

RANGE

Discover the **ALL** new **Range** Tribune Xe –
Engineered for maximum **EFFICIENCY**



Not **just** a **NEW** cylinder...

Range cylinders have been the brand the house builder turns to for innovation, economy and ease of installation for more than 80 years. With over 27 models to choose from, you can select exactly the right one to meet your needs. All with the added reassurance of BS EN ISO 9001:2008 accreditation to guarantee the highest manufacturing standards.

Now, the new Range Tribune Xe adds new levels of efficiency:

- ▶ Our first 'A' Rated ErP cylinders for energy efficiency providing a better operational performance*
- ▶ 25% Improvement in heat loss performance compared to Tribune HE (0.021 Lambda)
- ▶ A side mounted hot water outlet to reduce potential heat loss from the cylinder top
- ▶ Self-contained expansion space that acts as an additional insulator
- ▶ Automatic pressurisation on installation, for a fast, hassle-free fit
- ▶ Designed with the installer in mind for a quicker, easier installation and setup

Plus, all the benefits you expect from Kingspan cylinders:

- ▶ Fully transferable 25-year guarantee on the basic vessel, 2-years**
- ▶ High flow-rate controls - ideal for multiple bathrooms and powerful showers
- ▶ Fast reheat and high insulation values
- ▶ The complete package - just add pipework

* 120L and 150L indirect cylinders

** See installation instructions on our website for full terms and conditions



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Energy efficiency is the issue that nobody - specifiers, installers and homeowners alike - can afford to ignore.

Ever tighter legislation on emissions, BREEAM ratings, the energy-related products directive (ErP) and reduced carbon emissions construction targets have driven the building industry to seek more and more energy efficient solutions, while concerns for the environment and rising fuel costs mean it's one of the most important factors for buyers considering a new property.

With this in mind, we went back to the drawing board to reconsider every aspect of hot water cylinder design and see where we could make improvements.

The result, after many years of development, is the all new Range Tribune Xe cylinder.

A different approach to energy efficiency

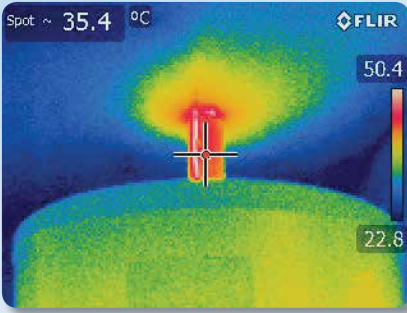
By going right back to the basics, we managed to make over 50 improvements to individual components and production processes. Each one contributes to an improvement in energy efficiency or installation efficiency. Together, they add up to our most energy efficient cylinder, ever.

For example, moving the hot water outlet from the top of the cylinder to the side looks, on the face of it, a relatively small change. Yet, it was one that took considerable re-engineering.

The reason? A traditional top mounted outlet - while easier to manufacture - means having a pipe penetration through the insulation at the hottest part of the cylinder. By switching to a side outlet, the top of the cylinder can be fully insulated with foam, making for better heat retention and a more energy efficient performance.



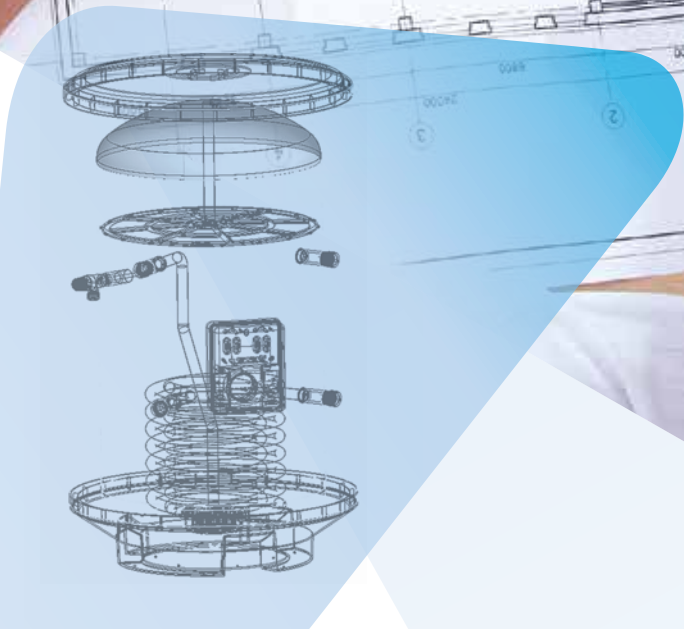
Leading competitor cylinder



New Range Tribune Xe



Thermal imaging shows the difference in heat loss between traditional top hot water outlet and new Xe with side outlet



Built-in thermal expansion: reducing heat loss and installation time



One of the biggest developments in the design of the Xe is its built-in thermal expansion space - an insulating 'air bubble' at the top of the cylinder, made possible by moving the hot water outlet to the side wall.

