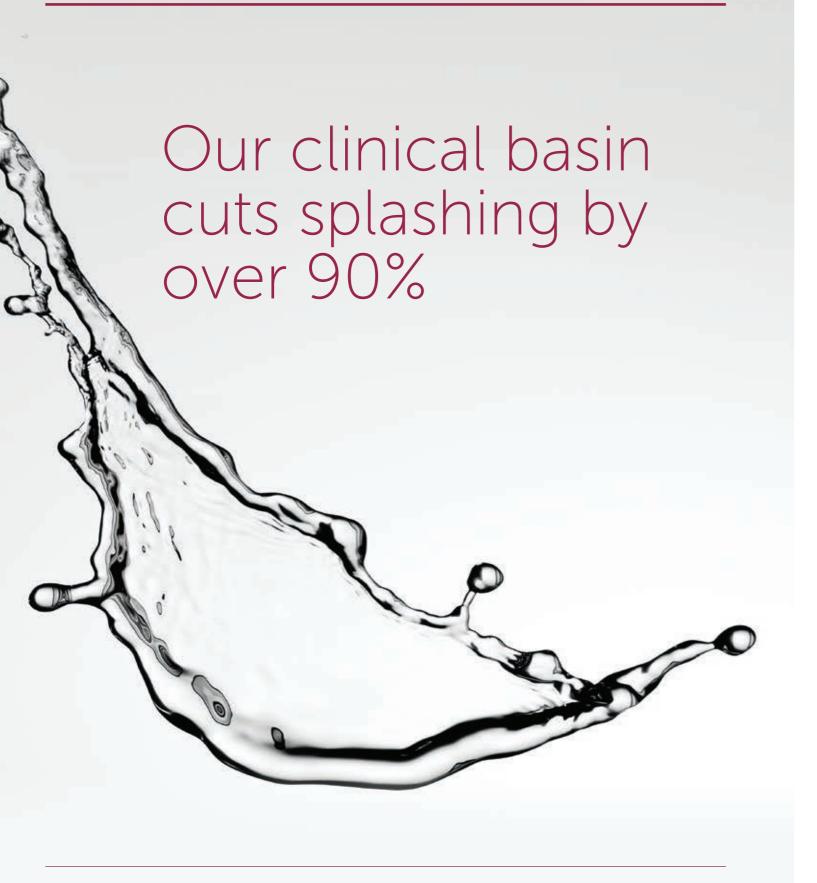
It is fully effective when paired with the MARKWIK 21+ mixer. The basin itself has been developed in partnership with Goodwin Hartshorn, using fluid dynamics to optimise the removal of water and debris.

2. High-tech hygienic surface

Our healthcare ceramics use an extra-smooth hydrophilic glaze – SmartGuard+ – making it easier for water to drain off and harder for bacteria to adhere. SmartGuard+ is an ionic silver antimicrobial additive, which helps prevent the build-up of biofilm. This protection lasts for the lifetime of the product, making cleaning easier and reducing the threat of cross-contamination.

3. Better drainage

Developed from CFD experts at Sheffield Hallam University, CONTOUR 21+ features a design that improves flow and reduces water retention. A simplified waste assembly removes the "steps" and hanging points that can lead to pooling. It enables water to drain away quickly and smoothly.



If there is bacterial flora in the basin, it can be imperceptibly splashed onto surrounding surfaces – particularly during hand washing.

Standard hospital basin risks

Our research shows that with standard hospital basins, running water can splash onto surrounding floors and surfaces. These splashes have been measured up to two metres away from the basin, potentially falling on beds, clothing and hospital equipment.



Unique fin design

It's important that washing facilities reduce opportunities for the transfer of bacteria within basins. That's why the CONTOUR 21+ range incorporates our unique Hydrofin which is moulded into the ceramic and cuts splashing by over 90%.



Reduced splash

The Hydrofin design, in combination with the larger surface area of the basin, means that water hits at a shallower angle and its splash is deflected to either side of the basin. It is fully effective when paired with the MARKWIK 21+ mixer.





Better drainage

Water systems are complex. Successful infection control depends on a close examination of every potential opportunity for harmful bacteria to grow and spread. We've combined the latest medical knowledge, materials, science and design techniques to produce a range of innovations that help create safer healthcare environments.



When designing basins for healthcare use, effective water drainage is one of the most important issues to address.

the basin design to improve water flow and

drainage. Thinner, more angular rims also

aid drainage and prevent standing water.



Less to clean

Basin design features a smaller back area to reduce the surface area that needs cleaning. The larger bowl area helps contain splashes.



Our back outlet basins, can be fitted by one person in seven minutes

• Efficient trap design

An air admittance valve in the CONTOUR 21+ trap prevents pressure build-up from forcing trap water into the basin. The trap material also contains an antimicrobial additive to help prevent pathogen growth. Armitage Shanks is the only manufacturer to include this feature as standard.

Easier to install

Fixings are made of stainless steel for chemical resistance and anti-corrosion. Simplified, "click to fit" attachments and a flexible waste mean installation can be carried out by one person. Our back outlet basin, reduces fitting from eighteen minutes for two people down to seven minutes for one person.





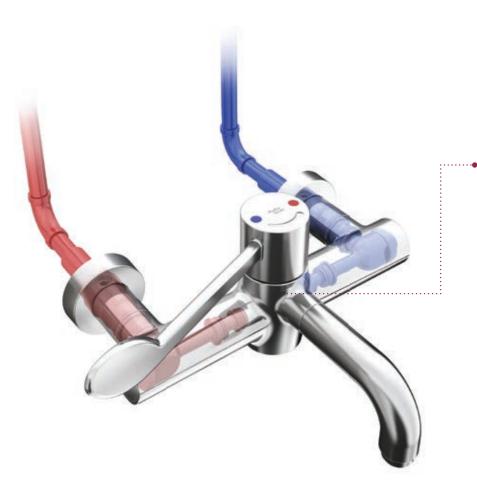
MARKWIK 21+ mixer

Research-driven innovation has created a new healthcare standard for taps and mixers, with a range of innovative patent-pending features, from autoclave-ready spouts to built-in thermal cleansing features.





*Maximum inlet supply temperature during use is 65 degrees.



Minimal dead-legs

By mixing water closer to the point of discharge, MARKWIK 21+'s integral thermostat minimises 'dead leg' areas of warm water where bacteria can grow. This is compliant with HTM 04-01 Part A, which states that thermostatic mixing devices should be fitted directly to the outlet or integral with it.



that MARKWIK 21+ mixers
that are paired with electronic
time-flow sensor controls are
flushed through with water at
least every 24 hours, helping to
prevent the formation of bacteria.





Thermal cleanse

MARKWIK 21+ mixers are designed for thermal disinfection and are equipped with a built-in thermal cleansing feature. This allows the maximum blend temperature stop to be overridden, using the hot water supply temperature in the system, for the most effective cleanse process possible.



Hydropurge

The Hydropurge system in MARKWIK 21+ mixers flushes any debris and waste that gets into the system during installation, reducing the high risk of infection when new facilities are opened. The same port can be used for inlet water sampling.







flow straighteners that can become contaminated over time and provide a haven for harmful bacteria.

MARKWIK 21+ mixers feature BioGuard a patent-pending copper lined outlet that helps prevent Biofilm attachment and reduces the risk of pseudomonas infection.





Clean water on demand

All MARKWIK 21+ mixers are compatible with Pall Medical filters, so sterilising-grade water can be made available on demand.



*Sensor position shown here for illustrative purposes.





Attention to detail

HTM 04-01 Part C notes that complex tap assemblies can be more prone to P. Aeruginosa colonisation. With a simplified design and the majority of polymers removed, MARKWIK 21+ holds a lower static water volume and has a minimised bio-footprint with fast cooling.



Water retained within a tap outlet can become heavily contaminated and in turn contaminate a high number of users.



Thermostatic cartridge

Thermostatic cartridge features a one-piece design for ease of changing and cleaning, and uses minimal plastics, reducing bacteria build-up compared with other designs.

Fewer polymers, more metal

To discourage bacteria, the MARKWIK 21+ cartridge is manufactured with more brass and less plastic. Where plastic is used, we have chosen grades that are less attractive to bacteria

MARKWIK 21+ has 52% less waterways* MARKWIK 21+ has 34% lower static water volume*

MARKWIK 21+ is over 85% brass reducing the polymer content by 66%

*Compared to existing product



The ultimate solution

The MARWIK 21+ deck mixer and CONTOUR 21+ basin combination is the first truly clinical deck mixer solution. The mixer is demountable for disinfection and maintenance, while the basin features a hidden trap behind a back outlet.



