Welcome to Eskimo central. Whether you're an old hand or a nervous first timer we think you'll enjoy it here. We are designers and engineers dedicated to saving the world from ugly and impractical radiators. We believe we bring a much needed injection of glamour into the world of heating. Whether the emphasis is on blending into a scheme or creating impact, our forms and finishes will fit beautifully into your vision. We offer both water and electric models and our radiators are simply beautiful and highly functional; nothing more complicated than that.

All our products, whether the new beauties or the old favourites, are designed and developed with the same key principles of clean lines, meticulous engineering and total practicality. We believe passionately that a radiator's primary function is to provide as much heat from as small a space as possible, which is why our radiators have the highest heat outputs of any good looking radiators in the world. OK, so we know that some of you choose us for our looks alone, and why not - we are pretty tasty? But we think we're like the contestant at a beauty pageant with a double first in physics; there's so much more to us than our perfect proportions. And we believe in world peace.

In our brochure you'll find plenty of product shots, size/price lists, some technical information and a bit of practical help. Our website is constantly updated with the latest, most detailed information. So if you're in a hurry or need to know where to buy, just go to www.eskimodesign.eu or www.heating-hub.com/eskimo.htm You can call us any time too, on: 0203 086 9919

You'll notice that we manufacture in Birmingham and we're proud to say that we work with the best of British suppliers across the UK, who are just as excited and as passionate as us about great design that combines modern aesthetics with technical reliability and intelligence.

stunning finishes incredibly high heat outputs leading technology bespoke sizes 'best of british' suppliers meticulous engineering clean lines & integration beautiful, highly functional love making heat



ESKIMO BROCHURE ISSUE 5

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Electric Outline Radiators

High performance electric heating

For all flat panel Outline radiators. Including RAL colours, brushed, Supermirror, Brassy, Rusty, Gong and Woody radiators.

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Electric controls

To accompany your Outline electric radiator For all flat panel Outline electric radiators.

Including RAL colours, brushed, Supermirror, Brassy, Rusty, Gong and Woody radiators.

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Supermirror

Wall mounted, central heating (Electric models also available)

Super-high polished stainless steel giving near-perfect reflection. The original flat panel radiator, designed for lovers of clean lines. Bespoke sizes available for water models. Hidden valves available.

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Outline Radiators

Wall mounted, central heating (Electric models also available)

The original flat panel radiator design for lovers of clean lines.

Bespoke sizes available for water models. Hidden valves available.

Hidden Valves and Hinge & Bracket

For lovers of clean line

Manual Hidden Valve models and Thermostatic Hinge & Bracket models are available for all water Outline radiators.

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Rusty

Wall mounted, central heating (Electric models also available)

An exclusive steel finish, hand patinated, to create a stunning palette of Autumnal tones. Bespoke sizes available for water models. Hidden valves available.

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Gong

Wall mounted, central heating (Electric models also available)

Beautifully patinated copper and brass finishes applied to Eskimo's super-powerful radiators. Bespoke sizes available for water models. Hidden valves available.

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Woody

Wall mounted, central heating (Electric models also available)

Combining the unique aesthetic properties of wood with the thermal performance of aluminium.

Bespoke sizes available for water models. Hidden valves available.

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The Holy Rail

Wall mounted, central heating

The Holy Rail radiator and towel warmer is a room's fun, colourful friend. Choose any combination of two RAL colours that you love.

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Ron Radiators

Wall mounted, central heating

Modular aluminium high output radiator: allowing you to add as many sections as you need from 1 to 50.

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Ron with towel rail(s), central heating

The matching elliptical towel rail is proportionately matched to the elliptical section of the radiator.

25

Leggy Ron, floor mounted, central heating

Ideal for rooms where glass, sloping or curved walls prevent the use of wall mounted radiators.

26

Colours, finishes

A choice of stunning finishes

There are 29 Eskimo standard RAL colours to choose from in semi gloss and they are included within the radiator price.

Also check out our stunning metal finishes.

28

Non standard connection positions Correction Factors based on

Delta T 50° C

FAQ's

Taking care of your Eskimo Radiator balancing

Water radiators – venting procedure (bleeding)

Water radiators - air/gas in radiator

Brassy (picture to your left)

Wall mounted, central heating (Electric models also available)

Eskimo's range of glamorous, highly polished brass radiators. Hot in all sense of the word. Outline with towel rail(s), central heating (Electric also available

Electric Outline Radiators High performance electric heating

Eskimo's new electric range of radiators represent a breakthrough in electric heating. Not only do they exceed the performance of Eskimo's previous products by around 40%, they also beat every other non-fan assisted convector and radiant heater on the market. For the first time you can now purchase a silent electric radiator that matches or exceeds the performance of many central heating radiators on a size for size basis. Eskimo have achieved this by going right back to first principles during the design phase for this new range. Most electric radiators are cannibalised versions of their more prolific central heating cousins. In the majority of cases this means taking the existing product, filling it with water, glycol or oil and then heating this fluid with an electric immersion heating element. This has several drawbacks:

In order to ensure an electric radiator operates safely you have to be sure it can't rapidly overheat if, for instance, it is installed incorrectly without adequate airflow, or if the radiator is mistakenly covered. This means de-rating the radiator below its actual performance. Most electric radiators are fitted with a heating elements 30% below the nominal power of the radiator.

The large quantity of fluid in the radiator is a substantial thermal mass, all of which has to be heated by natural convection – taking a long time to heat up and a long time to cool down, reducing controllability and running increasing costs.

The thermal expansion space required by the fluid in the radiator requires careful management when the radiator is produced. If this space is miscalculated, or if the radiator overheats, this expansion space might not be adequate in which case the pressure in the radiator will build up and cause the radiator to burst.

If a liquid filled radiator fails for any reason during its lifetime it can leak causing extensive damage to the building as well as being a safety hazard.

Eskimo have designed out all of these issues with their new dry electric range:

The heat exchanger engine is designed specifically for electric power, meaning that every bit of heat transfer surface area is optimised for the heat source giving the highest heat outputs of any non-fan assisted designer electric radiator on the market. You can now swap over most central heating radiators directly for an Eskimo dry electric without any reduction in performance.