Not only does this add extra thermal efficiency (air is a highly effective insulator). It also makes installation quicker and easier by eliminating the need for an external expansion vessel and allowing automatic pressurisation to a pre-set bar rating as the cylinder is filled.

An internal expansion space helps protect the heating system by absorbing excess water pressure created as the water heats up and expands.

Finally, a simple floating disc acts as a barrier between the air pocket and the water surface, reducing the amount of air that is absorbed into the water. So pressure is retained for longer and intervals between system re-pressurisation are extended.



As the water heats up, the floating disc rises to absorb the increase in pressure.



Built-in thermal expansion - the savings

By eliminating the need for an external expansion vessel, the Range Tribune Xe could save you:

- ▶ Up to 35 mins per cylinder installation
- ▶ Approximately 2m of 22mm copper tube
- ▶ 2 plumbing fittings and 8 brackets/fixings
- ▶ The expansion vessel itself





The Range Tribune Xe comes with a massive 45% increase in insulation volume.

Formed from the highest quality polyurethane available and applied using an advanced foam injection technique, this extra insulation delivers a huge reduction in heat loss.

We have also made improvements to our production processes, delivering a better, more consistent application of the polyurethane foam, resulting in superior insulation characteristics in the finished product. Yet another example of what happens when you totally rethink how to make a hot water cylinder.

Other improvements include the use of a pre-coated steel cylinder case that helps reduce our carbon footprint and provides a more consistent finish, an integrated immersion heater with dual thermostats and cover for reduced heat loss and faster response time, an 'A' Rated EuP circulating pump and a new swivel connection T&P relief valve for easier assembly.

The accumulation of all our changes has combined to deliver real tangible improvements in the cylinders' performance. From better thermal efficiency to higher flow rates and faster installation times, the new Range Tribune Xe provides superior results.



The **strongest** case yet for

A real improvement in thermal efficiency

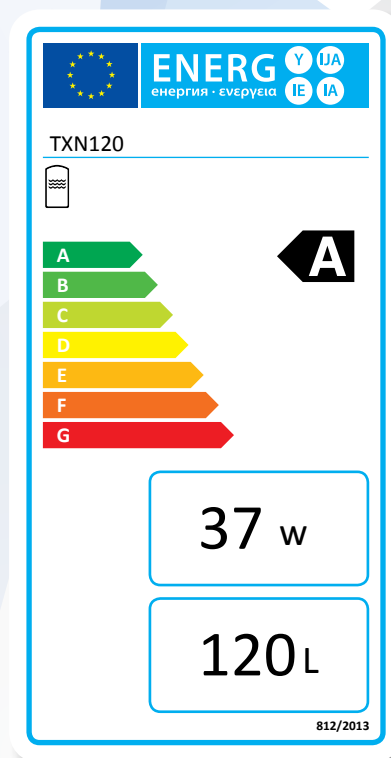
ErP Results

Volume	Tribune HE	Tribune Xe
120L	B	A
150L	B	A
180L	B	B
210L	C	B
250L	C	B
300L	C	C

SAP Results

See how the SAP score improves in this example of a 150L cylinder in a typical family home.