Bacterial flora can reach high levels in a basin's drain outlet. In many cases that flora can be multiresistant. Poor cleaning can lead to that bacteria being transferred to taps and spreading from there.



The MARKWIK 21+ deck mixer shown in an en-suite bathroom

First fully clinical deck tap

We are also bringing the advantages of clinical hand basin hygiene to general hospital areas – such as wheelchair-accessible toilets and patient en-suites – with the detachable MARKWIK 21+ thermostatic mixer and basin.

In these areas, wall-mounted mixer may not be accessible, so a deck-mounted solution is needed. However, traditional deck mixers can be hard to clean and wash basins with exposed traps can be less hygienic.

The first truly clinical deck mixer solution



Fully demountable

Every detail of our deck tap is designed to remove risks.

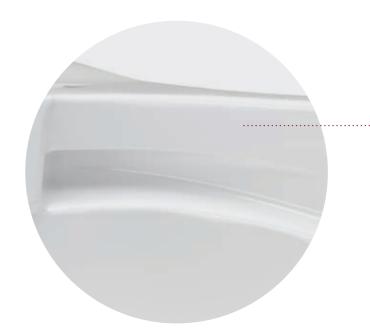




CONTOUR 21+ WCs

Featuring rimless design and antimicrobial surfaces, our latest WC helps create the most hygienic healthcare environments possible.



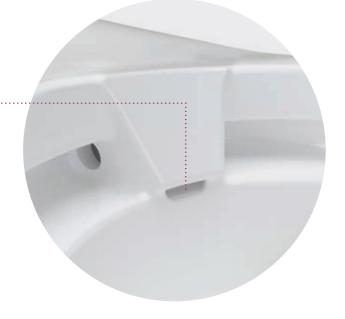


• Rimless design

Traditional WC rims provide an ideal habitat for bacteria. The design of CONTOUR 21+ WCs removes this haven for pathogens whilst making the units easier and quicker to clean.



The injector slot and increased visible space within the bowl make it easier to see where cleaning is needed because there are no nooks and crannies for harmful bacteria to hide.



Improved flush

CONTOUR 21+ is designed so that water is channelled over more of the bowl, helping to keep it cleaner.







More hygienic fixing •

Fixation for wall-hung pans has been redesigned with hidden fixation. This gives completly smooth sides, which are much easier to clean.





Longer outlet pipe

A longer outlet pipe on extended bowl versions makes installation easier and allows for a simple, quick inspection of water connection joints.

Back-to-wall fixation uses dual floor fixings to ensure greater stability of the pan.



Toilet seats and grab rails

Durable thermo-set toilet seats with seat retainers and stainless steel hinges give the feeling of quality, strength and stability and ensure that the seat doesn't move during use or lateral transfer from a wheelchair. Seats are made from urea, a naturally hygienic material.



- ▶ Grab rails are made from 33mm polyester-coated aluminium (except stainless steel and chrome rails), and are available in a variety of colours to provide contrast for the visually-impaired: white, blue, grey, charcoal, or stainless steel. The robust hinged arm support that folds up out of the way is capable of supporting 200kg. Grab rails also feature concealed fixings for added hygiene.
- Both of the above products will not be damaged during hydrogen peroxide vapour cleansing.





For the safest healthcare environment

With the MARKWIK 21+ and CONTOUR 21+ ranges, specifiers and infection control professionals can create clinical sanitary facilities with the highest levels of protection against healthcare-acquired infections.

Fully compliant

Our sanitaryware ensures your facilities comply with the latest performance requirements for infection control, environmental performance and disabled access.



Healthcare Document	Title/area covered	Covers
HBN 00-02	Sanitary Spaces	Guidance on designing bathrooms, shower rooms, changing areas and WCs in healthcare settings
HTM 04-01 PART A	Safe water in healthcare premises Part A: Design, installation and commissioning	This current review and update of HTM 04-01 is intended to move users of the document towards a holistic management of water systems via Water Safety Groups (WSGs), Water Safety Plans (WSPs) and other initiatives
HBN 00-09	Infection control in the built environment	This guidance, aimed at all providers of NHS care, discusses the various stages of a capital build project from initial concept to post-project evaluation. It highlights the major infection prevention and control (IPC) issues and risks to address at each particular stage to achieve designed-in IPC
HBN 00-10 PART C	Sanitary Assemblies	Guidance in sanitary assemblies for England, Wales and Northern Ireland
HTM64	Sanitary Assemblies	Guidance in sanitary assemblies for Scotland



Designed for sustainability

From the way they are manufactured to their performance in use, MARKWIK 21+ and CONTOUR 21+ products are designed to reduce environmental impacts, help you meet sustainability goals and achieve high BREEAM and LEED scores.

- Efficient manufacturing. More than 80% of wastes (clay effluent and fired pieces not making the relevant grade i.e. pitchers) are recycled into bricks, roof tiles, and wall & counter surfaces.
- ▶ Reduced waste. Introduced in 2006, a glaze filtration system reduces waste by 900 tonnes per year and cuts discharge by 12,000m³ each year.
- ▶ Less water. We design our products to use the optimum amount of water and eliminate unnecessary waste. Many of our WCs flush on low dual flush water volumes and mixers and taps are regulated. Our sensor mixers stop water flow after a preset time to reduce water use.

Built to last

MARKWIK 21+ and CONTOUR 21+ are manufactured to stand up to the rigorous cleaning regimes in healthcare facilities. All sanitaryware is finished in a high performance glaze for long life and colour retention.

Our products offer long guarantees:

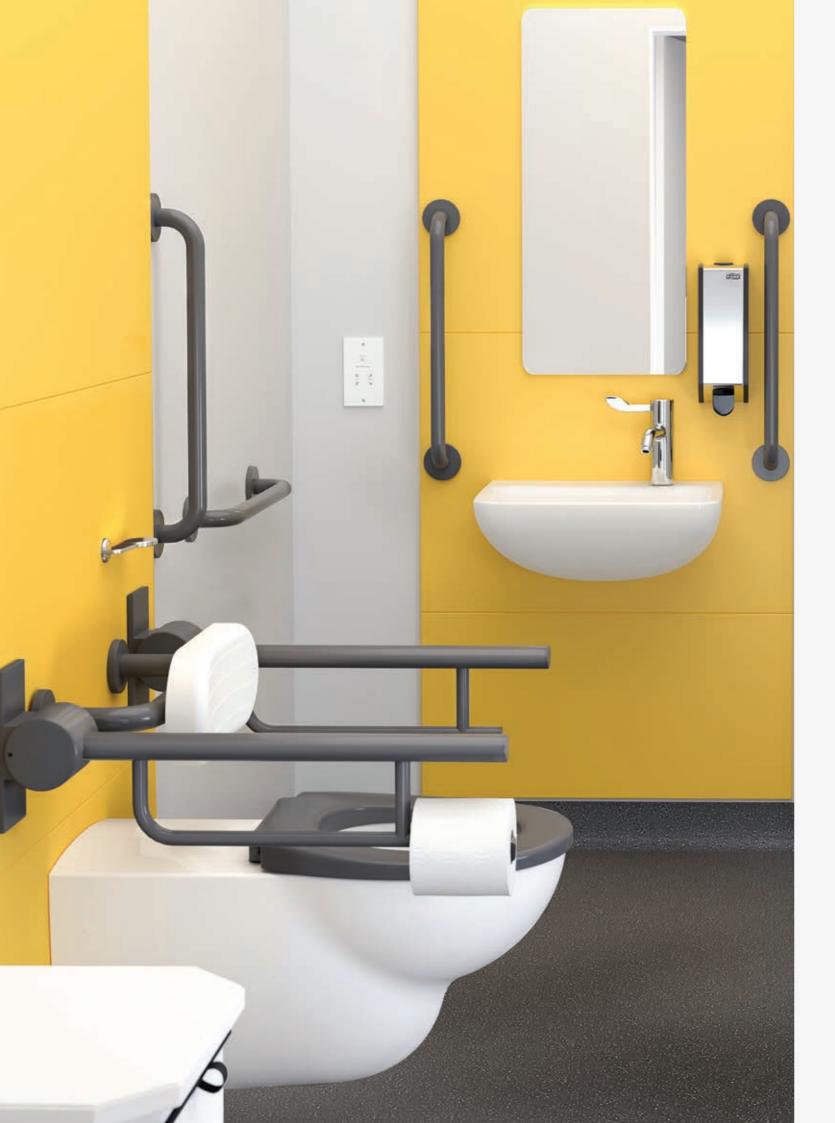


All mixers use seals that prevent damage by commercial cleaning products.

