

Bathroom Furniture



The Bathroom Academy
in partnership with
Strategic Professionals

Bathroom Furniture

Generic Industry Guide

Welcome to the Bathroom Furniture Generic Industry Guide, one in a series of guides which are available free of charge from the Bathroom Academy Web Site.

We have aimed to make the contents of the Guides both informative and relevant and hope you will consider them a valuable aid to your continuing professional development and that of your colleagues, within the Bathroom Industry.

Each Guide has been written by experts and contains the same five elements:

- Right choice of product for end user needs
- Generic industry design
- Generic industry installation
- Frequently asked questions
- Generic industry terminology

The Bathroom Furniture Generic Industry Guide looks at the vast range of bathroom furniture that is available and offers essential information which will allow the Retailer, Merchant and Installer to provide items best suited to the end user needs, whilst the customer's major considerations will be cost, functionality, durability and aesthetics. It is also essential to consider a number of important additional factors; available space, storage requirements and the materials used to manufacture the furniture and its' suitability and compatibility with the bathing and/or showering suite within the bathroom.

Other guides in the series are:

- Baths
- Brassware
- Domestic Water Systems
- Sanitaryware and Fittings
- Shower Controls
- Shower Enclosures
- Shower Trays
- Thermostatic Mixing Valves
- Wetrooms

All guides will be downloadable free of charge from www.bathroom-academy.co.uk

How to gain evidence and recognition of your knowledge of Bathroom Furniture

Did you know that when you have studied the guide in detail you can apply to be assessed and tested on your new found knowledge and if successful, achieve the Bathroom Furniture Bathroom Academy Merit?

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Introduction

Bathroom Furniture

Bathroom furniture is an idea that has come from the continent where sleek, modern furniture has been popular for years. In recent years, consumers have come to demand more from a modern bathroom than a utilitarian suite. The bathroom is now seen as a place to relax & linger, therefore it is fair to say that aesthetics have now become equally important to the consumer as its' function.

Manufacturers have responded to the expectations and aspirations of the consumer and now provide a vast array of furniture products, at variable costs, designed to meet the ever more sophisticated demands of today's consumer.



Section 1

Choosing the Right Bathroom Furniture

Options

Choosing the right kind of storage in a bathroom is just as important as finding the right design of the basin and bath. The reality is that by incorporating cupboards and units whether fitted, wall mounted or free standing, space can be maximised, clutter and ugly pipes hidden, and value added – making the bathroom a more pleasing environment and enhancing the bathing experience.

There are many different options available in terms of size, shape and design and all need to be carefully considered, in order to find the right product. The furniture incorporated into a bathroom design need not echo the fully fitted look of the kitchen, although there are many options to do so.

Freestanding or modular storage units, which stand on the floor, sit on top of other units or fix to the wall, offer lots of flexibility since they can be positioned in places, which suit the customer. Many have useful features like pull-out laundry baskets, cosmetic drawers and integrated towel rails, as well as incorporating shelving and mirror doors. Shallow units also make it easier to find items that would otherwise get lost at the back of a deeper cupboard.

Units need to be in proportion to the size of the room and leave as little dead space as possible – this will only end up as a dumping ground or a dust trap. Many manufacturers offer a good range of storage units including base units with drawers, wall cabinets with open shelving and mirror doors, tallboy units and corner cabinets in traditional or contemporary styles.

Furniture must be compatible with sanitaryware

Not only is it important to make sure that furniture and sanitaryware complement each other but also that they are compatible. For example, many vanity units are designed for countertop, semi-countertop or under countertop basins.

Countertop Basins

There are three types of countertop basin:

- Countertop
- Semi countertop



- Under countertop

Countertop

A full countertop basin is made with a flange that allows the basin to sit into an opening in the countertop. The joint should be made using a waterproof sealant.

Semi Countertop

In smaller rooms a semi countertop basin can be fitted. This will have its front portion projecting clear of the countertop and attached, using small brackets supplied by the manufacturer.