Eskimo's dry electric radiator has a uniquely low thermal mass meaning that they reach their maximum temperature within 6 minutes of being switched on. This rapid warm up means you never need to switch them on before you need them. This means lower energy bills and a more eco-friendly lifestyle. It also opens up the possibility of control via PIR motion sensors meaning the radiators only turn on when someone enters the building.

No fluid means no potential leaks. Eskimo's dry electric products have a double failsafe system. In the event of overheating their inbuilt sensor simply switches them off them allows them to come back on once they've cooled down. If this sensor fails there is an inbuilt thermal fuse which will make the radiator safe before it can overheat dangerously.





Part number: CTA RF IMH
Digital pogrammable wireless room thermostat



Part number: RTDRF ELIMHA Digital room thermostat



Part number: REA 1C IMHA Each electric radiator requires one wireless receiver which can be concealed within the wiring box on the wall.

Flectric Controls

To accompany your electric Outline radiators

If you choose an electric Outline radiator, whether it be in a RAL colour, brushed stainless, Supermirror, Brassy, Woody, Rusty or Gong, each radiator can be controlled very easily.

Our electric radiators are delivered all 'good to go', ready to simply wire in. For more information on installation, please see www.eskimodesign.co.uk/technical/installation/

What you'll also need is x1 channel wireless receiver for each radiator. Eskimo can provide these. £82 + VAT. Part number REA 1C IMHA.

Of course you will then need to control your electric radiator via an analogue or digital room thermostat. We can supply one of these too and whether you choose an analogue or digital, both are able to control up to 17 radiators.

A digital programmable wireless room thermostat is £172 + VAT. You can control the temperature up or down and of course on or off. Part number CTA RF IMH.

An analogue wireless room thermostat is £69 + VAT. This one is just an on and off control. You cannot control the temperature up or down.

When you install an electric radiator you will most likely want a more sophisticated control system than just on/off. In this case you essentially have two options.

- 1. Your installer can wire the radiators into a built in control system which will allow you to control the radiators thermostatically and/or via a timer. Your installer can advise on the best way to do this on your site.
- 2. If it's not feasible or cost effective to install new cabling then Eskimo can supply you with all you need to control the radiators wirelessly in your existing installation. The controls on this page are compatible with all Eskimo electric models (and with every other manufacturers too for that matter).



With Hinge & Bracket hidden valves 1500mm H x 430mm W x 50mm D Lead time 6 weeks (3 week standard models available) 1270 watts / 4334 Btu/Hr

Part no. 43150S-SM-HB

Polished valve sets available for standard, bottom end connection models

Supermirror

Our beautiful stainless steel mirror-finish radiators for beautiful people.*

A high performance radiator that is so highly polished you can fully admire yourself every time you walk by.

Anti-mist, hard wearing and easily cleaned.

Super-high polished stainless steel gives near perfect reflections**.

Available in electric and hot water versions.

- * Supermirror simply reflects what looks at it, beauty cannot be created where no beauty is present. Eskimo will not accept liability for ugliness of user. Eskimo mirrors can encourage slimming as part of a calorie controlled diet.
- ** There may be some minor distortion in the panel, particularly around the edges. It won't therefore compete with a glass mirror for absolute perfection, but assuming you're perfect to start with, we bet you could do with a couple of extra curves?



Outline water heated radiators: In a colour, a brushed stainless or one of our stunning metal finishes Supermirror, Brassy, Rusty or Gong The original flat panel design for lovers of clean lines

Outline is a modular aluminium, high output radiator with a stainless steel or powder coated steel front fascia panel. Available in two standard depths and 25 standard sizes. Bespoke sizes are also available - we make Outline to the nearest millimetre to fit odd spaces and match existing pipe centres, reducing your installation costs.

You can specify Hinge & Bracket so that, for example with Supermiror, the mirror panel appears to "float" just off of the wall with the radiator function disguised yet still accessible so that you have full thermostatic control. See pg 39 for further information.

You can also opt for fitted towel rails to create a high performance radiator and towel warmer combined.

Central heating or electric models.

Metal finishes

Supermirror Brushed Gong Rusty

Colours

29 standard RAL colours available
Or choose any RAL you like (additional cost)
Or use our colour matching service (additional cost)
See page 38 & 39 for all standard RALs and metal finishes.

Technical

All heat outputs are calculated in accordance with BS EN442. For an explanation of Delta T (Δt) and to calculate performance at different Delta Ts, please see the technical information on our website.

To convert Watts to BTU/hr, multiply the figure shown for watts by 3.412.

Test pressure: 7.5 bar.

Maximum Operating Pressure: 5 bar. Maximum Operating Temperature: 95°C.

Connections: 1/2" BSP Bottom (underside of radiator) opposite end tappings - use angle valves for pipes coming from walls and straight valves for pipes coming up from the floor.

Valves must be ordered separately.

For all installation guidelines, please see www.eskimodesign.co.uk

Hinge & Bracket is available for an additional £242 + VAT per radiator. Hidden manual valves, no access, an additional £102 + VAT.

Towel hanging rails (5mm x 40mm strips) can be added. £99 + VAT for the first rail, £54 + VAT for subsequent rails.

Water treatment

Unless otherwise stated these products are for use on closed heating systems only, they are not suitable for installation on secondary return hot water system. On completion of the installation the entire system MUST be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleaner is used, it must be thoroughly flushed from the system. Following this, the system MUST be dosed with a corrosion inhibitor/water treatment suitable for mixed metal systems (specifically aluminium) to prevent corrosion. System design, flushing and dosing must be in accordance with BS5449: 1990, BSEN12828, 2003 and BS7593:1992.

IMPORTANT

Failure to observe these requirements will invalidate the warranty.







Hidden Valves and Hinge & Bracket For lovers of a clean line

What could be improved about Eskimo's Outline range of radiators?

After ten years of continuous development very little it would seem, so we decided to move quite literally up and down stream of the radiator to the next part of the heating system - the valves.

Even though, in Ottinetti, we have selected the world's most beautiful valves to partner our radiators they can be a distraction from our clean lines. We know the reason our customer's love our Outline range in particular is their simplicity of form, a form that can be ruined by the wrong selection of valves.

Therefore Eskimo has put a lot of research and development time into developing a solution to this problem and we've resolved it with our hidden manual valve solution and our new Hinge & Bracket option on Outline radiators.