Low maintenance

Minimising downtime is essential, so ease of cleaning and servicing is at the heart of our design philosophy. CONTOUR 21+'s organic designs allow for faster and effective cleaning while MARKWIK 21+ mixers can be easily serviced, or dismantled for autoclaving. Panel-mounted mixers can be serviced from the front, with no need to remove wall panels.





Hospital Products Exceptional Solutions for Hospital Bathrooms

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The following pages detail sanitary assembly solutions that meet government guidance and legislation.

Semi ambulant WC



S0435HY

CONTOUR 21+ 40cm back outlet basin with tap deck, RH.

A6696AA

MARKWIK 21+ Thermostatic basin mixer with demountable down arm support body, detachable spout and copper inlets.

S0440HY

CONTOUR 21+ Raised height rimless back-to-wall WC pan standard projection.

S4066RN

CONTOUR 21 Top fix toilet seat in charcoal with retaining buffers.

S6361RN

650mm hinged drop in charcoal.

S6363RN

Toilet roll holder in charcoal.

S6454RN

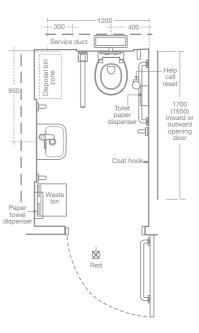
5 x 600mm grab rails in charcoal.

S4504MY

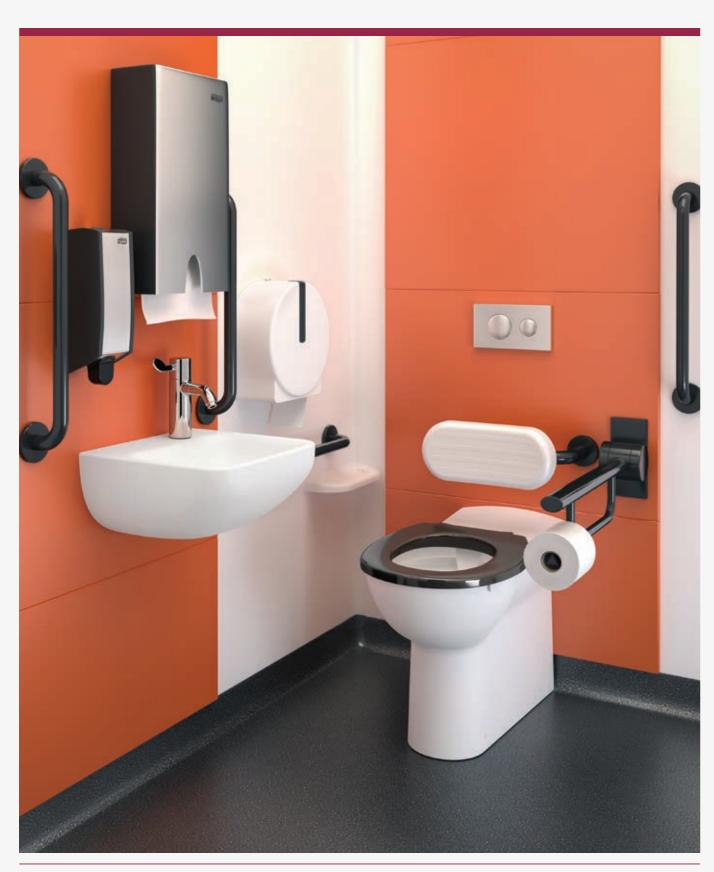
Contemporary flushplate.

S364367

Conceala 2 cistern.



Independent wheelchair WC



S0435HY

CONTOUR 21+ 40cm back outlet basin with tap deck, RH.

A6696AA

MARKWIK 21+ Thermostatic basin mixer with demountable body, detachable spout and copper inlets.

S0437HY

CONTOUR 21+ Raised height rimless back-to-wall WC pan – 70cm projection.

S4066RN

CONTOUR 21 Top fix toilet seat in charcoal with retaining buffers.

S688467

Back rest cushion.

S6481RN

CONTOUR 21 Back rest rail in charcoal.

S6361RN

1 or 2 x 650mm hinged drop down arm support in charcoal.

L6363RN

Toilet roll holder in charcoal.

S6454RN

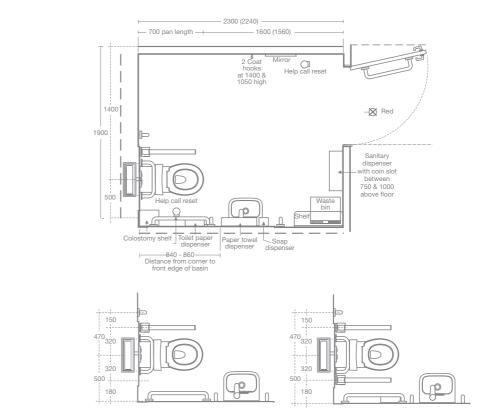
4 x 600mm grab rails in charcoal.

S4504MY

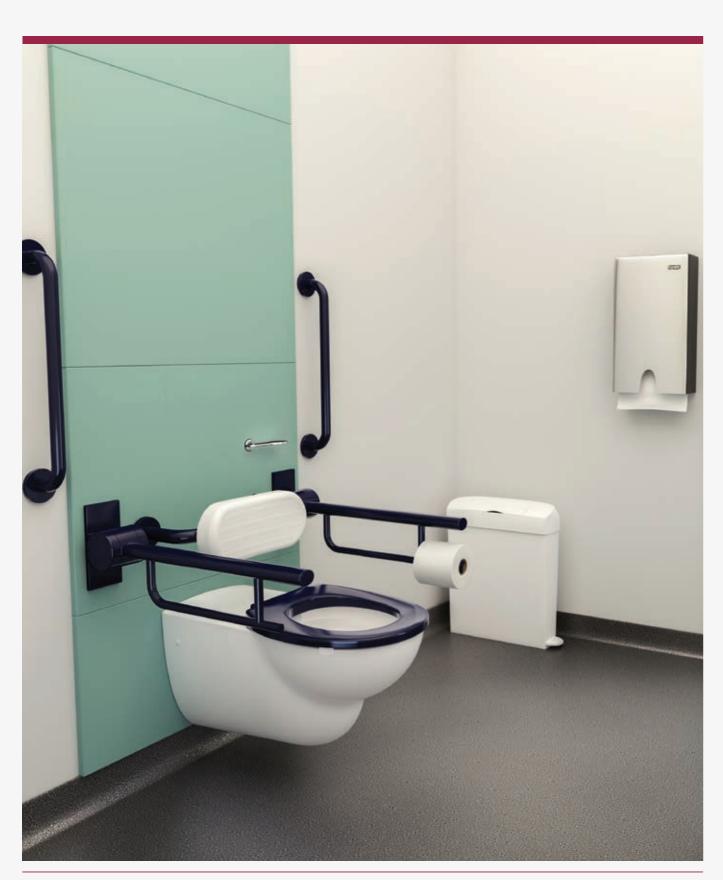
Contemporary flushplate.

S364367

Conceala 2 cistern.



Assisted WC (assisted ambulant disabled)



S0432HY

CONTOUR 21+ 50cm back outlet basin with tap deck, RH.

A6696AA

MARKWIK 21+ Thermostatic basin mixer with demountable body, detachable spout and copper inlets.

S0441HY

CONTOUR 21+ Rimless wall hung WC pan – 70cm projection.

S406636

CONTOUR 21 Top fixed toilet seat in blue with retaining buffers.

S688467

Back rest cushion.

S648136

CONTOUR 21 Back rest rail in blue.

S636136

2 x 650mm hinged drop down arm support in blue.

S636336

Toilet roll holder in blue.