Note: Terminology does differ and this type of basin is often referred to as a



semi-recessed basin rather than semi countertop.

Under Countertop

An under countertop basin has a lip around the top of the bowl. This is to allow the basin to be fitted underneath the countertop using fixing clips.

Alternatively, the vessel basin can be mounted on a variety of surfaces including bathroom furniture or simple shelving and is a popular choice for those seeking to achieve a 'minimalist look'.



The WC will need some consideration too, as furniture is available for back to wall WCs with the cistern concealed within a unit. The wall-hung WC is an alternative, fixed onto the wall instead of the floor, usually via a light weight steel frame onto which all of the furniture is bolted and in which the plumbing is concealed.

A comprehensive range of bathroom product designs are available to complement bathroom furniture. For more detailed information see the BMA Generic Industry Guides on

www.bathroom-academy.co.uk/guides.asp.

Section 2

Materials Used to Manufacture Bathroom Furniture

Most fitted bathroom furniture is supplied with melamine faced chipboard vanity tops, in a choice of colours designed to suit the finish of the furniture. Alternatively, a basic carcass can look fantastic with slate, marble, glass or granite worktop. Glass and reflective materials such as chrome and stainless steel are popular choices for use in the bathroom as they help to maximise light and space. For a natural look, many consumers opt for real wood units and marble worktops which can be fully fitted, modular or completely free-standing. Costs relate to the complexity of style and the materials used. If cost is an issue for the customer there are many different wood effect finishes or glossy laminates available which provide a durable, attractive, and less expensive alternative.

Melamine Faced Chipboard (MFC)

Chipboard is a wood derivative consisting of a mixture of adhesive and wood particles compressed at high temperature. This provides a rigid, stable and consistent surface. The chipboard is then faced with a decorative melamine, which is aesthetically pleasing, colourful and hard wearing. The core material is designed to withstand moisture penetration (BS EN 317: 1993 (2002)). Ideally, solid laminate materials should be used for damp environments.



Solid Laminate

Solid laminate is commonly a 13mm compressed material with two decorative faces and black core providing exceptional resistance to moisture and impact. The decorative faces comprise paper impregnated with melamine resin. The black core comprises layers of phenolic resin impregnated paper. Solid laminate is ideal for use in damp environments or where intensive cleaning is required. This material is not affected by moisture nor is it susceptible to weathering, mould or rot. Surfaces are non-porous, so dirt cannot cling to them, and they are easy to clean and disinfect. According to tests at several European test institutes, this material offers one of the best fire resistant performances for panel products.

Solid Surface Countertops

Solid surface is a hard synthetic material (polyester or acrylic) with natural fillers, primarily used for horizontal countertops and vertical wall applications, e.g. kitchens, bathrooms, service counters, baths and shower walls, etc. Note: Many manufacturers specify that to maintain the quality of the product, installation and warranty, only trained, licensed installers should be used to install their solid surface products. Most basins are compatible with solid surface countertops. Solid surface countertops are available in matt or polished finish. While some colours and textures look better polished and others in matt, suppliers are only too pleased to provide advice on which type of finish is most appropriate for a specific application.

Wood

The appeal of wood lies in its inherent warm textures and natural variety of grain pattern and colour. Some bathroom furniture is made from strips or staves of solid wood. These strips are cut, selected, graded and kiln dried to have a moisture level suitable for domestic interior use before they are glued up into a homogenous panel. The process known as lamination, gives a stable durable construction.

It reduces the natural defects of the wood and ensures a more consistent colour and grain pattern. There will be some pattern, colour and grain differences over the wood surfaces. This is a normal and valued characteristic of the appearance of wooden products.



Ongoing care and oiling of the wood brings out and enhances its' appearance as well as protecting the wood surfaces from wear and tear.