Our Hidden Manual Valves are a simple modification to our standard product employing flexible hoses incorporating simple quarter turn ball valves (operated by a screwdriver) that allow the radiator to be connected to the pipework prior to the radiator being hung. The radiator is then set up by the plumber to check the operation before being hung on the wall on the brackets provided. The flexible hoses are then coiled up and hidden behind the extended front panel at the bottom of the radiator.

This a relatively low cost solution suitable for bathrooms and other areas where thermostatic control of the radiator may not always be required, or where a room thermostat is installed to turn the radiator on and off as required. It should be noted that turning the radiator off for maintenance will necessitate taking the radiator off it's brackets and turning the valves off - the valves cannot be turned off without first unhanging the radiator.

Hidden Manual Valves - £102 + VAT in addition to the radiator price.

Our new Hinge & Bracket design goes one step further. It has all the benefits of our hidden manual valve system but with full thermostatic controls that are completely accessible when the radiator is "opened". And it couldn't be simpler...

Hinge and Bracket Outline radiators are hinged at the top and are opened by pushing the bottom of the radiator inwards slightly to release a latch. The radiator then pivots forward on the top hinges with the use of two gas struts that take the weight of the radiator and keep it open while you adjust the valves to your desired temperature. The radiator is then pushed back into position until the latch engages.

Hinge & Bracket - £242 + VAT in addition to the radiator price.

Radiator dimensions must be at least 430mm wide/high to incorporate the included set of chrome thermostatic valves and hinge system.

Valves are an important part of a heating system - they allow the radiator to be controlled and maintained, but at least with Eskimo's hidden valve systems, they can become your dirty little secret.







Gong

The latest in a long line of firsts from Eskimo, is Gong.

Beautifully patinated copper and brass finishes applied to Eskimo's super-powerful radiators.

As with all Eskimo products, huge attention has gone into ensuring that the lines of the product are as clean and uncluttered as possible, allowing the stunning opulence of the finish to speak for itself.

The patinations on Gong are applied by hand by highly skilled metalworkers and artists, in London's East End, using a variety of hot working tecniques and colour compounds depending on the finish required.*

Metal finishes

Brassy Knoll:

A brass patina – granite grey base with sea green highlights.

Mighty Magmas:

A copper patina – an earthy pallet of burnt orange and rose tones.

Midnight Caller:

A brass patina – aggregate greys washed with a night sky blue.

Dusky Moodstress:

A brass patina – dark chocolate brown with warm golden hints.

* Due to the hand finished nature of the patinas, EVERY Gong is different in tone and pattern each time.



Patina, Brassy Knoll With Hinge & Bracket hidden valves 2000mm H x 430mm W x 50mm D Lead time 6-8 weeks 1771 watts / 6045 Btu/Hr

Part no. 43200S-G-HB

Woody

Combining the unique aesthetic properties of wood with the thermal performance of aluminium

Woody's panels are produced by one of the UK's most skilled furniture makers.

Available in two standard depths, shallow and deep, 61mm and 106mm respectively – with the deep version giving double the heat output.

Three finishes are available, with and without towel rails; English Oak, Walnut and Fumed Oak. With the Hinge & Bracket hidden valve design now available, there is simply nothing more beautiful. For hidden heating it's better than underfloor too because it has proper temperature control.

One of reasons for using wood* is that you get a very nice and even gentle spread of temperature with no hot spots, even when the radiator 'engine' itself is delivering high heat output.

Woody'sl finishes

Oak Walnut Fumed Oak

Technical

Tests on Eskimo's thermal cycling rig included cooling down to ambient temperature and heating up to 80 degrees Celsius whilst being automatically sprayed at 5 minute intervals with water. It remained completely unaffected by high temperature fluctuations and damp and humid environments. There was no damage to the surface finish found - the Woody remained as beautiful as before its test. In short Woody is the perfect bathroom radiator as well as other areas of your home.

Water treatment

Unless otherwise stated these products are for use on closed heating systems only, they are not suitable for installation on secondary return hot water system. On completion of the installation the entire system MUST be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleaner is used, it must be thoroughly flushed from the system. Following this, the system MUST be dosed with a corrosion inhibitor/water treatment suitable for mixed metal systems (specifically aluminium) to prevent corrosion. System design, flushing and dosing must be in accordance with BS5449: 1990, BSEN12828, 2003 and BS7593:1992.

IMPORTANT

Failure to observe these requirements will invalidate the warranty.

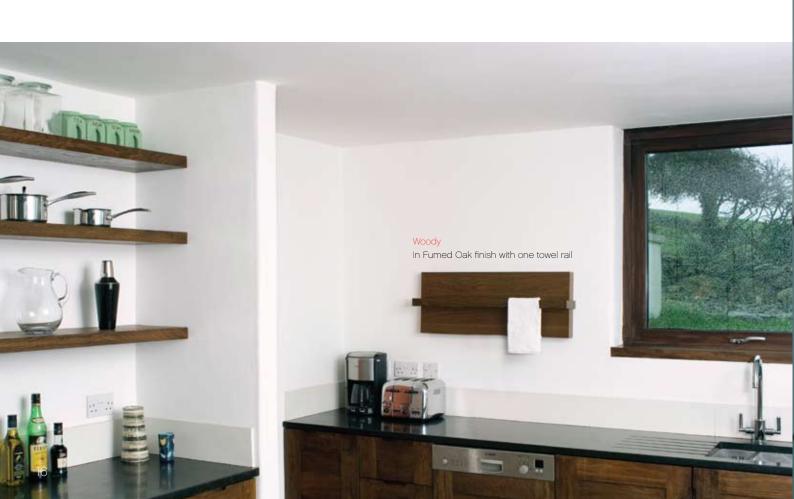
Water treatment

Unless otherwise stated these products are for use on closed heating systems only, they are not suitable for installation on secondary return hot water system. On completion of the installation the entire system MUST be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleaner is used, it must be thoroughly flushed from the system. Following this, the system MUST be dosed with a corrosion inhibitor/water treatment suitable for mixed metal systems (specifically aluminium) to prevent corrosion. System design, flushing and dosing must be in accordance with BS5449: 1990. BSEN12828. 2003 and BS7593:1992.