S645436

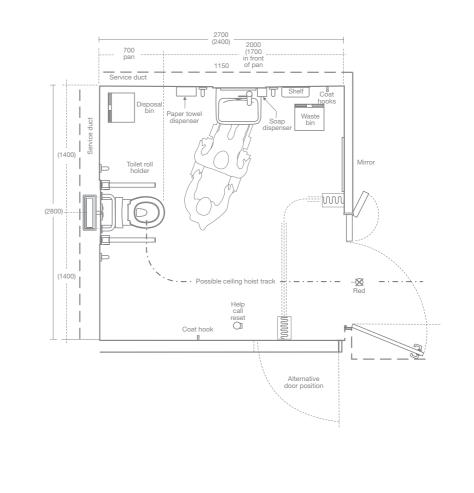
4 x 600mm grab rails in blue.

S362067

Conceala 2 cistern.

S4516AA

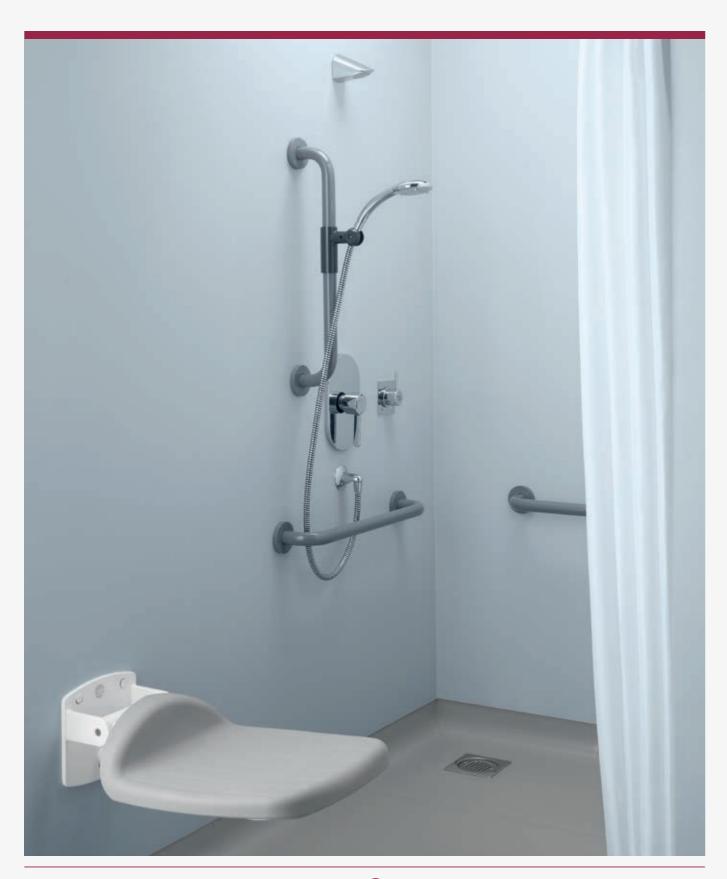
Spatula lever.







Ambulant shower room



A4129AA

CONTOUR 21 Built in thermostatic sequential shower.

B9304AA

Shower handset.

E4745AA

Shower hose.

S6477LJ

Adjustable handset holder in grey.

L6919AA

Shower diverter.

E4705AA

Shower wall elbow.

S6632XK

Shower seat in grey.

ostatic S9313AA

Anti vandal shower fixed

shower head.

S6454LJ

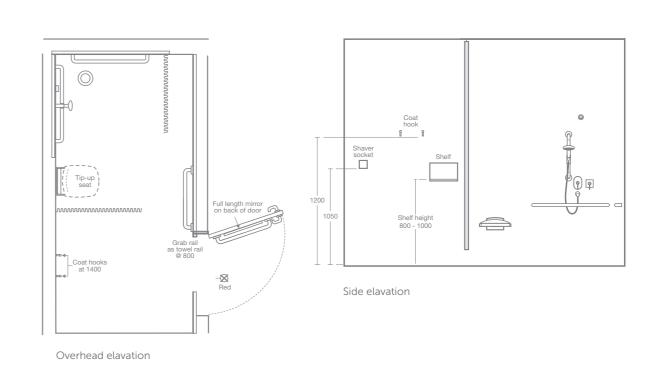
5 x 600mm grab rails in grey.

S6751AC

Shower curtain rail.

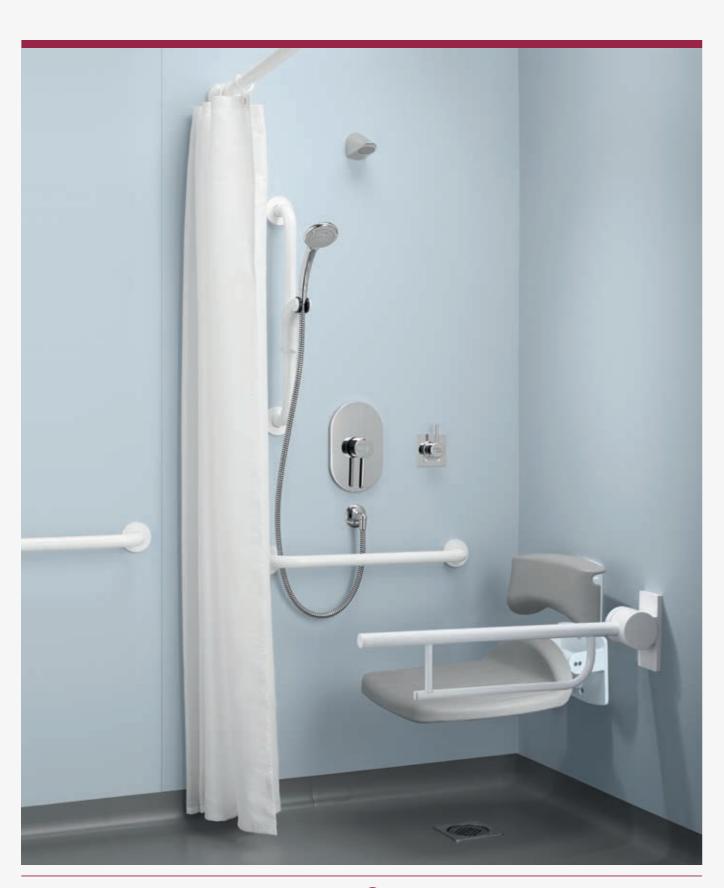
S675001

Shower curtain.





Independent wheelchair shower room



S0435HY

CONTOUR 21+ 40cm back outlet basin with tap deck, RH.

A6696AA

MARKWIK 21+ Thermostatic basin mixer with demountable body, detachable spout and copper inlets.

S0441HY

CONTOUR 21+ Rimless wall hung WC pan – 70cm projection.

S4066AC

CONTOUR 21 Top fix toilet seat in white with retaining buffers.

S6361AC

2 x hinged drop down arm support in white.

S6363AC

Toilet roll holder.

S688467

Back rest cushion.

S6481AC

Back rest rail in white.

A4129AA

CONTOUR 21 Built in thermostatic sequential shower.

B9304AA

Shower handset.

E4745AA

Shower hose.

S6477AC

Adjustable handset holder.

L6919AA

Shower diverter.

E4705AA

te. Shower wall elbow.

S6632XK

Shower seat in grey.

S9313AA

Anti vandal shower fixed shower head.

S6454AC

7 x 600mm grab rails in white.

S6751AC

Shower curtain rail.

S675001

Shower curtain.

S6635XK

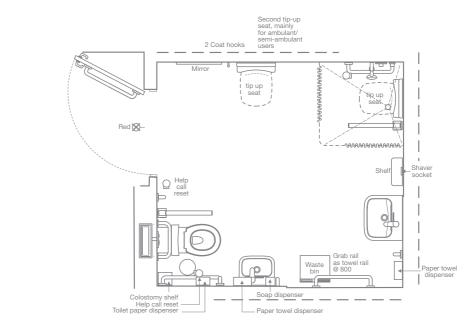
Shower seat back support in grey.

S6457AC

1 x 800mm grab rail in white.

