



Ten STEPS

towards *choosing* and *using* a
new *sustainable bathroom*



The BMA

The Bathroom Manufacturers Association is the trade association that represents the major manufacturers of bathroom products, ranging from sanitaryware, baths, taps, showers, enclosures, accessories and furniture.

The BMA represents the interests of over 80 well known bathroom brands trading in the UK.

The BMA is committed to enhancing its membership's competitiveness and focuses attention on industry issues which can be more effectively dealt with by a collective body. The BMA is thus the 'Voice of the Bathroom Industry' and has its finger on the pulse of both fashion and technical trends in the bathroom.

Members of the BMA offer products with an outstanding combination of quality, style, design, colour and availability.

The Water Label

The Water Label is the most important resource in all 27 countries of Europe for information about the eco-sensitive bathroom products.

The scheme is open to all suppliers of bathroom products and the listed products help specifiers meet the requirements of both the Code for Sustainable Homes, The Water Regulations, and the latest Building Regulations Approved Document G.

The handy on-line 'water calculator' which is now used regularly by over 1000 planners assists developers in achieving the targets laid down in the regulations.

Underlying the whole scheme are the water labels themselves. Loosely based on the energy efficiency labels found on white goods the labels quickly show how well a particular product performs.

Manufacturers, showrooms, DIY stores and builders merchants are being encouraged to use the labels and a collection of POS material is available for use on the products, in showroom windows and in literature.

The Water Label is now recognised by government as a "cornerstone in water efficiency" and is set to grow further. The scheme is recognised by DEFRA, WaterWise, CLG, CCWater and The Energy Saving Trust. www.europeanwaterlabel.eu/



CHOOSING

So you have decided to re-do your family bathroom. Well done!

Your biggest step of all has been taken but now you have to get down to the detail. Follow this comprehensive guide – your ten steps to a sustainable family bathroom - and you'll find your decision making a little easier.

If you haven't renovated your family bathroom before it is an exciting yet daunting task.

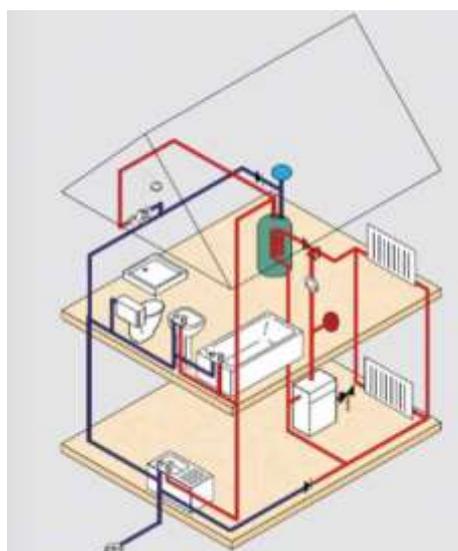
To point you in the right direction, here is a simple guide which will help you choose a bathroom which is sustainable and eco-friendly, to keep your utility bills down

STEP 1 – rate yourself and your bathroom

First you should '**rate yourself and your existing bathroom.**'

Sit down and think about what you really need. Discuss your new bathroom with your family. How will they use it? How will youngsters, the elderly, and those in your family who have special needs use the new bathroom? For additional help in **rating yourself and your existing bathroom** try the BMA's helpful questionnaire at the end of this guide.

***WHY?** Don't just choose your new bathroom on looks alone. Style does mean a lot, of course, but how your bathroom will be used by everyone is an important factor in the decision making process.*



STEP 2 – your plumbing system Find out what plumbing system is installed in your house - is it high or low pressure? This matters when you choose some bathroom products since some only work on high pressure systems.

High Pressure systems usually work on water pressures above '1 BAR pressure.' **Low Pressure** systems usually work on pressures below '1 BAR pressure.'

Generally speaking, if you have no tank in the loft and no hot water cylinder but a combination (combi) boiler then you will have a **high pressure system**. If you have a water tank in the loft and a hot water cylinder in the airing cupboard you will have a **gravity-fed low pressure** system.

There are a number of variations and if you are unsure about your plumbing system you should seek advice from your plumber.

WHY? *When you finally specify your products you will need to ensure that those products will perform successfully when installed on your plumbing system. The technical specification for each product will be given in the manufacturer's catalogue or installation manual. If a tap designed for use on a high pressure system is installed on a low pressure system it will not produce a sufficient water flow. So, for example, it would take a very long time to fill your bath!*

STEP 3 - your dream bathroom

Decide how you want to use your dream bathroom. Do you want to use it as a retreat to get away from it all? Away from those cares and woes of everyday life and to recharge your batteries with a long relaxing soak in a luxury tub?