IMPORTANT

Failure to observe these requirements will invalidate the warranty.

*As you'd expect from Eskimo, we only use timber from well managed forests, using sustainable, FSC certified sources. And once again our suppliers are British. One of the foremost furniture makers in the UK.











The Holy Rail radiators A splash of colour, a lot of heat and toasty towels

The Holy Rail radiator and towel warmer is a room's fun, colourful friend. You can choose any two colours that blend beautifully within your interior design or any two colours that just take your fancy. Fun, colourful friends can also be surprisingly practical if you look beneath the surface and this one pumps out a high heat output via it's hidden modular aluminium radiator 'engine'. A powder coated steel front fascia panel and towel slot shell makes this an inspired dual purpose design, both heating your room and warming your towels.

We've considered your luxury chunky bath towels, we've thought about a family's haste and we've added to our mission statement of ridding the world of ugly radiators - another priority. The end of wet towels being left on floors, beds, chairs and banisters. Imagine this world. Our new design allows the stuffing of towels into a slot on the way out. Could it be true? The ever frustrated 'towel picker-upper' may finally have found it. The Holy Rail.

Available in six standard sizes and a choice of 29 standard colours that are included within the price. Alternatively you can have any colours you choose for a small additional cost. We are even happy to create special one-off combinations perhaps including our metal finishes such as Supermirror.

Wall mounted, central heating with bottom end connections for your valves.*

*Please see page 42 for information on our valve sets.

Colours

29 standard RAL colours available.

Or choose any RAL you like (additional cost).

Or use our colour matching service (additional cost).

Metal finishes

On special request.

See page 38 & 40 for all standard RALs and metal finishes.

Technical

All heat outputs are calculated in accordance with BS EN442. For an explanation of Delta T (Δt) and to calculate performance at different Delta Ts, please see the technical information on our website.

To convert Watts to BTU/hr, multiply the figure shown for watts by 3.412.

Test pressure: 7.5 bar.

Maximum Operating Pressure: 5 bar. Maximum Operating Temperature: 95°C.

Connections: 1/2" BSP Bottom (side of radiator) opposite end tappings - use angle valves for pipes coming from either the walls or up from the floor.

Valves must be ordered separately.

For all installation guidelines, please see www.eskimodesign.co.uk



Ron radiators

Eskimo's range of elliptical aluminium radiators

Eskimo's Ron range crosses the boundary between contemporary and classic. Its styling cues include 1950s aircraft technology and the traditional school house radiator. As a result it will happily sit with most interior schemes from ultra-modern to period. Ron is a modular aluminium high output radiator - allowing you to add as many sections as you need, from 1 to 50.

Available in a range of six standard heights. Fit long, low 200mm high versions underneath windows or shelving; or fit space saving 1.8m tall and narrow versions.

Wall mounted, central heating.

Leggy Ron is also available, please see page 15 for further information on this floor mounted version.

Metal finishes

Gold Matt Aluminium Polished Bead blast

Colours

29 standard RAL colours available
Or choose any RAL you like (additional cost)
Or use our colour matching service (additional cost)
See page 42 & 43 for all standard RALs
and metal finishes.

Technical

All heat outputs are calculated in accordance with BS EN442. For an explanation of Delta T (Δt) and to calculate performance at different Delta Ts, please see the technical information on our website.

To convert Watts to BTU/hr, multiply the figure shown for watts by 3.412.

Test pressure: 7.5 bar.

Maximum Operating Pressure: 5 bar. Maximum Operating Temperature: 95°C.

Connections: 1/2" BSP Bottom (side of radiator) opposite end tappings - use angle valves for pipes coming from either the walls or up from the floor. Valves must be ordered separately.

For all installation guidelines, please see www.eskimodesign.co.uk

Water treatment

Unless otherwise stated these products are for use on closed heating systems only, they are not suitable for installation on secondary return hot water system. On completion of the installation the entire system MUST be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleaner is used, it must be thoroughly flushed from the system. Following this, the system MUST be dosed with a corrosion inhibitor/water treatment suitable for mixed metal systems (specifically aluminium) to prevent corrosion. System design, flushing and dosing must be in accordance with BS5449: 1990, BSEN12828, 2003 and BS7593:1992.

IMPORTANT

Failure to observe these requirements will invalidate the warranty.







Optional Ron towel rails

The matching elliptical towel rails are proportionately designed to the elliptical section of the radiator.

Towel rails for Ron radiators

One warms your towels, the other heats your room

The problem with most towel rails is that they only provide their full heat output so long as you don't hang towels on them. Hanging a towel on a towel rail is like putting a tea cosy on a tea pot - it keeps the heat in, resulting in a cold room. Eskimo's towel rails are different: the rail on the front has a separate function to the radiator at the back - one warms your towels, the other heats your room, without compromising each other.

The matching elliptical towel rail is proportionately designed to the elliptical section of the radiator.

Available in a range of three standard heights with up to three towel rails.

Towel rails can be added for £103 + VAT per rail.

Other positions are available - speak with your local retailer or go to www.eskimodesign.co.uk

Central heating.

Metal finishes

Gold Matt Polished Bead blast

Colours

29 standard RAL colours available Or choose any RAL you like (additional cost)

Technical

All heat outputs are calculated in accordance with BS EN442. For an explanation of Delta T (Δt) and to calculate performance at different Delta Ts, please see the technical information on our website.

To convert Watts to BTU/hr, multiply the figure shown for watts by 3.412

Test pressure: 7.5 bar.

Maximum Operating Pressure: 5 bar. Maximum Operating Temperature: 95°C.

Connections: 1/2" BSP Bottom (side of radiator) opposite end tappings - use angle valves for pipes coming from walls and also from the floor. Valves must be ordered separately.

For all installation guidelines, please see www.eskimodesign.co.uk

Water treatment

Unless otherwise stated these products are for use on closed heating systems only, they are not suitable for installation on secondary return hot water system. On completion of the installation the entire system MUST be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleaner is used, it must be thoroughly flushed from the system. Following this, the system MUST be dosed with a corrosion inhibitor/water treatment suitable for mixed metal systems (specifically aluminium) to prevent corrosion. System design, flushing and dosing must be in accordance with BS5449: 1990, BSEN12828, 2003 and BS7593:1992.