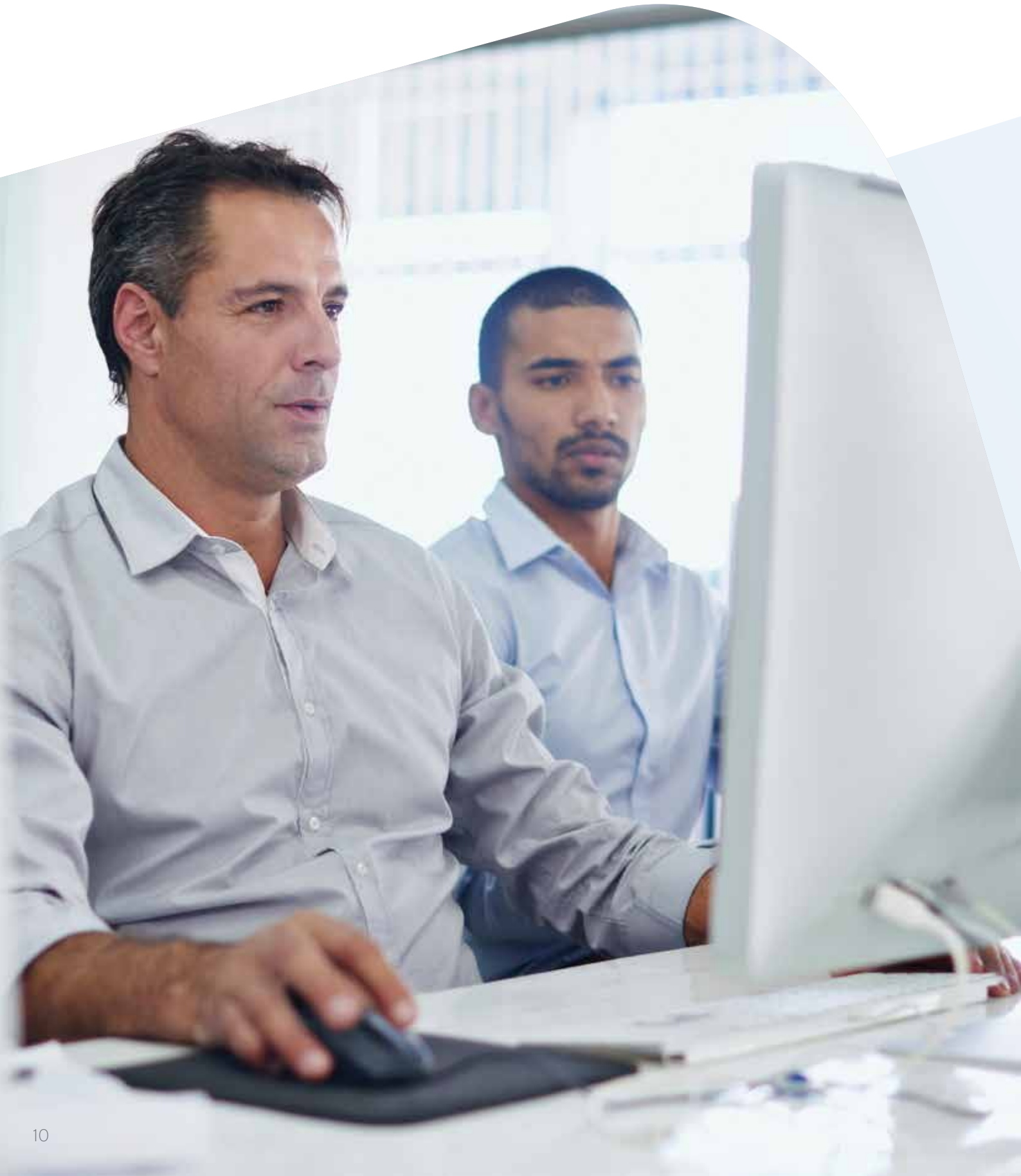
Volume	Heat Loss (kWh/24h)	DER
Tribune HE	1.23	14.7
Tribune Ecocyl	1.06	14.65
Tribune Xe	0.96	14.62



choosing **Kingspan** cylinders

Kingspan after sales service

Kingspan provide a comprehensive aftercare service from our nationwide team of engineers for the full peace of mind of the homeowner, contractor and housing developer.



Why **Kingspan**?

Because we **offer** MORE.

High quality, industry leading products and accessories are just part of the Kingspan story.

We add even more value through the Coates Design Partnership, another Kingspan company, providing a comprehensive consultancy service to help ensure your system designs are energy efficient and incorporate good practice from the word go.

We'll work closely with you to achieve the lowest carbon footprint in line with industry standards including BREEAM, 'Passivhaus' and all current building regulations. The Coates Design team includes skilled engineers with many years' construction industry experience and an accredited SAP assessor, allowing us to produce practical, joined up designs and SAPs from one team.