Or is your bathroom a place to dash into, freshen up, and dash out again?

WHY? *A bathroom which is used as a place for retreat will usually have a bath. A bathroom used for a quick freshen up will not. A standard bath filled for a long deep soak will use more water than a quick shower. The choice is endless.*



STEP 4 – matching it all

Decide whether you would prefer a fully matching/coordinated suite from one BMA manufacturing member. Or are you OK about choosing products which don't have an overall coordinated theme, from different BMA members.

WHY? *A coordinated bathroom from one manufacturer may appear more stylish, will be easier on the eye and will be easier to purchase. It may, however, not be the most sustainable. A more sustainable bathroom may result if the most efficient individual products are selected from different manufacturers and combined.*



STEP 5 – a style you like

Decide on your style.

Do you prefer a traditional classic look or the latest state-of-the-art, sleek and modern styling?

WHY? *Styling should make no difference to the sustainability of your new bathroom. However ultra-modern bathrooms tend have water efficiency built-in since manufacturers are keen to ensure that they have created the most modern, sleek and efficient designs.*

STEP 6 – the WC

Time to choose your new **WC suite**.

There are hundreds of designs and styles available ranging from the freestanding WC and cistern, through to 'wall hung' and 'back to wall' models. The very latest designs come in 'rimless' versions which are extremely hygienic and some come with a built-in bidet function. Whichever style you choose, go for one which has the most economical 'dual flush.' These are specially designed to clear the WC bowl with as little as 2.6 litres, short flush. That's a really efficient flush and will save huge quantities of water over the year.

Look for The Water Label to help you choose a WC with the lowest water consumption. For the most efficient aim for 3.5 litres average flush, or less.





WHY? By law, every new WC suite installed in the UK can use no more than 6 litres per flush.

This law, part of the Water Regulations 1999, is designed to conserve our water supplies and over a period of years, as WCs are replaced, we will see less consumption of this precious commodity. But when you buy your new WC suite you can opt for an even more water efficient design.

Some are now available with an average 3 litre flush - compare these with the 13 litre and 9 litre guzzlers from the 60s and 70s and you can see the obvious difference.

STEP 7 – washbasin and taps



Now choose your **washbasin and taps** and look for complimentary styling for the best effect.

The washbasin and taps can, without much effort on your part, really reduce your water use. And since about one quarter of your household energy is taken up by heating the hot water you will also save on your energy bill.

For your downstairs cloakroom go for a handrinse basin with ‘spray taps.’ These are remarkably efficient. You might also think about electronically controlled taps

(which turn on and off as you put your hand underneath) or push-button, self-closing taps.

For your main family bathroom select taps which have a ‘low flow rate.’ Try to seek out those which have a quoted flow rate of 5 or 4 litres per minute or a lot lower. These are very efficient.

Look for The Water Label to help you choose your taps with the lowest water flow rates. For the most efficient aim for 5 litres or less. Some go as low as 2 litres.

WHY? *Spray taps are water efficient since with their special nozzle they are designed to create maximum 'wetting' for minimum water flow. This is ideal for hand rinsing in the cloakroom.*

Low flow rate taps which are electronically activated or self-closing are ideal for a washbasin where, perhaps, you just use it for simple washing or cleaning your teeth.

However, low flow rate means just that and you would not use one of these to fill your bath – it would take an age.



STEP 8 – bath and shower

Decide and choose your **bath and/or shower enclosure**. How you use your bathroom will influence the type and shape and material which your bath and enclosure are made from.

Bath designs can have a major impact on your water use. For instance, a simple traditional rectangular tub will use more water than a tub with clever internal shaping and a lowered overflow. Shaped tubs save water whilst still allowing you to take a deep relaxing soak.

Look for a shower enclosure with 'coated glass.' The coating, at a microscopic level, gives the glass a very slippery surface so that water runs off quickly to leave the glass clear. Clear glass means less

build-up of water soluble salts – and that means the enclosure will be easier to clean and you will use less water during cleaning.

Look for The Water Label to help you choose your bath with the lowest water volume. For the most efficient, aim for lower than 140 litres.

***WHY?** The most sustainable baths use 140 litres or less. The volume is measured when the bath is filled right up to the overflow. This is the standard measurement but actually you will use a lot less – depending on how big you are! When you compare baths, always compare the volumes given in the standard measurement. Interestingly a good long soak in a bath, say for 20 minutes, can use less water than a shower taken for the same period of time. It's all about how you use your bathroom.*

STEP 9 – shower, handset and taps

Choose your **shower valve, shower handset and bath/shower mixer taps**. These are the products which actually deliver the hot and cold water to your shower and bath and can have a big effect on usage volumes. And try to get complimentary designs for a good overall style.