IMPORTANT

Failure to observe these requirements will invalidate the warranty.





Leggy Ron radiators Eskimo's range of elliptical aluminium radiators, with legs

Born initially from a project in a listed building that prohibited wall mounting of radiators, Leggy Ron works equally well in conservatories or shops wherever there is floor to ceiling glass. Also where high skirting boards would normally require the radiator to be mounted at an unsightly height, or under benches and in alcoves where a wall mounted radiator would suffer from a reduced heat output being mounted too far back. The design is perfectly symmetrical allowing the radiator to be installed without regard to which side will be seen. A great solution allowing radiators to be used where the only option would be underfloor heating with all the associated issues such as lack of temperature control. Available in a range of six standard heights. Fit long, low 307mm high versions underneath windows or shelving; or fit space saving 2m tall and narrow versions*.

Floor mounted, central heating.

Metal finishes

Gold Matt Polished Bead blast

Colours

29 standard RAL colours available
Or choose any RAL you like (additional cost)
Or use our colour matching service (additional cost)
See page 38 & 39 for all standard RALs and metal finishes.

Technica

All heat outputs are calculated in accordance with BS EN442. For an explanation of Delta T (Δt) and to calculate performance at different Delta Ts, please see the technical information on our website.

To convert Watts to BTU/hr multiply the figure shown for watts by 3.412.

Test pressure: 7.5 bar.

Maximum Operating Pressure: 5 bar Maximum Operating Temperature 95°C.

Connections: 1/2" BSP Bottom (inside of radiator feet) opposite end tappings - use corner valves for pipes coming up from the floor.

Valves must be ordered separately.

For all installation guidelines, please see www.eskimodesign.co.uk

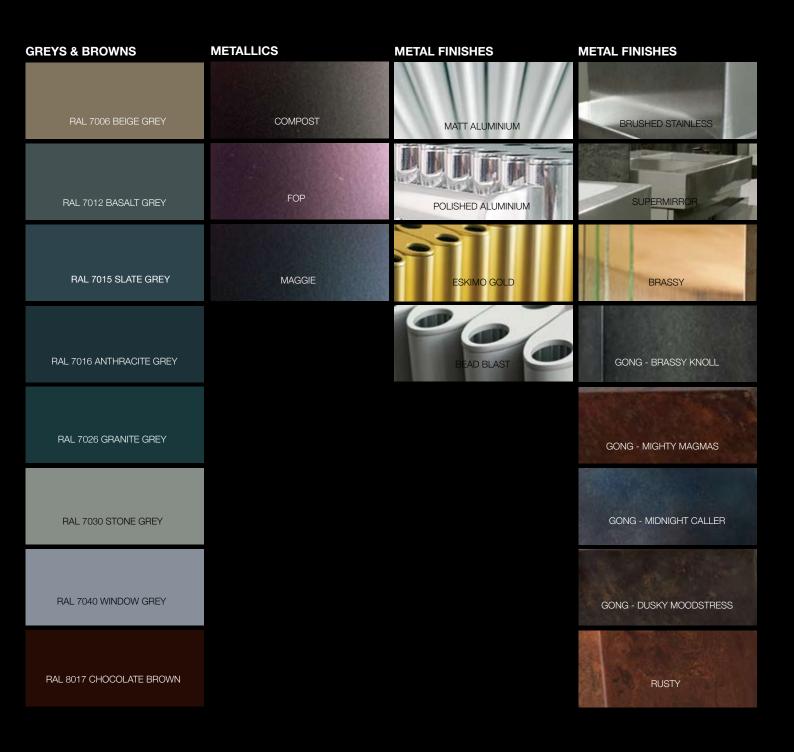
Fixings: 4 off M8 expanding bolts (RAWL type) are provided with the radiator, suitable for concrete floors. For other floor types the installer will need to ensure that adequate fixing strength is achieved. Any fixings used must be suitable for the weight and height of the radiator and capable of preventing the radiator from being pushed over in normal use. If in doubt consult a qualified engineer.

See water treatment information on opposite page.

Eskimo radiator colour collection and metal finishes

Please note: due to the limitations of the printing process, the colours shown here are not exact representations. To see precise colour representation, please ask your showroom to show you a RAL colour chart.

YELLOWS AND CREAMS	ORANGES	REDS	BLUES
RAL 9001 CREAM	RAL 2011 DEEP ORANGE	RAL 3002 CARMINE RED	RAL 5013 COBALT BLUE
RAL 1015 LIGHT IVORY		RAL 3004 PURPLE RED	RAL 5024 PASTEL BLUE
WHITES & BLACKS		RAL 3007 BLACK RED	
RAL 9002 GREY WHITE		RAL 3015 LIGHT PINK	
RAL 9003 SIGNAL WHITE		RAL 3016 CORAL RED	
RAL 9010 PURE WHITE		RAL 3027 RASPBERRY RED	
RAL 9016 TRAFFIC WHITE		RAL 4004 CLARET VIOLET	
RAL 9005 JET BLACK			



GREENS

RAL 7002 OLIVE GREY

Delta T

Delta T (\Delta t) is the difference between the desired ambient air temperature in the room (if in doubt use 20°C) and the mean water temperature in the radiator. To calculate the mean water temperature in the radiator, add the water temperature at the inlet to the radiator to the water temperature at the outlet from the radiator and divide by 2. As an example: You wish to have an ambient air temperature of 21°C in your bathroom. The water coming in to the radiator is at 50°C, by the time it's passed through the radiator it is down to 42°C. The mean water temperature is therefore (50+42)/2 = 46°C. To calculate the Delta T, subtract 21 from 46; the Delta T is therefore 25°C. A Delta T of 60°C is shown in the price lists. If your Delta T is not 60°C then you will need to apply a correction factor to the heat outputs shown in the price lists - see the list of correction factors alongside. The boring bit: ALL SALES AND TECHNICAL INFORMATION MAY BE SUBJECT TO CHANGE WITHOUT NOTICE AND IS SUBJECT TO ESKIMO'S STANDARD TERMS AND CONDITIONS CORPES	Δt °C 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	Correction Factor 0.24 0.26 0.27 0.29 0.30 0.32 0.34 0,35 0.37 0.39 0.41 0.42 0.44 0.46 0.48 0.50 0.51 0.53 0.55 0.57 0.59 0.61 0.63 0.65 0.67 0.69 0.71 0.73 0.75 0.77 0.79 0.81	Δt °C 54 54.5 55 55.5 56 56.5 57 57.5 58 58.5 59 59.5 60 60.5 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78	Correction Factor 0.87 0.88 0.89 0.90 0.91 0.92 0.94 0.95 0.96 0.97 0.98 0.99 1.00 1.01 1.02 1.04 1.07 1.09 1.11 1.13 1.15 1.18 1.20 1.22 1.24 1.27 1.29 1.31 1.34 1.36 1.38 1.41
CHANGE WITHOUT NOTICE AND IS	49	0.77	76	1.36