Wood is a natural material that responds throughout its' life to changes in humidity and moisture in its' environment. It absorbs or gives up its own moisture until it is in equilibrium with its' surroundings e.g. when the room heating is switched on seasonally, it should be turned up to temperature gradually, over a period of days. This will allow the wood to acclimatise properly.

When wood moisture content increases, the wood expands; when it dries, the wood shrinks. This change, called 'movement', occurs across the grain only. For example, a worktop will become a little wider and narrower respectively. It is a normal characteristic of all wood. For this reason manufacturers of bathroom countertops devise fixings and gaps to accommodate this expansion and contraction. In use it is very important to avoid sudden large changes in environmental humidity and moisture since these put great stress on the mass of wood in the top; the wood needs time to adjust to change.

Please note: New wood surfaces will weather over time as they are exposed to light. Items left for a period of time in one place will mask the wood, which will then show as a lighter area. If this is a problem, items should be moved regularly from place to place to stop the shading from occurring, until the surfaces are evenly weathered.

Cupping

The upper surface of the furniture, being the more exposed, usually, reacts first to change in moisture. Extreme changes can cause it to go out of balance with the underside and cause the wood worktop to cup'. If the upper surface is consistently wetter the top can rise in the middle. If the upper face is consistently drier than the underside, the top will 'dish'. The top will recover its flat shape when the two surfaces come naturally into balance with each other.

If the cupping persists, it will need to be remedied.

Possible causes are;

- The top surface is being kept too wet
- The top has been installed over a heater
- Moisture is leaking from a pipe or built-under appliance
- The slotted fixing brackets and screws have not been fitted or have failed.

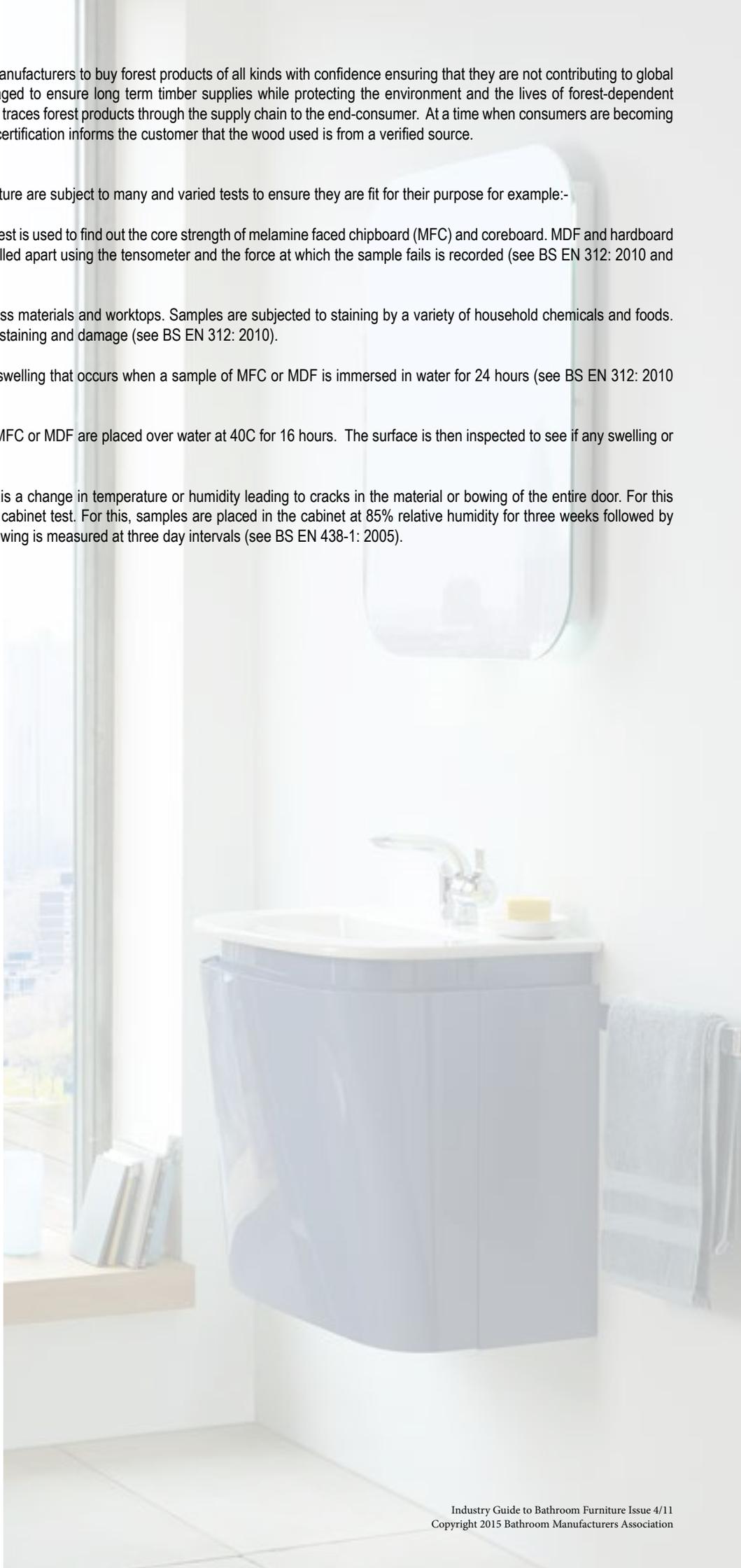
In all likelihood the top will recover gradually once the cause of the cupping has been resolved. If not, seek expert advice.