Designers use a range of industry approved engineering software, including AutoCAD for all 2D and 3D designs, ensuring full compatibility with customers' systems. Coates Design is a BIM ready consultancy and is fully committed to the use of Building Information Modelling (BIM) on future projects.



Tested and Guaranteed for 25 Years

The Kingspan name is founded on the high performance, quality and reliability of our products. A reputation maintained by rigorous quality control systems at our UK production facilities.

Every stainless steel cylinder is pressure tested to 15 bar on the production line to ensure it is free from faults. Rigorous ongoing product life cycle testing that surpasses the minimum requirements set out by approvals bodies and industry leading thermal test labs gives us highly detailed performance data that we feed back into product development to improve our cylinder designs still further.

THE RESULT IS A FULL, 25-YEAR GUARANTEE AGAINST MANUFACTURING DEFECTS ON THE BASIC VESSEL AND A 2-YEAR GUARANTEE ON COMPONENTS*.

* See installation instructions on our website for full terms and conditions

Pre-Plumb Cylinders

Pre-plumbed models offer up to 70% faster installation times and significant savings in components, materials and labour.

They come with all pipework, inlets and components pre-fitted, allowing 'plug and play' installation, straight out of the box. And with our new straight line configuration, it's now even easier to align and connect all essential inlet and outlet feeds and power supplies.

You also get the added protection of our full guarantee, as the factory fitted plumbing is covered as part of the cylinder. Plus, each unit is pre-plumbed and pre-wired using high grade components to deliver exceptional performance, easy maintenance and reliability.

Key features

- Standard indirect models: 120, 150, 180, 210, 250 and 300 litre capacity
- Indirect solar models: 180, 210, 250 and 300 litre capacity
- Seven day programmable room thermostat with timed domestic hot water (DHW) control
- Separate central heating and hot water zones
- 'A' Rated EuP compliant variable speed circulating pump
- Automatic bypass valve for system efficiency
- Load balancing valve for indirect coil efficiency
- Connections for vented and unvented heating primaries
- Central heating expansion vessel pack
- Consistent electrical and plumbing layout
- Brazed pipework fabrication

Benefits

- Simplified on-site installation
- Up to 70% quicker to install
- Factory assembled for reliability - reduces costly call-backs and delays
- Consistent electrical and plumbing layout - neat, professional finish
- Greater customer satisfaction
- ISO 9001:2008 quality assured
- Compatible with standard boiler





TP9000



TP5000 Si

Specification Details

Separate central heating and hot water configuration

- 22mm motorised valve to radiator circuit
- 22mm motorised valve to coil heat exchanger
- Wiring centre
- Hot water temperature thermostat
- Seven day programmable room thermostat with timed domestic hot water (DHW) control

Advanced TP9000 controller

- Programmer and room thermostat in a single unit
- Reduced installation time
- Fully compliant with Part L Building Regulations
- Load compensator and delayed start function boiler 'ON' time
- High rating in SAP software for reduced energy costs and carbon emissions
- Twin zone Xe models feature TP5000 Si room thermostat for programmable time and temperatures for the 2nd zone