Non standard connection positions

Both Outline and Ron radiators can be specified with alternative connection positions at an additional cost

- please contact Eskimo for details: 0207 117 0110, sales@eskimodesign.co.uk

As Standard, Outline radiators use positions B & C. To specify the connection positions in the part number, follow this examplefor a Get Up 2000mm high x 430mm wide x 95mm deep in brushed stainless, with one connection on the top right hand face and one on the bottom left hand side face.

43200D-B-AY

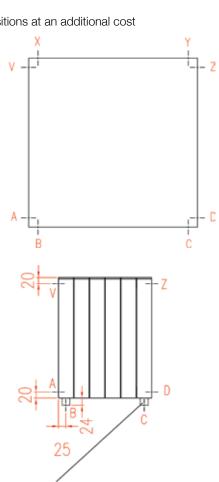
All connections positions are 33mm in from the corner of the radiator. Inlet and outlet do not have to be specified. NOTE: You cannot specify both connections on one corner i.e. connection positions AB or VX etc.

As standard, Ron radiators use positions A & D. Other connection positions can be specified as shown.

To specify the connection positions in the part number follow this example for a Ron 1800mm high x 416mm wide in polished aluminium with one connection on the right hand face at the side and one on the bottome left hand face.

RON-18-416-P-AZ

Inlet and outlet do not have to be specified. NOTE: You cannot specify both connections on one corner i.e. connection positions AB or CD.



		ı	Correction
Δt °C	Correction	Δt °C	Factor
ДСС	Factor	_ <u></u>	ractor
9	0.19	50	1.00
10	0.21	51	1.02
11	0.23	52	1.04
12	0.25	53	1.07
13	0.27	54	1.09
14	0.29	55	1.11
15	0.31	56	1.13
16	0.33	57	1.15
17	0.35	58	1.18
18	0.36	59	1.20
19	0.38	60	1.22
20	0.41	61	1.24
21	0.42	62	1.27
22	0.44	63	1.29
23	0.46	64	1.31
24	0.48	65	1.34
25	0.50	66	1.36
26	0.51	67	1.38
27	0.53	68	1.41
28	0.55	69	1.43
29	0.57	70	1.45
30	0.59		
31	0.61	1	
32	0.63	1	
33	0.65	1	
34	0.67	1	
35	0.69	1	
36	0.71	1	
37	0.73	1	
38	0.75	1	
39	0.77	1	
40	0.79	1	
41	0.81		
42	0.83		
43	0.85		
44	0.87]	
45	0.89]	
46	0.91]	
47	0.94]	
48	0.96]	
49	0.98]	

Q. How do I choose the size of my radiator?

A. Firstly, ask your plumber to calculate the heat requirement of the room(s) in question or follow the steps in our heat requirement calculator on our website (we can also email you this as a spreadsheet). Then decide whereabouts you want the radiator and what shape it ought to be. Then look through the price lists to see what options you have in terms of size and finish - we also have a further 300 standard sizes, 6 standard finishes and an infinite variety of special sizes and finishes. You'll find masses of options, so please call Eskimo if you'd like assistance.

Q. Are Eskimo radiators compatible with my existing heating system?

A. Yes, Eskimo radiators are designed for use with any central heating system, in any combination of shapes or sizes, and with anybody else's radiators installed in other parts of the system. The connections are British Standard Pipe connections, which despite the name, are used on all radiators throughout Europe. Eskimo radiators have been used in locations as diverse as New York, Casablanca, Little Snoring and Irkutsk in Siberia. As for our electric radiators - again they are compatible with all systems throughout Europe and we can also supply 120v 60hz versions for use in North America.

Q. Should I change all of my radiators at once or can I do them one at a time?

A. Whichever suits your site best – Eskimo radiators will work happily as a single feature radiator or as the only style of radiator throughout a site. If one radiator only is changed, then the system might require balancing to ensure an equal flow of water to each radiator, but your plumber will do this. If you are installing yourself then see the technical help page on balancing found on our website.

Q. Should I keep the radiators in the current position or can I move them somewhere else in the room?

A. You can move them anywhere you like, but consider these points: if you keep the radiator in the current position it will reduce installation costs. Eskimo are the only company who offer radiators tailor made to the nearest millimetre - if you give us your current pipe measurements (centre to centre) we will make a radiator that matches these precisely, reducing installation costs hugely. If you have a traditional property with single glazing then fitting the radiators under the windows makes sense, as the cold air dropping from the window is heated by the radiator, cancelling out cold draughts. If you have a modern building or good double glazing, then you can site the radiator in any position and in whatever format (long and low, tall and narrow etc) you fancy.

Q. Is there anywhere I shouldn't put a radiator?

A. Absolutely, but in terms of installation in a room, think about the movement of air through the radiator. All Eskimo radiators require air to move freely into (from underneath) and out of (above) the radiator. In practice this means that you should allow 100mm above and 100mm below the radiator without any obstructions such as skirting, shelves etc if you want to achieve full performance. If mounting the radiator in a purpose built alcove allow 100mm above and below the radiator, while the sides can be within about 25mm of the alcove wall provided the effects of heat are considered in the construction.

Q. How long will my radiator take to make?

A. All Eskimo radiators are made to order at our factory in Birmingham, UK, and the maximum lead time is 6 weeks, order to delivery.