Note: The Forest Stewardship Council enables manufacturers to buy forest products of all kinds with confidence ensuring that they are not contributing to global forest destruction. FSC certified forests are managed to ensure long term timber supplies while protecting the environment and the lives of forest-dependent peoples. A system of Chain of Custody certification traces forest products through the supply chain to the end-consumer. At a time when consumers are becoming increasingly aware of environmental issues, FSC certification informs the customer that the wood used is from a verified source.

Testing of Materials

The materials used to manufacture bathroom furniture are subject to many and varied tests to ensure they are fit for their purpose for example:-

- The tensile strength and surface soundness test is used to find out the core strength of melamine faced chipboard (MFC) and coreboard. MDF and hardboard are also subject to this test. Samples are pulled apart using the tensometer and the force at which the sample fails is recorded (see BS EN 312: 2010 and BS EN 622-1: 2003).
- The stain test is used for all frontages, carcass materials and worktops. Samples are subjected to staining by a variety of household chemicals and foods. The surface is then assessed for permanent staining and damage (see BS EN 312: 2010).
- The swelling test determines the amount of swelling that occurs when a sample of MFC or MDF is immersed in water for 24 hours (see BS EN 312: 2010 and BS EN 622-1: 2003).
- For the moisture resistance test samples of MFC or MDF are placed over water at 40C for 16 hours. The surface is then inspected to see if any swelling or colour change has occurred.
- Frontages can shrink or expand when there is a change in temperature or humidity leading to cracks in the material or bowing of the entire door. For this reason materials are subject to the humidity cabinet test. For this, samples are placed in the cabinet at 85% relative humidity for three weeks followed by three weeks at 30% relative humidity. The bowing is measured at three day intervals (see BS EN 438-1: 2005).



Section 3

Bathroom Furniture Generic Industry Design Solutions

The average British bathroom is 168cm wide by 198cm long and whilst limited space creates a challenge, it needn't be a barrier to inspired ideas and aspirational design. Manufacturers of bathroom furniture now provide a vast array of products designed to make even the smallest bathroom practical, stylish, and well organised. Product development has resulted in a vast choice of shapes and sizes being available providing the consumer with a variety of design options. Today bathroom furniture is an increasingly common feature in many homes, as more people begin to realise the versatility and practicability of the wide variety of space saving solutions.