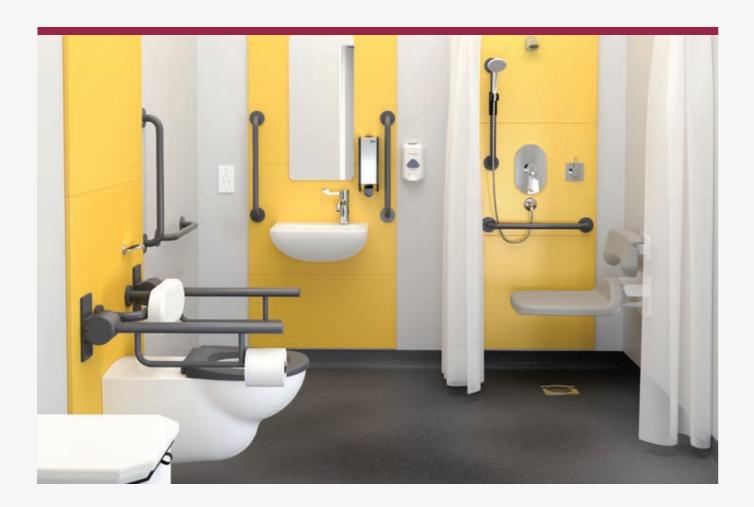
B1364AA

Category 5 hose retainer.





Assisted shower room



S0441HY

CONTOUR 21+ Rimless wall hung WC pan – 70cm projection.

S4066RN

CONTOUR 21 Top fix toilet seat in blue Single lever one taphole with retaining buffers.

S6361RN

2 x 650mm hinged drop down arm support in charcoal.

S6363RN

Toilet roll holder in charcoal.

S6454RN

6 x 600mm grab rails in charcoal.

S0431HY

CONTOUR 21+ 50cm back outlet basin with tap deck, LH.

S6696AA

CONTOUR 21 sequential thermostatic basin mixer.

A4129AA

CONTOUR 21 Built in thermostatic sequential shower.

S6477RN

Adjustable handset holder in charcoal.

L6919AA

Shower diverter.

S6751AC

Shower curtain rail.

S675001

Shower curtain.

E4705AA

Shower wall elbow.

E4745AA

Shower hose.

B9304AA

Shower handset.

S9313AA

Anti vandal fixed shower head.

S6481RN

CONTOUR 21 Backrest rail in charcoal.

S688467

Backrest cushion.

S6632XK

Shower seat in grey.

S6635XK

Shower seat back support in grey.

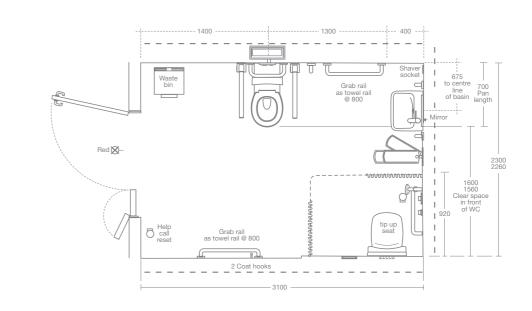
B1634AA

Category 5 hose retainer.

S362067

S4516AA Spatula lever.

Conceala 2 cistern.



Clinical wash station



S0444HY

CONTOUR 21+ 60cm back outlet basin.

A6682AA

MARKWIK 21+ Demountable panel mounted mixer with detachable spout.

En suite



S0432HY

CONTOUR 21+ 50cm back outlet basin with tap deck, RH.

A6696AA

MARKWIK 21+
Thermostatic basin
mixer with demountable
body, detachable spout
and copper inlets.

S0437HY

CONTOUR 21+ Raised height rimless back-to-wall WC pan - 70cm projection.

S406636

CONTOUR 21 Top fix toilet seat in blue with retaining buffers.

S6361AC

5 x hinged drop down arm support.

S6363AC

Toilet roll holder.

S688467

Back rest cushion.

S6481AC

CONTOUR 21 Back rest rail in white.

A4129AA

CONTOUR 21 Built in thermostatic sequential shower.

B9304AA

Shower handset.

E4745AA

Shower hose.

S6477AC

Adjustable handset holder in white.

L6919AA

Shower diverter.

E4705AA

Shower wall elbow.

S6454AC

2 x 600mm grab rails.

S4504MY

Contemporary flushplate.

S364367

Conceala 2 cistern.

S9313AA

Shower diverter.







(HBN) 00-10 (HTM 64) Additional Product Solutions

Contents

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The following pages detail products that meet the necessary requirements of (HBN) 00-10 and HTM 64.

Janitorial Unit JU

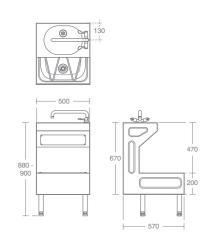
Clinical Procedure Disposal Units DU H





S6556MY

Janitorial unit with mixer tap in stainless steel.



S6563MY

Stirling right hand slop hopper in stainless steel.

S8270AA

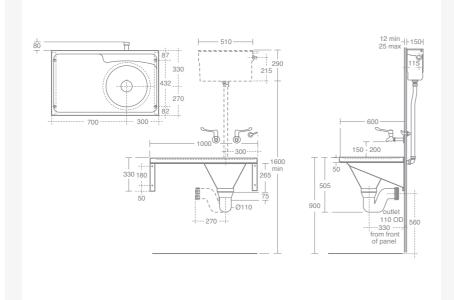
MARKWIK 21 Lever action bib taps.

B1684AA

100mm extension.

B1686AA

½" wall mount for concealed plumbing.



Plaster Sinks PS H



S6557MY

Clyde right hand plaster sink and work surface in stainless steel.

S8270AA

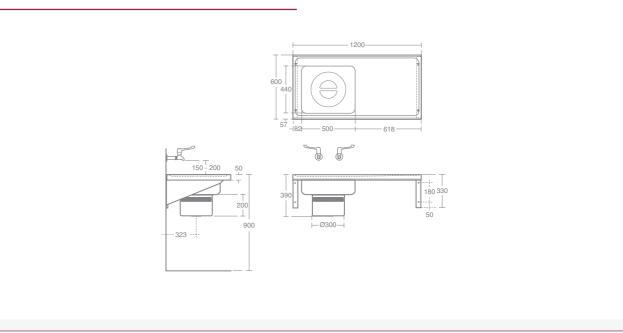
MARKWIK 21 Lever action bib taps.

B1684AA

100mm extension.

B1686AA

½" wall mount for concealed plumbing.







Scrub-up Troughs SU H



S2876MY

Firth scrub-up trough 240cm LH waste.

Variants

S2877MY

Firth scrub-up trough 240cm RH waste.

S2873MY

Firth scrub-up trough 180cm LH waste.

S2874MY

Firth scrub-up trough 180cm RH waste.

S2870MY

Firth scrub-up trough 80cm LH waste.

S2872MY

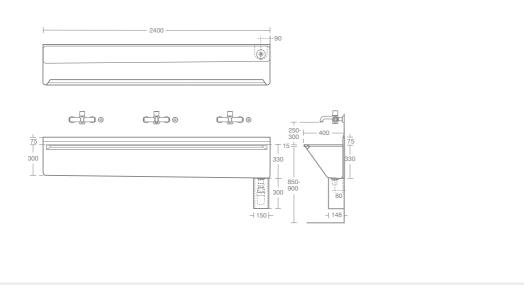
Firth scrub-up trough 80cm RH waste.

Accessories

A6684AA

MARKWIK 21+ Demountable panel mounted mixer with sensor and detachable spout.

RH - right hand LH - left hand



Clinical Sinks ST A (hospital pattern)







S5987MY

Doon sink 120cm, single bowl with left hand drainer, no tapholes and no overflow.

Variants

S5986MY

Doon sink 120cm, single bowl with left hand drainer, 2 tapholes and no overflow.

S5926MY

Doon sink 120cm, single bowl with right hand drainer, 2 tapholes and no overflow.

S5985MY

Doon sink 120cm, single bowl with right hand drainer, no tapholes and no overflow.

Accessories

S8270AA

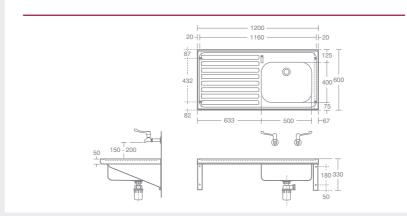
MARKWIK 21 Lever action bib taps.

B1684AA

100mm extension.

B1686AA

1/2" wall mount for concealed plumbing.



S5999MY

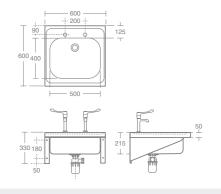
Doon 60 x 60cm sink.

S6000

No taphole option.

S8265AA

MARKWIK 21 High neck sink pillar taps.