High performance configuration

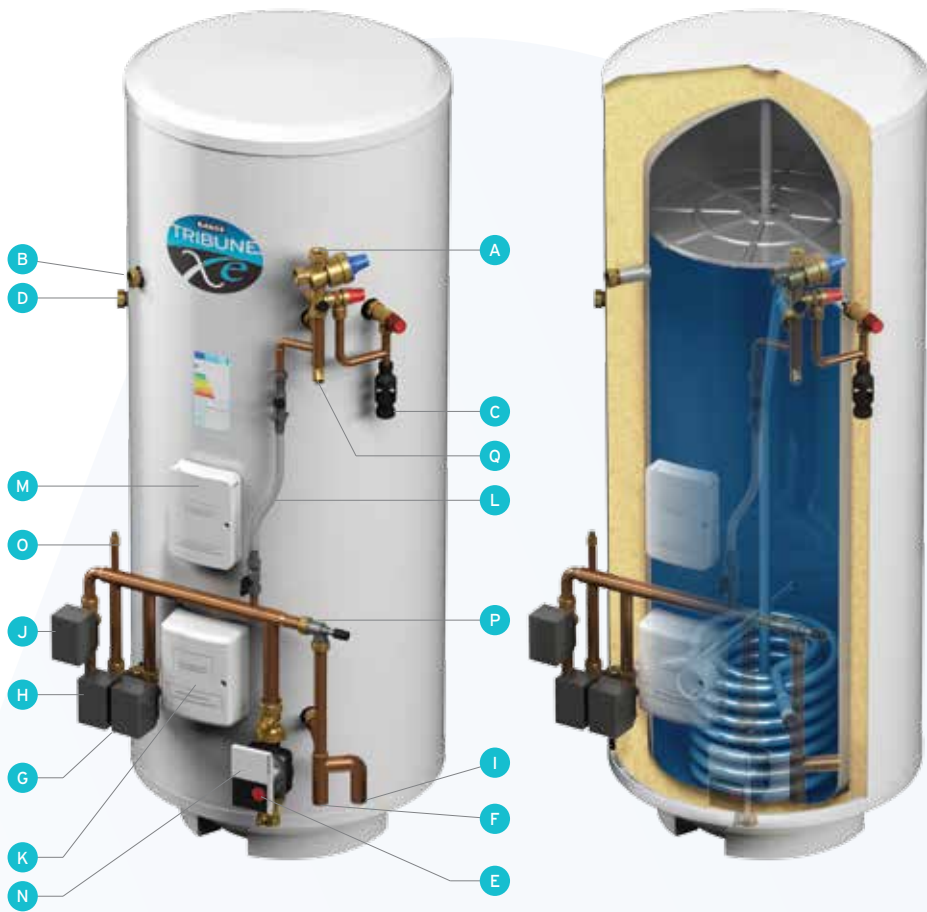
- Automatic bypass valve
- 'A' Rated EuP compliant variable speed circulating pump
- 22mm high performance monobloc cold inlet set
- Combined expansion valve/ check valve housing
- 22mm hot outlet to taps
- 28mm primary flow
- 28mm primary return
- Immersion heater with integral thermostat and thermal cut-out
- Drain cocks
- Comes complete with central heating expansion vessel pack and pressure gauge

Comprehensive Safety Controls

- Temperature and pressure relief valve operating at 90°C / 7 bar
- 22mm tundish outlet
- High limit hot water thermal cut-out



Pre-Plumb Indirect



Technical specifications

Connections:

A	22mm Inlet control set - cold feed
B	22mm Hot water draw-off
C	Tundish drain off
D	Secondary return (210L, 250L & 300L)
E	28mm Flow from boiler
F	28mm Return to boiler
G	Connection - Central heating flow two port valve zone 1
H	Connection - Central heating flow two port valve zone 2
I	28mm Return from radiator circuit
J	22mm DHW two port valve
K†	Immersion heater & dual thermostats
L	Filling loop flexible hose
M	Wiring centre
N	Circulating pump
O	Manual bottle air eliminator
P	Auto bypass valve
Q	Cold feed drain