There are different types of furniture which can be incorporated into bathroom design, including under sink vanity units, drawer units, wall and floor-standing cupboards, open shelving and cabinets. The number of designs and finishes is vast and ranges from made-to-measure real wood fitted furniture to industrial stainless steel medicine cabinets to mobile storage trolleys on castors.

There are so many options these days from a whole variety of manufacturers that there ought to be something to suit most people's bathrooms. Freestanding units can often give more versatility of layout and are popular because they can be moved. Although some flat-pack or rigid units are relatively inexpensive, some manufacturers offer a bespoke service, thereby enabling the customer to obtain tailor made bathroom furniture to match a specific space.



Maximising Space

Clever use of interior fittings will help to make maximum use of space. External corners help to make the most of every centimetre.

Running a worktop around a corner creates useful extra putdown space with cupboards or open shelving tucked underneath. It is advisable to position a pull-out storage unit next to the basin so that toiletries are close at hand but tidily out of sight. Pull-outs are available in a wide range of door styles and vary in price. Colours and pattern should be kept to a minimum in a small space. Pale paintwork in a silk finish reflects light – and will make the room seem larger. Large size tiles create less visual clutter than small ones. A vertical line of tiles in a different colour will make a low ceiling room seem higher – and a horizontal line will make a high ceiling seem lower.

Sliding doors make it possible to place a cupboard almost anywhere within the bathroom and are available in a wide range of materials.



Corner configurations enable the most awkward corners to be utilised, if the right fittings are used. Some corner mirror units come with lighting and provide useful storage space inside. Plumbing is hidden away so there's no visual clutter – and the space inside the base unit stores cleaning materials. For safety reasons it is recommended that hazardous cleaning materials are stored in lockable cupboards.

Space above shoulder height is often under-used and can be more effectively utilised by adding wall units and open shelving. By raising the height of one wall cabinet it is possible to attach a worktop under the lower cabinet to create extra shelving. Many manufacturers offer space saving basins that project just 115mm from the front of reduced depth furniture. Some units measure just a little more than a tube of toothpaste from front to back - but provide really useful storage space.

The curved shape of a contoured unit gives an extra deep base shelf, ideal for storing taller items that would not otherwise fit.

Many furniture ranges include the option of a matching bath panel which is used to complete the fully fitted look.

The space under a basin has huge storage potential for cleaning products, bath-time toys as well as spare soap and fresh towels so adding a vanity unit into the bathroom design is a great idea. It also hides all the plumbing and pipework yet needn't take up any more room than the basin itself. Depending on the style, the furniture may be as little as 200mm deep from front to back. If the unit is wall-mounted this will create the illusion of yet more space in the bathroom, and of course, it's easy to clean the floor underneath. Some manufacturers make slimline and corner vanity units, from as little as 500mm wide, thereby enabling flexible, easily accessible storage space in the smallest bathroom or cloakroom.



Section 4

Generic Industry Installation of Bathroom Furniture

As we have seen, there are many styles and types of bathroom furniture. Units can be supplied in flat pack form which will require assembly prior to installation or as rigid units which simply need installation. Whether the product is supplied as a flat pack or rigid unit, it is essential that you follow the manufacturer's installation instructions.

Useful Tips

- Remember there are varying depths of base units, 320mm deep being the standard depth with 220mm or 520mm depth options for maximum planning. It is also very important to remember that units are manufactured in varying widths.
- Allow space in front of suite fittings for comfort, minimum of 600mm for toilets and bidets, 700mm alongside the bath and 600mm for wash basins plus elbow room.
- Do not forget to allow for access to plumbing fittings, stop taps etc.
- It is worth considering a small base unit next to the WC to store toilet rolls and a brush.
- Provide adequate lighting over mirrors.
- Glass shelves are an attractive design feature that provide useful storage space.

Essential Steps for Effective Installation

Step 1

Old sanitaryware is removed and services are "capped off" safely and securely ready for the furniture installation. All services at this stage should be installed in place.

Step 2

Mark a level across the wall and fix wall mounting brackets.