Clinical basins (Hospital Pattern) – LB HM

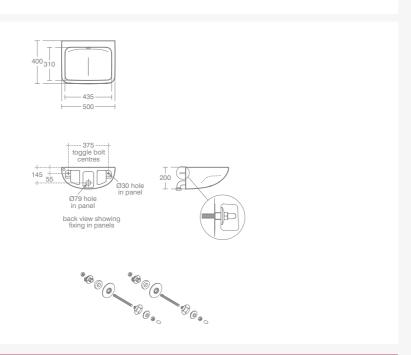


S0430HY

CONTOUR 21+ 50cm back outlet basin with Hydrofin.

S0444HY

CONTOUR 21+ 60cm back outlet basin with Hydrofin.



Personal washing basins – LB GL/M

Hand-rinse basins – LB GS (General Pattern)





S0432HY

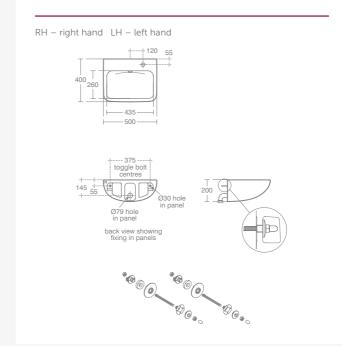
CONTOUR 21+

50cm back outlet basin with tap deck, RH.

S0431HY

CONTOUR 21+

50cm back outlet basin with tap deck, LH. General pattern back outlet with left and right hand tap options.



S0435HY

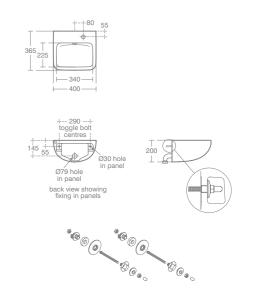
CONTOUR 21+

40cm back outlet basin with tap deck, RH.

S0433HY

CONTOUR 21+

40cm back outlet basin with tap deck, LH. General pattern back outlet washbasin with left and right hand tap options.







Urinals (hospital pattern 1)

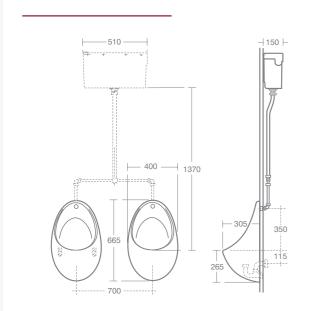
Urinals (hospital pattern 2 – waterless)

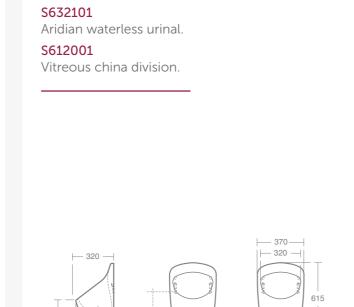




S611001 CONTOUR 21 Urinal. S6286AA

Back inlet spreader.





Urinals HygenIQ



S611901 CONTOUR 21 HygenIQ urinal. S6286AA

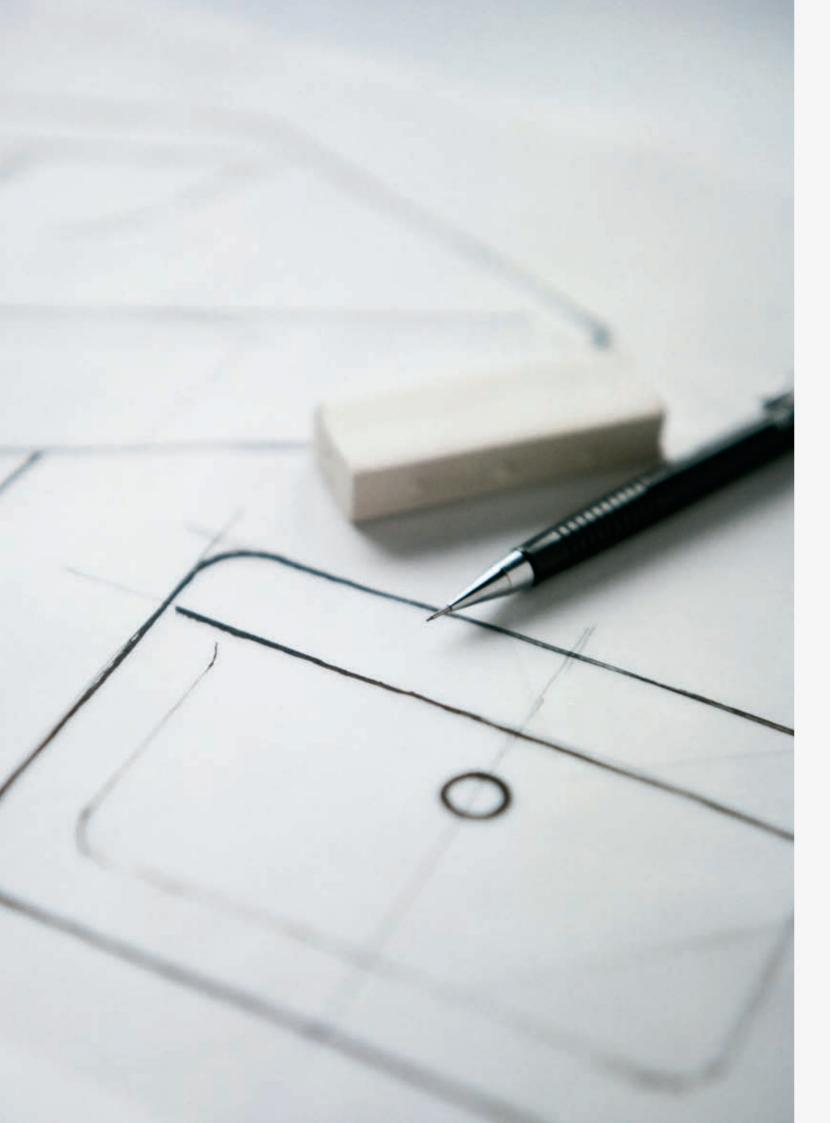
Urinal flush valve – panel mounted.

A4854AA

Sensorflow21







Technical Information Product Drawings, Specifications and Guarantees

Contents

Hospital Ceramics 68
Hospital Brassware 74



Hospital Ceramics

S0430HY

CONTOUR 21+

50cm back outlet basin.

Hospital pattern washbasin for clinical use

- Basin, for use with wall mounted mixer
- Patented anti splash "Hydrofin"
- SmartGuard+ antimicrobial glaze
- Concealed supply and waste with improved drainage minimises bacteria traps
- Non reservoir basin improves hygiene.

S038867

CONTOUR 21+ Basin fixation set.

S038667

CONTOUR 21+ Waste pack with Smart Guard for wall mounted basin.



S0444HY

CONTOUR 21+

60cm back outlet basin.

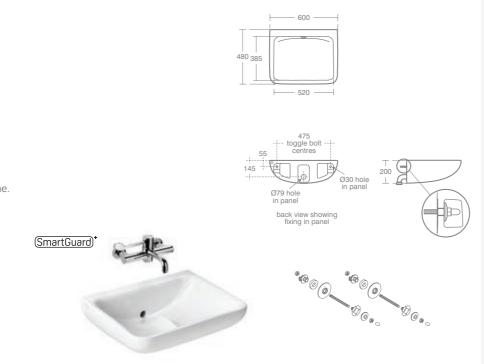
- Hospital pattern washbasin for clinical use
- Large basin, for use with wall mounted mixer
- Patented anti splash "Hydrofin"
- SmartGuard+ antimicrobial glaze
- Concealed supply and waste with improved drainage minimises bacteria traps
- Non reservoir basin improves hygiene.

S038867

CONTOUR 21+ Basin fixation set.

S038667

CONTOUR 21+ Waste pack with Smart Guard for wall mounted basin.



S0435HY

CONTOUR 21+ 40cm back outlet basin with tap deck, RH.

- General pattern back outlet washbasin with left and right hand tap options
- SmartGuard+ antimicrobial glaze
- Small compact size
- Concealed supply and waste with improved drainage minimises bacteria traps.
- Unique thermostatic basin mixer with demountable body and detachable spout
- Smooth easy to clean shape improves hygiene.

S038867

CONTOUR 21+
Basin fixation set.

S038767

CONTOUR 21+ Waste pack with Smart Guard for tap Deck Basin.

S0433HY

CONTOUR 21+ 40cm back outlet basin with tap deck, LH.