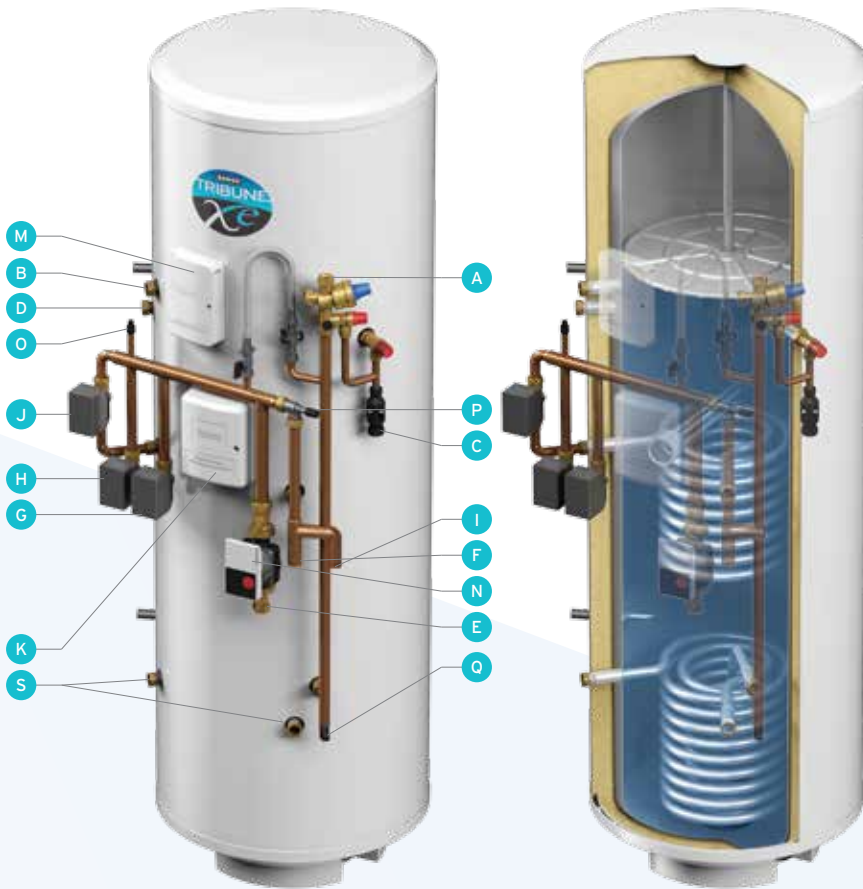
Code*	Litres	Height (mm)	Dia. (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	ErP Rating	Standing Loss, W
TXN120P	120	1001	580	834	655	452	NF	92	196	204	204	A	37
TXN150P	150	1187	580	1020	841	638	NF	122	226	234	234	A	40
TXN180P	180	1371	580	1204	1025	822	NF	152	256	264	264	B	50
TXN210P	210	1561	580	1270	1091	888	1026	152	256	264	264	B	62
TXN250P	250	1806	580	1515	1336	1133	1271	187	291	299	299	B	66
TXN300P	300	2076	580	1750	1588	1385	1523	187	291	299	299	C	77

* For Twin zone models add 'T' to the end of the code e.g. TXN180P Becomes TXN180PT

N/F = Not Fitted

† Not to be used as the primary heat source

Pre-Plumb Solar



Technical specifications

Connections:

A	22mm Inlet control set - cold feed
B	22mm Hot water draw-off
C	Tundish drain off
D	Secondary return (210L, 250L & 300L)
E	28mm Flow from boiler
F	28mm Return to boiler
G	Connection - central heating flow two port valve zone 1
H	Connection - central heating flow two port valve zone 2
I	28mm Return from radiator circuit
J	22mm DHW two port valve
K†	Immersion heater & dual thermostats
L	Filling loop flexible hose
M	Wiring centre
N	Circulating pump
O	Manual bottle air eliminator
P	Auto bypass valve
Q	Cold feed drain
R	Stat pocket - solar
S	Solar coil connections

Code*	Litres	Height (mm)	Dia. (mm)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	S (mm)	ErP Rating	Standing Loss, W
TXSN180P	180	1371	580	1321	1025	806	NF	649	739	751	751	349	B	50
TXSN210P	210	1561	580	1421	1091	872	1026	699	789	801	801	379	B	62
TXSN250P	250	1806	580	1421	1336	1117	1271	769	859	871	871	379	B	66
TXSN300P	300	2076	580	1721	1588	1369	1523	799	889	901	901	414	C	77

* For Twin zone models add 'T' to the end of the code e.g. TXSN180P Becomes TXSN180PT

N/F = Not Fitted

† Not to be used as the primary heat source

Indirect

Designed to heat up rapidly using the primary heating coil connected to a gas or oil boiler. The cylinder will retain its heat for long periods so you can be assured of the most economical system choice. These cylinders also feature a back up immersion heater as a secondary heat source that can act as a boost when the primary heat source is not available.



Technical specifications

Connections:

- A** 22mm Cold feed with dip pipe to diffuser in bottom of cylinder
- B** 22mm Hot water outlet
- C1†** Immersion heater
- C2*** Secondary immersion heater
- D1** 22mm Coil connections
- E** 1/2" Temperature relief valve boss (Valve factory fitted to cylinder)
- F*** 22mm Secondary return

Code	Heat Up Time (Minutes)	Coil Rating (kW)	Immersion Heaters (3kW)
TXN120	22	15.51	1
TXN150	25	16.76	1
TXN180	28	17.44	1
TXN210	30	19.68	1
TXN250	34	20.95	2
TXN300	44	21.00	2