Q. Is there anything I can do to speed the process up?

A. Yes, you can have all the pipe work and valves installed, flooring laid, decoration finished etc. Then, when the radiator is ready, it's just a case of mounting it on the wall and connecting the valves to the radiator. Pipe connection positions are available on the relevant installation instructions via our website, or from Eskimo direct. We've done this for hundreds of installations and it's easy.

Q. Are Eskimo radiators efficient?

A. Yes, Eskimo radiators have uniquely high heat outputs for a given size of radiator – they therefore use less material to deliver the same power. However, they will cost the same amount to run as any other radiator, as all a radiator does is replace the heat lost through the fabric of the building – it can't make that building lose any less heat. So the running cost is a feature of how well insulated the building is (how much heat it loses) not how much heat the radiator gives out.

MORE FAQ'S CAN BE FOUND ON OUR WEBSITE AT:

www.eskimodesign.co.uk



Cleaning your radiator How to clean your radiator finish

Outline radiators

Brushed

Clean with a stainless steel cleaner, no abrasives, then rub down with baby oil along the grain for a smear-free sheen.

RAL colour finish (including three metallics: Maggie, Fop and Compost)

Any multisurface cleaner suitable for kitchen worktops but no abrasives.

Supermirror and Brassy

Any glass cleaner suitable for use on mirrors.

Woody

Woody's Oak veneers are lacquered so we suggest a spray furniture polish.

Gong

It is not recommended that you try to clean or add anything to the patinated surface of your Gong radiator. It should not be necessary to have to clean the surface. At most, a yellow duster or soft muslin cloth can be used to polish probably best if this is done when the radiator is cold.

Spillages or anything of that sort should be removed immediately with soft tissue. All standard cleaning products are a bad idea as they will, at best, attack the wax, at worst, damage the patina. If cleaning is really necessary, the radiator should be allowed to cool and then a very dilute sugar soap solution can be used with soft muslin and then dried thoroughly with tissue.

No abrasives should be used or applied and you should not attempt to wax the radiator.

Rusty

As Gong, above.

RON radiators

Gold finish

Gently clean with soapy water and then buff with a dry lint free cloth.

Matt aluminium finish

Gently clean with soapy water and then buff with a dry lint free cloth.

RAL colour finish (including three metallics: Maggie, Fop and Compost)

Any multisurface cleaner suitable for kitchen worktops but no abrasives.

Polished finish

Any mirror cleaner. Use Brasso for stains.

Bead blast finish

Gently clean with soapy water and soft brush then buff with a dry lint free cloth. We recommend all handling be done with cotton gloves to avoid marking.

Radiator balancing

Balancing may be necessary any time radiators are fitted in an existing system or upon the installation of an entire heating system. If a system is not properly balanced it will result in one or more radiators not heating up properly, or not heating up at all.

A basic explanation of what balancing involves is helped by an understanding of the way water behaves when flowing through any pipe-work system and what is meant by pressure drop.

Pressure Drop

This describes the effect of friction on the water flowing through pipes – the resistance to the flow of the water. This resistance is increased by twists and turns and will be higher in a smaller diameter pipe than it will be in a larger one. It's also increased every time the water flows from a pipe of one diameter to a pipe of a different diameter or through a valve. Pressure drop is measured in Bar or PSI and essentially the water pump has to generate enough pressure to overcome the total pressure drop (can also be called pressure loss) in the system.

Every radiator will have a different pressure drop. Combine this with the fact that the pipes flowing to and from each radiator will be of different lengths and take straighter, or more circuitous routes, and you'll see that the water will have to work harder to flow round some radiators in your system than others.

Lazy water

The water flowing around your system is essentially lazy. It will follow the path of least resistance. If radiator A and its associated pipe-work has a lower pressure drop than radiator B, then more of the water will flow to radiator A. If the pressure drop through radiator B and its pipes are much higher than radiator A then it won't bother going through radiator B at all.

Balancing is the name for the procedure that ensures that each radiator in the system has a roughly equal pressure drop and is done by using the lockshield valve on the return side of the radiator (the downstream side).

Valves

The lockshield valve is on the other end to the thermostatic valve and usually requires a screwdriver, spanner or allen key to operate it, although sometimes they can be turned by hand.

If thermostatic valves (TRVs) are not being used, i.e. your valves are manual on/off valves then use the valve on the return side of the radiator (if in doubt as to which this is check with your plumber – it will be the cooler of the two pipes if you can feel a difference, or the pipe which heats up last when the heating is first switched on)

In principle balancing involves using the lockshield valve to restrict the flow of water (thereby increasing the pressure drop) through those radiators that have a lower pressure drop while leaving the lockshield valve open on those radiators with a higher pressure drop to make it as hard for the water to flow through radiator A as it is through radiators B, C, D etc.

In practice it can mean tightening (clockwise) or loosening (anticlockwise) each valve a little at a time until the pressure drop at each of the radiators is equal – balanced.

Radiator Thermometers

The job of balancing a system is made much easier with the use of radiator thermometers – these measure the temperature drop across the radiator and allow you to ensure that there is an equal temperature drop across each radiator, meaning that each radiator is receiving the required flow of water.

This temperature drop will usually be something between 10°C and 20°C depending on your system – if in doubt go for 12°C – the key is to ensure that the temperature drop is the same across each rad.

Balancing Procedure

- 1. Before you start balancing it's important to make sure that the radiators have been vented (bled) properly so that all the air in the radiators is removed if in doubt see Eskimo technical help file "venting procedure".
- 2. Start by switching off the system and letting the water cool down.
- 3. Remove any cover from the lockshield valve(s) and find the appropriate tool(s) for adjusting it (them).
- 4. Open both the lockshield valve and thermostatic valve (or the other manual valve normally positioned at the opposite end of the radiator) on ALL radiators.
- 5. With all the radiator valves now fully open, switch on the central heating system if all the radiators become

similarly hot in a similar time there is nothing to do and your radiator balancing is completed. If not, and "not" is usually the case, then follow the procedure below:

If not using radiator thermometers

- 6. Allow the system to cool down, then with all valves still fully open switch it on again. Find the radiators which get hottest quickest and restrict the flow through them by turning down the lockshield valves (clockwise). There is no fixed order in which to restrict radiator valves except to do the hotter radiators first. This pushes more flow through the remaining radiators. Work out how many turns it takes to fully close the lockshield valve and then return it to about 50 or 60% closed (i.e. if it takes 5 turns to close it fully, turn it 2.5 or 3 turns).
- 7. Having restricted the return valves on the hottest radiators by 50% or 60% to start with, wait to see what happens. Cooler radiators will start to get hotter. Some previously cool radiators may get fully hot. If some are still cool go round again, restricting all the hotter radiators by turning down the lockshield valve (clockwise again), some which were restricted before should be closed down even more (always on the lockshield end) and some which weren't restricted first time round should be restricted this time because they are now hot. Again wait to see what effect this has and again, if necessary, further restrict the hotter radiators. Continue until all of the radiators are roughly equally hot and have roughly the same temperature drop across the pipes.