Step 3

Locate cabinets in position and fix in position using the fixing kits provided. Adjust cabinets to ensure that they are level.

Step 4

Cabinets at this stage are installed, level and ready to fit the door fascias and countertop.

Step 5

Using the template provided mark out the desired position of the vanity basin.

Step 6

Using a jigsaw, cut out the countertop and fascias to accommodate the basin.

Step 7

Installation of cabinets is now completed and ready for the plumbing operation.



Electrical Installation

IMPORTANT NOTE: All electrical installations must be carried out by a qualified electrician in accordance with current legislation.

Manufacturers Guarantees

Many manufacturers offer a guarantee with their product – and it is very important to remember to:

- Register the guarantee
- Keep a copy of the guarantee in a safe place
- Manufacturer's care and maintenance instructions. Many manufacturers offer guidance on how to care for and maintain their products. It is very important to follow these instructions.

Ventilation

Ventilation is a vital part of the bathroom. Excessive steam causes misting on glass, mirrors and bathroom furniture. Not only is this unsightly but it can allow mould to grow, ruining decor and possible damage to the fabric of the building. Adequate ventilation, aided by the installation of an extractor fan, is the answer.

There are several types of fan specifically designed for positioning above the bath or shower, for wall, window or ceiling mounting which can be switched on either independently or via the light switch. Some fans have a humidistat option which automatically activates the extractor when the humidity in the room reaches a certain level.

Always purchase an extractor fan that has been manufactured to recognised safety and quality standards and choose a quiet fan, as excessive noise will

deter people from using it. For more information about ventilation requirements see Building Regulations 2010 Part F Approved Document – Means of Ventilation.



Care and Maintenance of Bathroom Furniture

Whilst bathroom countertop surfaces will resist most household chemicals, including alcohol and cosmetics, certain items such as dyes, chemicals and sanitary cleaners will stain. It is therefore always advisable to wipe off any spillage immediately on both vertical and horizontal surfaces.

Wood is a living material, and that means that no matter how well we take care of it, it will always react more or less according to the conditions in the bathroom. Whilst the furniture will have been treated at the factory it is often recommended that they are treated with biological oil again after installation. Many manufacturers supply the oil with the furniture and you should apply it twice a week for 4 – 6 weeks. Spread a thin layer of oil over the entire worktop and add a little extra oil to areas where oil seeps in quickly. Polish the furniture in the direction of the grain with a polishing sponge, and let the oil absorb into the wood for a couple of hours. After a few weeks of regular treatment, the wood will stop absorbing the oil. This means that the wood grain has closed.



Section 5

Frequently Asked Questions

What plumbing fittings do you get with washbasins?

Most washbasins are usually supplied with a complete overflow kit (waste kits are not usually supplied to offer the customer the freedom to choose a standard or pop-up waste).

How do I fix my cabinet to the wall?

Firstly, obtain the correct fixings for the type of wall. Remember to carefully follow the manufacturer's installation instructions.

What sort of handles are available with bathroom furniture?