S038867

CONTOUR 21+ Basin fixation set.

S038767

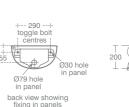
CONTOUR 21+ Waste pack with Smart Guard for tap Deck Basin.

RH – right hand LH – left hand

(SmartGuard)









S0432HY

CONTOUR 21+ 50cm back outlet basin with tap deck, RH.

- General pattern back outlet with left and right hand tap options
- SmartGuard+ antimicrobial glaze
- Small compact size
- Concealed supply and waste with improved drainage minimises bacteria traps
- Unique thermostatic basin mixer with demountable body and detachable spout
- Smooth easy to clean shape improves hygiene.

S038867

CONTOUR 21+ Basin fixation set.

S038767

CONTOUR 21+ Waste pack with Smart Guard for tap Deck Basin.

S0431HY

CONTOUR 21+ 50cm back outlet basin with tap deck, LH.

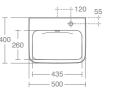
S038867

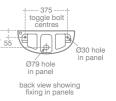
CONTOUR 21+ Basin fixation set.

S038767

CONTOUR 21+
Waste pack with Smart Guard
for tap Deck Basin.















Hospital Ceramics

S215401

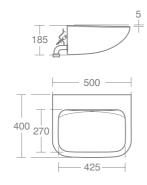
CONTOUR 21 50cm basin with back outlet, no overflow or tapholes.

S215501

CONTOUR 21

60cm basin with back outlet, no overflow or tapholes.

- Hospital pattern washbasin for clinical use
- Large basin, for use with wall mounted mixer
- Concealed supply and waste minimise bacteria traps
- Non reservoir basin improves hygiene.



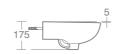


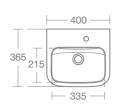
S2314HY

Portman21

40cm basin, no overflow or chain hole – one right hand taphole.

- General pattern washbasin for non-clinical use
- Small compact size
- Exposed supply and waste for easy maintenance
- Smooth easy to clean shape, improves hygiene.





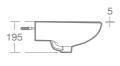


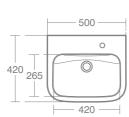
S2254HY

Portman21

50cm basin, no overflow or chain hole – one right hand taphole.

- General pattern washbasin for non-clinical use
- Medium size for extra washing capacity
- Exposed supply and waste for easy maintenance
- Smooth easy to clean shape.







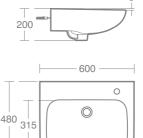
S2298HY

Portman21

60cm basin, no overflow or chain hole – one right hand taphole.

- General pattern washbasin for non-clinical use
- Medium size for extra washing capacity
- Exposed supply and waste for easy maintenance







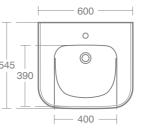
S216801

CONTOUR 21

60cm accessible basin – one centre taphole.

- General pattern washbasin for non-clinical use
- Unique design allows use from wheelchair
- Exposed supply and waste for easy maintenance
- Reservoir design for easy use.





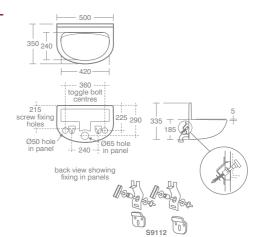


S214401

CONTOUR 21 back outlet 50cm

with upstand basin.

- Hospital pattern back outlet washbasin for clinical use
- Short projection basin with upstand, ideal where space is limited (e.g. corridors) for use with wall.







Hospital Ceramics

S0443HY

CONTOUR 21+

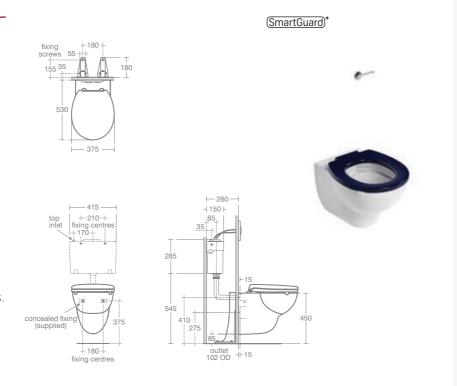
Rimless wall hung WC pan

- standard projection.
- Hospital pattern WC for clinical use
- SmartGuard antimicrobial glaze
- Improved Rimless technology
- Wall hung for easier floor cleaning with hidden fixation
- 4.5 litre water saving flush
- WC seat without lid in range of contrasting colours
- Seat retainers keep seat secure when transferring to WC
- SmartGuard+ antimicrobial glaze.

S406636

CONTOUR 21

Seat no cover with retaining buffers.



S0441HY

CONTOUR 21+

Rimless wall hung WC pan 70cm projection.

- Hospital pattern WC for clinical use
- SmartGuard antimicrobial glaze
- Wall hung for easier floor cleaning with hidden fixation
- Improved Rimless technology
- Padded back support for improved comfort
- Easier transfer from wheelchair to WC
- 4.5 litre water saving flush
- WC seat without lid in range of contrasting colours
- Seat retainers keep seat secure when transferring to WC
- SmartGuard+ antimicrobial glaze.

S406636

CONTOUR 21

Seat no cover with retaining buffers.



S0440HY

CONTOUR 21

Raised height rimless back-to-wall WC pan – standard projection.

- Hospital pattern WC for clinical use
- Rimless design eliminates potential bacteria hot spot
- Floor mounted, 46cm high for disabled users
- Concealed cistern minimises
- projection into the room
- 4.5 litre water saving flushSmartGuard+ antimicrobial glaze.

S406636

CONTOUR 21

Seat no cover with retaining buffers.







(SmartGuard)*

S0437HY

CONTOUR 21+

raised height rimless back to wall pan – 70cm projection.

- Hospital pattern WC for clinical use
- SmartGuard antimicrobial glaze
- Improved rimless technologyFloor mounted, 46cm high
- for disabled users
- Easier transfer from wheelchair to WC
- 4.5 litre water saving flush
- WC seat without lid in range of contrasting colours
- Seat retainers keep seat secure when transferring to WC
- SmartGuard+ antimicrobial glaze.

S406636

CONTOUR 21

seat no cover with retaining buffers.







A6682AA

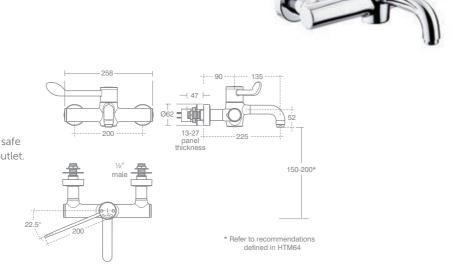
MARKWIK 21+

Demountable panel mounted mixer with detachable spout.

- Suitable for 15mm copper
- Single lever operation with large easy to use lever
- 200mm tap centres
- Easy access for maintenance
- No need to remove panels
- Horizontal spout
- Cleansing feature
- Insulate technology keeps fittings at body temperature and therefore safe
- With Bioguard Anti-Pseudomonas outlet.

A6735AA

Fixed spout option.



A6684AA

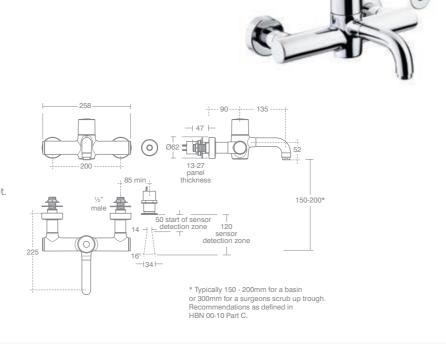
MARKWIK 21 +

Demountable panel mounted mixer with time flow sensor and detachable spout.

- Suitable for 15mm copper
- Sensor operated means no hand touch
- 200mm tap centres
- Easy access for maintenance
- No need to remove panels
- Horizontal spout
- Cleansing feature
- Insulate technology keeps fittings at body temperature and therefore safe
- With Bioguard Anti-Pseudomonas outlet.

A6737AA

Fixed spout option.



A6734AA

MARKWIK 21+

Deck mounted sequential thermostatic mixer.

- Suitable for 15mm copper
- Can be easily retro fitted on existing
- basins and sinks with 200mm tap centres
- Easy access for maintenanceNo need to remove panels
- Horizontal spout
- Cleansing feature
- Insulate technology keeps fittings at body temperature and therefore safe
- With Bioguard Anti-Pseudomonas outlet.