SHOWER VALVE – sometimes just called the 'shower' – may be a simple mixer valve, a thermostatic mixer valve or an electric instantaneous shower.

- *Mixer Valve* Hot water from a boiler or hot water tank is blended with cold water to deliver a shower at the temperature controlled by you. Simple mixers have the disadvantage in that the final water temperature can vary if incoming water varies in both temperature and pressure. Generally they give a higher flow rate than an electric instantaneous shower.
- *Thermostatic Mixer Valve* This may be a manually operated or digitally operated shower mixer. Hot water is blended with cold to a temperature set by you. The thermostatic mechanism ensures that the set temperature remains constant. Suitable for ALL types of plumbing system.
- *Electric Instantaneous Shower* This type of shower unit has a built-in water heater, rather like the element in a kettle. Incoming cold mains water is heated instantly, and the appliance only heats the water as it is used. It is independent of the domestic hot water system and is therefore is very efficient. Some models have a built in thermostatic mixer. Electric showers have a kW rating - the higher the rating then the better the flow rate will be. 10.8 kW is the maximum.



SHOWER HANDSET – sometimes just called the ‘spray head.’ These have had major re-design over recent years. The water stream passing through the shower head now creates a greater deluge effect with less water flow. Two systems are being used. A) The aerating showerhead injects air directly into the water stream so you use less water while experiencing a powerful shower. B) The twin jet shower head produces thousands of droplets which collide to splash and create an invigorating shower.

BATH TAPS (or bath fillers) As the name implies, these are used to fill the bath so the flow rate from them should be as high as practical.

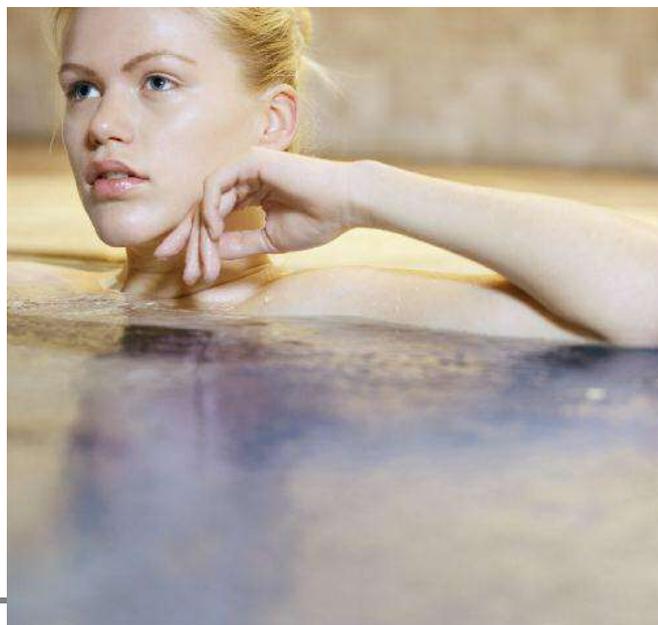
Some bath fillers have built-in showers and these are called **BATH/SHOWER MIXERS**

***WHY?** All these products actually deliver the water and should be chosen carefully. It is argued that these are the most technically advanced of all the bathroom products and are affected greatly by the plumbing system in your house and its water pressure. If you are in any doubt you are advised to ask advice from your plumber.*

STEP 10 – get it installed

Find your installer. Take care when selecting your plumber or installer. Certainly shop around for the best quote but also shop around for someone who is a competent and qualified person, a member of a trade association, and who really knows both the practice and theory of plumbing. He will also know about the Water Regulations and about the ways to get the best out of your new bathroom.

***WHY?** Your installer can affect the sustainability of your bathroom. A poorly installed product can have a major effect on its water efficiency and if it uses hot water it can affect your heating bill. A qualified installer will know how your plumbing system can affect the efficiency of your new bathroom. He will be able to advise you which products are most suited to your system. He will put things right if they go wrong. Choose carefully – get advice from a trade association.*



USING

Here are the ten steps towards using your new bathroom sustainably. There are loads more ideas here

www.water-efficiencylabel.org.uk/bewaterwise.asp

but when all said and done its it's all about your behaviour, and your approach to water saving.

How exciting!

Your new bathroom has been delivered and installed and now is the time to use it to its full and sustainable potential.