Code	Capacity (Ltrs)	Height (mm)	Dia. (mm)	Boss centre from floor							ErP	
				A (mm)	B (mm)	C1† (mm)	C2* (mm)	D (mm)	E (mm)	F* (mm)	ErP Rating	Standing Loss, W
TXN120	120	1001	580	459	655	359	NF	319	623	NF	A	37
TXN150	150	1187	580	459	851	389	NF	349	809	NF	A	40
TXN180	180	1371	580	494	1025	419	NF	379	993	NF	B	50
TXN210	210	1561	580	494	1091	419	NF	379	1059	1026	B	62
TXN250	250	1806	580	534	1336	454	1109	414	1304	1271	B	66
TXN300	300	2076	580	534	1588	454	1259	414	1556	1523	C	77

* Not always fitted refer to table above

† Not to be used as the primary heat source

Direct

Designed to be heated directly by the built in high quality 3kW electric immersion heater, these cylinders heat quickly and retain the temperature for a long period. Each direct cylinder also features a secondary back up 3kW electric immersion heater that can also act as a boost when the primary heater is not on.



Technical specifications

Connections:

- A** 22mm Cold feed with dip pipe to diffuser in bottom of cylinder
- B** 22mm Hot water outlet
- C1** Immersion heater
- C2** Secondary immersion heater
- D1*** Coil connections
- D2*** 22mm Coil connections (Secondary Coil)
- E** 1/2" Temperature relief valve boss (Valve factory fitted to cylinder)
- F*** 22mm Secondary return

Code	Reheat Time (Minutes)	Immersion Heaters (3kW)
TXD120	45	2
TXD150	61	2
TXD180	79	2
TXD210	96	2
TXD250	112	2
TXD300	132	2

Code	Capacity (Ltrs)	Height (mm)	Dia. (mm)	Boss centre from floor						Load Profile	Rating	Efficiency	kWh/year
				A (mm)	B (mm)	C1 (mm)	C2 (mm)	E (mm)	F* (mm)				
TXD120	120	1001	580	183	650	243	531	618	NF	M	D	34%	1442
TXD150	150	1187	580	183	836	243	631	804	NF	L	D	36%	2730
TXD180	180	1371	580	183	1020	243	731	988	NF	L	D	35%	2770
TXD210	210	1561	580	183	1086	243	831	1054	1021	L	D	34%	2819
TXD250	250	1806	580	183	1331	243	971	1299	1266	L	D	34%	2844
TXD300	300	2076	580	183	1583	243	1122	1551	1518	XL	D	36%	4500

* Not always fitted refer to table above
 Thermostat set at 60°C
 Always isolate from electric supply before working on product

Solar Indirect

These cylinders are designed with two indirect heating coils. The primary coil connects to a solar thermal system and the secondary coil is connected to a gas or oil boiler, providing heat when there is insufficient input from the solar heat source. In addition each cylinder features a 3kW electric immersion heater as a secondary backup and to offer a boost to the primary heat source.



Technical specifications

Connections:

- A** 22mm Cold feed with dip pipe to diffuser in bottom of cylinder
- B** 22mm Hot water outlet
- C[†]** Immersion heater
- D1** 22mm Coil connections - solar
- D2** 22mm Coil connections - boiler
- E** 1/2" Temperature relief valve boss (Valve factory fitted to cylinder)
- F^{*}** 22mm Secondary return
- G1** Dry stat pocket - solar control
- G2** Dry stat pocket - high limit

Code	Designated Solar Volume (L)	Fossil Fuel Volume (L)	Immersion Heaters (3kW)	Solar Coil	
				Surface Area (m ²)	Fluid Content (L)
TXSN180	55	125	1	0.760	4.21
TXSN210	65	145	1	0.860	4.75
TXSN250	90	160	1	0.860	4.75
TXSN300	100	200	1	0.960	5.28

Code	Capacity (Ltrs)	Height (mm)	Diameter (mm)	Boss centre from floor									ErP	
				A (mm)	B (mm)	C [†] (mm)	D1 (mm)	D2 (mm)	E (mm)	F [*] (mm)	G1 (mm)	G2 (mm)	ErP Rating	Standing Loss, W
TXSN180	180	1371	580	535	1025	914	349	859	993	NF	404	1025	B	50
TXSN210	210	1561	580	535	1091	964	379	909	1059	1026	434	1091	B	62
TXSN250	250	1806	580	535	1316	1034	379	979	1304	1271	434	1316	B	66
TXSN300	300	2076	580	535	1588	1064	414	1009	1556	1523	469	1588	C	77

* Not always fitted refer to table above

† Not to be used as the primary heat source

Tribune Xe. Greater than the sum of its parts



Acetal tundish
15 x 22 mm



Incoloy long life 3 kW
immersion heater



High flow rate
inlet control set



Temperature and
pressure relief valve



Two port valve

Cold Water Inlet Control Set

The inlet control set on every Tribune Xe unit is of a well-proven 'high-flow' design, allowing flows in excess of 50ltr/min (where local conditions permit).