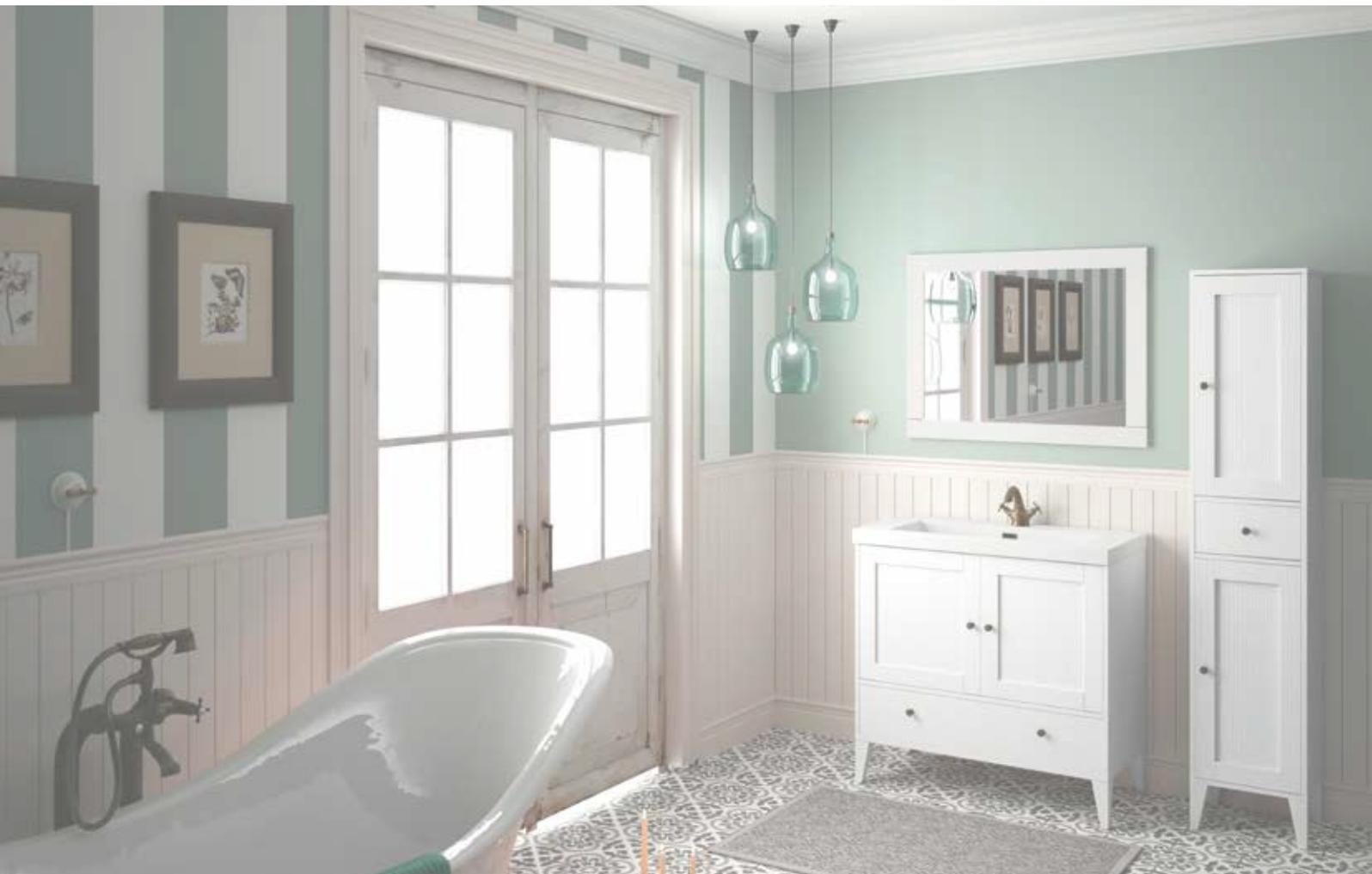
Many manufacturers of bathroom furniture produce doors and drawers that are semi-drilled to allow the consumer to fit their choice of handle e.g. – wood, chrome, stainless steel etc.

Do all doors on bathroom furniture open on the same side?

No, single door cabinets may be supplied with the door loose to allow the installer to decide which way the door will open. It is important to specify the type and finish you require at the time of ordering.

Water and wood don't mix, do they?

Water can penetrate and subsequently damage any wooden surface so it is strongly recommended that any water splashes are quickly wiped away with a soft cloth.



Section 6

Industry Terminology

Back to the Wall WC

The WC is fitted "back to the wall" with integral sides to conceal the trap and is usually used with a cistern. The cistern is concealed behind a false wall, panelling or fitted furniture, with just the flushing mechanism showing.

Bath End Panel

Fitted under the rim of the bath. The bath end panel encloses the end of the bath to give a fitted look, and hide unsightly pipework and structures.