STEP 1

The way that you use your new bathroom will have a huge effect on its sustainability.

For example, a 5-minute shower will use 25% more water than a 4-minute shower. That's obvious, so have a shorter shower and save.

If you clean your teeth for up to five minutes, as recommend by dentists, but without turning the tap off while you brush, you will waste around 12 litres of water – that's 3 gallons - enough to wash a car.

Use it carefully. Make a conscious decision to use your sparkling new bathroom as efficiently as you can. You don't have to be "uber-frugal" but you do have to be sensible with your water and heating. Avoid wasting water and you will also avoid wasting energy.

"Be water wise" The key to water efficiency is reducing waste, not restricting use.

STEP 2

Turn the taps off. If you are running water unnecessarily down the drain then that is an obvious waste. So the old adage about turning the taps off when you are cleaning your teeth does ring true.

STEP 3

Use a plug. Rather than washing your hands under running water think about putting the plug in to create a pool of water in your washbasin.

STEP 4

Use the 'dead leg.' The dead leg is the term which plumbers have coined to mean the length of pipe holding cold water in your hot water pipe system. It's this cold water that flows first into your bath before the hot arrives. Don't let the cold water go to waste. Actually it is the safest way to fill a bath. Cold first – hot later. Blend both to get your desired temperature. And remember don't overfill your bath.

STEP 5

Some showers have a dial which allows you to pre-set the temperature. This is both a safety feature and a water efficiency feature.

STEP 6

Swap a deep bath for a short shower. Then take it slightly shorter. And Invest in an aerated or optimised-flow shower head. These use less water per minute, but maintain your shower experience That's the easiest way to save water!

STEP 7

Don't use your WC as a rubbish bin! It's tempting to flush away lots of unwanted items down the drain. Using your toilet to flush away rubbish is just water wasteful.

Try to avoid flushing away cotton balls, make-up tissues, and those pesky spiders- throwing them in the bin will cut down on the amount of water that is wasted by every flush

STEP 8

Fix those dripping taps, leaky pipes and leaky WC valve. Leaks are very water-wasteful. A dripping tap wastes at least 5,500 litres of water a year enough to fill a paddling pool every week for summer. Consider installing a water efficient tap or a tap aerator – aerators in particular are cheap and simple quick fixes that you can do yourself.

STEP 9

Have your system maintained on a regular basis. When your bathroom and heating products work properly they save energy and prevent water waste.

STEP 10

Use less water and your energy bills will go down. They will. Because around a quarter of your household energy bill is entirely due to heating your hot water

RATE YOURSELF AND YOUR BATHROOM

Being able to maintain personal hygiene is essential as it gives us dignity.

It not only allows us to have pride in our personal appearance, but it can also have a significant impact on our physical and psychological well-being.

During the process of re-designing your bathroom to meet your changing needs, it is important to consider all the options available to make bathing both an easy and pleasurable experience.

This questionnaire will help you to have a clear understanding of your own requirements and it can also be used by retailers and plumbers for the basis of discussion to address individual needs.

The questions mostly require a simple **yes** or **no** answer and will help you understand how your current bathroom works and what your needs really are.

About you and your family's needs

Mobility

1. Do you have any mobility difficulties? YES NO
2. Do you need the assistance of another person to help you bathe? YES NO
3. Do you have problems bending? YES NO
4. Do you have problems reaching? YES NO
5. Do you have problems twisting? YES NO
6. Do you have to use any special equipment in the current bathroom? YES NO
7. Do you have a specific medical problem that impacts on the way you use your bathroom? YES NO

Balance

1. Do you have a problem with maintaining your balance? YES NO
2. Have you fallen in your bathroom within the last year or so? YES NO
3. Do you suffer from dizzy spells? YES NO
4. Is your balance affected when you are tired? YES NO
5. Do you need any grab rails to steady yourself around the bathroom? YES NO

Muscle strength & dexterity

- | | | |
|--|------------------------------|-----------------------------|
| 1. Do you have limited movement in your arms, hands or both? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 2. Is your handgrip weak? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 3. Do you suffer with any pain on moving your body? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 4. Do you have problems with recognising different temperatures? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

Vision

- | | | |
|--|------------------------------|-----------------------------|
| 1. Do you have impaired vision? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 2. Do you wear glasses? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 3. Do you need tactile information on products you choose? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

The bath room itself

- | | | |
|---|------------------------------|-----------------------------|
| 1. Is this your only bathroom? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 2. How many other family members use this bathroom? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 3. Do you need a bath for other family members? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