S8265AA

MARKWIK

High neck sink pillar taps.

- Deck mounted chrome plated taps with 15cm levers
- Suitable for closed fist operation.







S8270AA

MARKWIK

Lever action bib taps, including wall mounts and extensions.

- Wall mounted chrome plated taps with 15cm levers
- Suitable for closed fist operation
- HTM 64 TB H1.

B1686AA

Wall mounts not included.

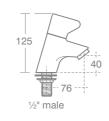


B8262AA

Piccolo 21 Pillar taps.

Suitable for 15mm copper.

- Deck mounted chrome plated brass taps with anti vandal indices
- Particularly suitable for contract use
- Suitable for closed fist operation
- HTM 64 TP5.

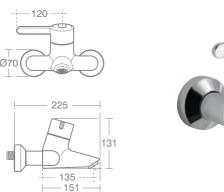




A4135AA

CONTOUR 21 Wall mounted thermostatic bath mixer.

- Single easy turn lever
- Sequential operation
- To ensure system hygiene and user safety the water is always drawn from first cold and then the hot supply
- 150mm tap centres
- Built in thermostat.



A6696AA

MARKWIK 21+

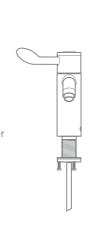
Thermostatic basin mixer with demountable body, detachable spout and copper inlets.

- Basin mixer with extended easy use lever particularly suitable for closed fist operation
- Suitable for healthcare and less abled bathrooms
- HTM 64 TP6
- Integral thermostat set at 41°C
- Sequential operation. To ensure system hygiene and user safety the water is always drawn from first cold and then the hot supply
- Can be fitted in standard pillar taps hole.

A6791NU

MARKWIK 21+

Fixing kit for use in conjunction with back outlet basin.







A4846AA

Sensorflow Spout 150/230 Compact.

- Features an automatic purge facility (duty flush) where the tap can be set to run for an extended period during cleaning or maintenance. A run time of between 1 and 120 minutes will clear extensive pipe runs and outlets
- Available with a remote control for easy adjustment and activation of temporary flow stop for cleaning
- Downwards facing sensor to help eliminate false activation
- Fitted with water-saving 5 lpm outlet.

A4846

150 mains option.

A4847

150 link option.

A4849

230 mains option.

A4850

230 link option.

Colour options

- Chromium Plated AA
- Brushed Steel GN.

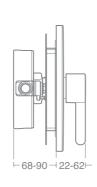


A4129AA

CONTOUR 21 Built in thermostatic sequential shower.

- Suitable for 15mm copper
- Built in sequential shower
- Built in thermostat
- 120mm long lever suitable for closed fist operation
- Safety temperature stop
- Sequential operation
- To ensure system hygiene and user safety the water is always drawn from first cold and then the hot supply
- TMV3 approved.



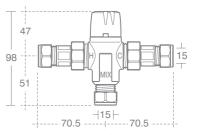




A5900AA

Thermostatic mixing valve.

- Suitable for 15mm copper
- Automatic shut off if cold supply fails
- Multi-point usage
- Precise temperature control
- Anti tamper shield
- TMV3 scheme approved
- Suitable for 2 taphole basins.





S645436

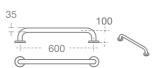
CONTOUR 21

60cm straight grab rail in blue.

Also available 45 cm straight grab rail.

Colour options

- Blue 36
- Grey LJ
- Charcoal RN
- White AC.





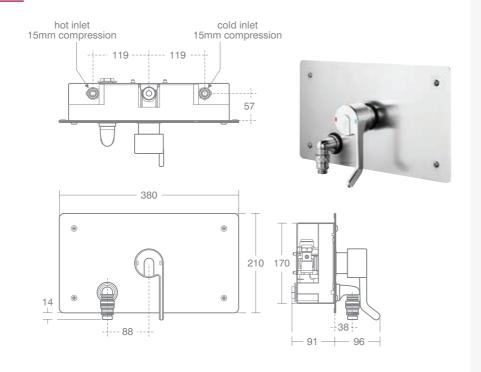




A4314MY, A3085AA

Thermostatic shower and mounting box.

- Stainless Steel
- TMV3 approved.



S6360AC

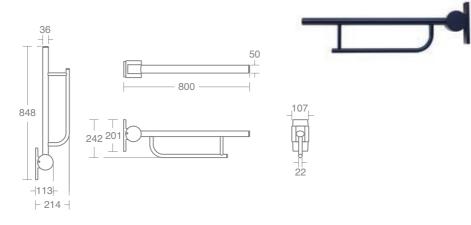
CONTOUR 21

80cm drop down grab rail in blue.

- Robust support that folds up and out of the way
- Concealed fixings for improved hygiene and security
- Slip resistant contact surfaces
- Capable of supporting 200kg
- Optional toilet roll holder.

Colour options

- Blue 36
- Grey LJ
- Charcoal RN
- White AC.



S6481AC

CONTOUR 21 Back support rail for 70 cm projection.

S688467

CONTOUR 21

Cushion for back support.

- Back rest for use with back-to-wall and wall hung WCs
- Fixed on polyester coated aluminium grab rail
- Padded one-piece backrest.











S406636

CONTOUR 21

Seat no cover with retaining buffers.

- WC seat without lid in range of contrasting colours
- Seat retainers keep seat secure when transferring to WC.

Colour options

- Blue 36
- Grey LJ
- Charcoal RN









Guarantee

Lifetime All ceramic products

Our confidence in the quality and reliability of Armitage Shanks products enables us to guarantee many of them for a lifetime.

Our guarantee is offered on all products that have been used in the manner for which they were intended, and does not apply to any products that have been misused or abused in any way. Products must be installed and cared for in line with our fixing instructions and local water byelaws. In the unlikely event the product fails within the guarantee period, we offer a free replacement or replacement part (or nearest equivalent). We also reserve the right to repair the product. Liability is limited to individual products and does not cover consequential loss or damage on installation.

- 1. All ceramic products are guaranteed for a lifetime.
- 2. Showers, bath panels, furniture, mixers and taps,

WC suite seats, stainless steel units and cistern fittings are guaranteed for five years from date of purchase. (Cistern seals are not included).

- 3. Parts (including push button flush valves) are guaranteed for five years and will be replaced if found to be faulty.
- Cistern diaphragms, seals and shower seals are not included. Replacements may be purchased through our parts supply service.

Armitage Shanks pursues a policy of continuing improvement in design and performance of its products. The right is therefore reserved to vary the specifications without notice. Products can be subject to tolerances due to manufacturing processes. Colour reproduction is as accurate as possible within the limitations of the printing process. All measurements are in millimetres and are approximate.

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5 years

On taps, mixers, toilet seats, stainless steel and cistern fittings

Conditions

- This guarantee applies only to products purchased and installed in the united Kingdom or the republic of Ireland.
- 2. Proof of purchase is required in the event of a claim.
- 3. Provision of the barcode / serial number will be required to enable product identification.
- 4. We must be given the opportunity to inspect the product, if we request to do so, the product should not be removed or destroyed before inspection without our consent. We may request photographic evidence in any investigation.
- The product must have been installed, used and cared for in accordance with our instructions for installation and care.
 In addition, the products must have been installed in accordance with good plumbing practice.
- 6. Where our on-site investigation reveals that the reported fault was not due to manufacturing or materials defect a callout charge will be applied.
- 7. Where we are satisfied that a defect has arisen because of faulty manufacturing or materials we will, at our option, repair or replace the product free of charge to you. If we choose to replace the product and we no longer manufacture the identical model we will replace it with the nearest equivalent in our then current range.
- This guarantee does not apply to general wear and tear or where, in our opinion, the product has been modified, misused, neglected or wilfully or accidentally damaged.
- 9. This guarantee does not cover consequential damages or loss.
- 10. This guarantee does not cover damage and or malfunction caused by inappropriate cleaning (please refer to our recommended care and maintenance guidelines).
- 11. Mildew build up, the effects of lime scale and corrosion are not covered under this guarantee.
- 12. Guarantee is not transferable in cases where product is reinstalled in subsequent locations
- 13. Non glass or metallic spare parts (excluding cistern diaphragms, seals and shower seals) are subject to normal wear and tear through usage and are therefore covered on all products for 2 years from installation. these parts will be charged thereafter. thereafter, such parts are available for purchase through our parts supply service.
- 14. This guarantee does not affect your statutory rights. April 2017