Bath Side Panel

Fitted under the rim of the bath, the bath side panel encloses the long side of the bath to give a fitted look, and hide unsightly pipework and structures.

Concealed Cistern

A cistern which is fitted behind a (false) wall so that only the operating mechanism can be seen.

Continuous Plinths

Plinths come in various lengths and hide unsightly structures at the base of the unit adding a finishing touch to the unit/units.

Corner Filler Panels

Corner filler panels can also act as an infill panel i.e. locate the corner section in the required position and secure by using angle brackets. Then fix the complete corner filler to the adjacent carcass in the same way.

Corner Shaped Sanitaryware

Offers a space saving solution to help make the most of even the smallest or unusually shaped bathroom.

Countertop Basin (Full)

A washbasin fitted into a worktop surface from above.

Countertop Basin (Semi)

A basin which fits part way into the countertop, leaving the front of the basin projecting and is held in position with the aid of clips and/or brackets.

Countertop Basin (Under Countertop)

A basin which fits beneath the countertop and is held in position with the aid of clips and/or brackets.

Decorative Legs

Used to give a stylish freestanding look to the units.

Dual – Flushing Cistern

A flushing cistern that provides discharges of two different volumes, the selection being made by the user, and an excellent way to save water.

Filler Panels (Carcass)

These fillers are held in place by screwing through the adjacent side panel and located in such a manner that the front of the filler aligns with the front edge of the carcass.

Filler Panels (Front Finish)

These fillers are held in place by screwing through the adjacent side panel and located in such a manner that the front of the filler aligns with the front edge of the door.

Front Access Panel (Cistern)

Front access panel enables the cistern to be completely hidden behind the bathroom furniture with no unsightly inspection holes providing a hygienic and easy clean solution.

Front Fascias

Normally refers to the door of the units.

Furniture Units

There are many types of furniture units available which can have single or double doors, drawers or combinations of doors and drawers.

Handrinse Basin

Wall hung basin that has an overall width of 500mm or less.

High Level WC

The WC cistern is mounted on the wall usually around head height, connected to the WC pan by a long flush pipe.

Linear Framing Panel

Creates a clean modern look by framing the units with a choice of finishes.

Low Level WC

The cistern is fixed on the wall immediately above and behind the WC and connected to it by a short flush pipe.

Pedestal Washbasin

A washbasin supported vertically by a column from the floor, designed to conceal pipework with additional screws to fix it to the wall.

Reduced Depth Units

These are designed to provide storage space in small bathrooms, cloakrooms or en-suites and provide practical storage without projecting too far taking up valuable space.

Semi-Pedestal Basin

Basin fitted with a pedestal to conceal supply pipes and waste outlet but the pedestal stops short of the floor.

Solid Backed

Typically a 15mm backing board is used to provide a more rigid and sturdy product. These are used to hang the units onto the wall and adjust easily providing a safe and secure fit.



Vessel Basin

A design which has the appearance of a simple bowl, all of which is visible and supplied by wall or deck mounted taps.

Waste Pipe

A pipe which takes water from a WC or washbasin into the drainage system.

Wall Hung WC

The WC pan is mounted on brackets adjacent to the wall giving completely free floor space beneath. Used in bathrooms to give a feeling of added space.

Section 7

References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest addition of the referenced document (including any amendments) applies.

BS EN 438 - 1: 2005

High- Pressure decorative laminates (HPL). Sheets based on thermosetting resins (usually called laminates). Introduction and general information.

BS EN 312: 2010

Particleboards. Specifications.

BS EN 622-1: 2003

Fibreboards. Specifications. General requirements.

BS EN 317: 1993 (2002)

Particleboards and fibreboards. Determination of swelling in thickness after immersion in water.

Building Regulations 2010 Part F

Approved Document. Means of Ventilation.

BS 8558: 2011

Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages. Complimentary guidance to BS EN 806.