The bathroom suite

The bath

- | | | |
|---|------------------------------|-----------------------------|
| 1. Can you get in and out of the bath OK? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 2. Do you feel confident bathing? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 3. Have you ever been stuck in the bath? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 4. Are the taps easy to get to and operate? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 5. Do you use a shower over the bath? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

The shower

- | | | |
|--|------------------------------|-----------------------------|
| 1. Do you feel confident getting in and out of the shower enclosure? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 2. Do you feel confident showering? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 3. Is the height of the showerhead adjustable? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 4. Is the riser bar for the shower long enough? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 5. Are the shower controls easy to operate? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 6. Do you have a level access shower tray? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| 7. Do you need to sit to shower? | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

The washbasin

1. Is the washbasin at a comfortable height? YES NO
2. Are the taps easy to operate? YES NO
3. Is the plug easy to get in and out? YES NO
4. If you need to sit is there enough room for your knees under the basin? YES NO

The WC

1. Is the WC at a height that allows you to get on and off with ease? YES NO
2. Is the flush on the WC easy to operate? YES NO
3. Do you need a toilet/bidet that washes and dries you? YES NO
4. Can you adjust the height of your toilet seat? YES NO
5. Can you reach the toilet roll dispenser? YES NO
6. Can you easily replace the toilet roll? YES NO

Storage and Accessories

1. Is there enough storage for cosmetics, towels etc? YES NO
2. Is the storage easy to access? YES NO
3. Are there convenient soap dishes/dispensers in the shower or bath? YES NO
4. Are the soap dishes at the right height & position for you to use? YES NO
5. Do you have access to a mirror? YES NO
6. Can you reach the toilet brush? YES NO

Lighting

1. Does your window provide sufficient natural lighting? YES NO
2. Is there adequate general lighting? YES NO
3. Would you benefit from more task lighting? YES NO
4. Do you need low-level lighting for night time use? YES NO

Heating and ventilation

1. Does your existing bathroom feel warm enough? YES NO
2. Is your towel warmer/radiator in the correct position? YES NO
3. Is your radiator thermostatically controlled? YES NO
4. Is there good ventilation? YES NO
5. Do you need to add an extractor? YES NO

Surfaces

1. Are all the surfaces easy to keep clean? YES NO
2. Are the bathroom walls free from mildew? YES NO
3. Are your bathroom walls tiled? YES NO
4. Have you considered using shower boards/wall cladding? YES NO
5. Is the flooring in good condition is it slip resistant? YES NO
6. Is your bathroom floor carpeted? YES NO
7. Do you have under floor heating? YES NO
8. Would you prefer different finishes to your bathroom wall & floor? YES NO

Water System

1. Do you ever run out of hot water before everyone has taken a bath/? YES NO
2. Is your water supply metered? YES NO
3. Does an Emersion Heater heat your water? YES NO
4. What type is your boiler? _____

Water safety

1. Does a thermostatic mixing valve control your current shower valve? YES NO
2. Do you have thermostatic mixing valves on your taps? YES NO
3. Does the temperature in your tap alter when another tap is turned on somewhere else in your house? YES NO

Environmental issues and water efficiency

1. Are you on a water meter? YES NO
2. Would you like to reduce the amount of water used in the bathroom? YES NO
3. Are you interested in water efficiency products? YES NO

And finally

List the three items you most like in your bathroom

List the three items you like least in your bathroom



To further aid you in planning your new bathroom the BMA has produced a series of fact sheets to help you in the selection process. For copies of these factsheets visit our website www.bathroom-academy.co.uk/guides.asp

ACKNOWLEDGMENTS

Kate Sheehan, an Independent Occupational Therapist with 20 years' experience in the NHS and Social Services environments, has worked closely with the BMA to produce this questionnaire. Kate is the Ex Chairman of the College of Occupational Therapists specialist section – Housing (COTSS – H) and she has represented the College on The Department of the Deputy Prime Minister's comprehensive review of the Disable Facilities Grant.

Kate Sheehan, is now Director of The OT Practice which provides Occupational, Physio and Speech and Language Therapists into the private sector and provides advice and consultancy to the commercial sector. It was started by two Occupational Therapists and between them they have over 35 years of experience and both continue to maintain clinical experience.



So that's it – your guide to choosing and using a new sustainable and eco-friendly bathroom. For more help, look though the Consumer Advice on the Bathroom Manufacturers Association website. www.bathroom-association.org. Here you can download the Guides and check out the jargon.

For help in selecting the most efficient bathroom products **Look for The Water Label** and choose on the web-enabled database here www.europeanwaterlabel.eu

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