If using radiator thermometers

- 8. Fit the radiator thermometers to the INLET and OUTLET pipes of the nearest radiator to the boiler. DO NOT fit them to the main flow and return pipes.
- 9. Switch on the central heating system.
- 10. Close the lockshield valve on the first radiator to almost closed, as the temperature of the systems comes up, gradually open up the valve until the temperature difference between the two thermometers is about 12°C.
- 11. Move the thermometers to the next radiator away from the boiler. Close down the lockshield valve and adjust it until the temperature difference increases to about 12°C (the temperature difference will probably start at less than 12 degrees with both valves fully open).
- 12. Work along the rest of the radiators until they have all been balanced.

Recommended Venting Procedure for Radiators (with bottom opposite end connections)

Please ensure that you have a container and cloth at the ready to catch any water that may be lost during the following process, and the central heating system is turned off.

For best results vent the system when cool. Generally radiators will have been 'balanced' by the setting of the return-side valve. If this is the case, record the setting (e.g. The number of turns it takes to close, or the position of slot on the 'ball valve' type) and return to this setting after completing the following procedures:

- Sealed Systems (e.g. Combi-boiler) Radiators installed on 'pressurized' systems are under simultaneous pressure on their flow and their return sides. This may sometimes cause a stubborn airlock in the middle of a radiator. The following process promotes natural water gravitation and easier venting by using system pressure separately on the flow and return side of a radiator.
- 1. Carry out an initial vent from all radiators, working from the lowest point upward, retopping pressure frequently to maintain approximately 2 bar throughout the venting process.
- 2. Run central heating system for 5 minutes, switch off and allow it to cool completely.
- 3. Carry out a full and thorough vent from the entire central heating system, as before.
- 4. Return to the radiator to be vented and close the flow valve and return valve
- Vent radiator, ensuring all pressure is released from radiator water first, air last.
- 6. Gently open the return valve only (with the vent closed) and then close again.
- 7. Vent radiator ensuring all pressure is released from radiator water first, air last.
- 8. Repeat steps 5 & 6 until all air is removed (maintaining 2 bar pressure).
- 9. Open the flow valve.
- 10. Return the return valve to the noted position.

- Open Systems (e.g. with an expansion tank in the loft)
 The following process promotes natural water gravitation and easier venting by using system headerpressure on the return side of a radiator.
- 1. Carry out an initial vent from all radiators, working from the lowest point upwards.
- 2. Run central heating system for 5 minutes, switch off and allow it to cool completely.
- 3. Carry out a full and thorough vent from the entire central heating system as before.
- 4. Return to the radiator to be vented and close the flow valve.
- 5. Open the return valve fully.
- 6. Vent radiator slowly and repeatedly until all air is removed.
- 7. Open the flow valve.
- 8. Return the return valve to the noted position.

Once a heating system has been installed, it should be chemically cleansed and inhibited according to British Standard BS7593: 1992.

All air should be removed from the system before normal operation. Although radiators may be vented (i.e. air bled out) on an annual basis as a matter of routine maintenance, the need for more frequent venting may indicate a system problem.

The presence of air, or gases (the by-product of corrosion), in a central heating system can be identified by:

- Cold spots in radiators (generally at the top).
- 'Trickling' or 'burbling' sounds from radiators (particularly column type radiators).
- Pin hole corrosion in radiators.

These symptoms can generally be eliminated by:

- Fully venting all air out of the system.
- Ensuring there are no leaks anywhere in the system.
- Chemically cleansing and inhibiting the system.
- Ensuring that no radiator is above an air separator or system vent position (open system only).

Failure to eliminate all air or gas from a radiator, or the re-occurrence of gas in a radiator, may be attributed to one or more of the following reasons:

- Air remaining in the system, which has not been released through venting, which may then travel around the system.
- The central heating system has an intake of air, which is then being circulated around the system, and is collecting in the radiator(s). (Micro leaks often occur at screwed or compression joints on the suction side of the pump and can allow air in without letting water out.)
- The central heating system has not been inhibited, or is insufficiently inhibited, allowing the continuous production of hydrogen gas, which is subsequently being pumped around the system and is collecting in the radiator. (Hydrogen is a byproduct of electrolytic corrosion and is often mistaken for air. Due care must be taken as hydrogen is highly combustible.)
- The pump for the central heating system is set too high, causing the release of oxygen from the system's water ('cavitation'), which is then being pumped around the system and is collecting in the radiator(s).
- The pump for the central heating system is incorrectly positioned in relation to the feed and expansion

pipes, causing the production of oxygen ('pumping over'), which is then being pumped around the system and is collecting in the radiator (only applicable to open vented systems).

• The central heating system's air vent has been installed below the top of said radiator, consequently causing air to rise to the highest level and collect within.

Maintenance

A poorly maintained or untreated system will work to the detriment of all its components, dramatically shortening their longevity, so please ensure that your central heating system contains non-corrosive, clean water, and has the correct amount and type of corrosion inhibitor applied - in accordance with British Standard 7593:1992. (This is also essential for central heating systems which are supplied via a water-softener.)

If the system contains unclean water, or does not have an inhibitor applied it may be advisable to seek advice from a qualified plumber or heating engineer on chemically cleansing and flushing the entire central heating system (including the boiler) in accordance with British Standard 7539:1992, and with the manufacturer's instructions.

For advice on system treatments and maintenance, call the Fernox Technical Helpline on 01799 550 811 or visit their website at www.fernox.com
Fernox are our independent, and the UK's leading water testing team.