The set combines a pressure reducing valve, complete with strainer, non-return valve and expansion relief valve with provision for balanced cold connections. The operating pressure is 3.5 bar, but the valve will continue to give good performance down to an inlet pressure of 1 bar.

Coil-in-Coil Heat Exchanger

With its large surface area you are assured of fast reheats.

Either coil connection can be used as the inlet. Reheat performance is equally good either way.

In reaching right down to the bottom of the cylinder, the coil-in-coil heats the Tribune Xe's entire capacity. A sophisticated cold water baffle helps preserve the stratification and prevent mixing during draw-off. As a result, a 150 litre Tribune Xe produces 150 litres of hot water - as simple as that!

Environmentally Friendly Insulation

As you would expect, the Tribune Xe is very well insulated.

A class leading 64mm thick insulation layer surrounds the cylinder. Coupled with the close-fitting case, Tribune Xe's heat loss performance is very low, with excellent SAP and ErP ratings. The insulation is CFC-Free, HCFC-Free and contains no ozone depleting chemicals with an ODP of Zero and GWP of 3.1.

Comprehensive Kit of Parts

We've not cut corners in our kit of parts. You get all the components you need to complete the installation - just add pipework and fittings. This attention to detail means no lost time making a trip to the merchants and no hidden costs involved when you buy a Tribune Xe.

You get it all...

Tribune Xe comes complete with all the fittings you need to complete the installation:

Direct models (electric)

- Inlet control set
- Temp & pressure relief valve
- 15mm / 22mm Tundish
- 2 x 3kW immersion heaters
- Installation & Maintenance Instructions

Indirect models (gas, oil or electric)

- Inlet control set
- Temp & pressure relief valve
- 15mm / 22mm Tundish
- 1 x 3kW immersion heater (2 x 3kW on 250 & 300 ltr)
- Two port valve
- Dual thermostat
- Installation & Maintenance Instructions

Indirect solar models (alternative energy source)

- Inlet control set
- Temp & pressure relief valve
- 15mm / 22mm Tundish
- 1 x 3kW immersion heater
- 2 x Two port valves
- 1 x Dual thermostat
- 1 x Single control thermostat
- 1 x Single high limit thermostat
- Installation & Maintenance Instructions
- 2 x Sensor pocket retaining bungs

Product selection guide



Domestic selection guide

Recommendations are based on the guidelines in BS 6700. Guidance should be sought for unusual applications. Eg: High flow rate showers, large baths etc.

Hot Water Demand	Bedrooms	Indirect units	Direct units
1 Standard Bath or Shower	Bedsit / 1 Bed	120	150
	2 - 3 Bed	120	180
	3 - 4 Bed	150	210
1 Standard Bath	2 - 3 Bed	120	180
	3 - 4 Bed	150	210
1 Bath and En-suite	2 - 3 Bed	150	210
	3 - 4 Bed	150	210
	4 - 5 Bed	180	250
2 Standard Baths	2 - 3 Bed	180	210
	3 - 4 Bed	180	210
	4 - 5 Bed	210	250
3 Bathrooms	3 - 4 Bed	250	300
	4 - 5 Bed	250	300
	5 - 6 Bed	300	300

Commercial selection guide

Recommendations based on the guidelines in BS 6700. Guidance should be sought for unusual applications. Eg: High flow rate showers, large baths etc.

Typical Commercial Application	Indirect units
Large House - 6 bed / 4 Bathrooms	2 x 210
Guest House - 8 bed / 4 Bathrooms	2 x 300
Small Hotel - 8 bed / 8 Bathrooms	3 x 210
Sports Pavilion (25 people / 4 showers)	2 x 300
Sports Pavilion (25 people / 6 showers)	3 x 210
Student House (25 people / 3 bathrooms)	3 x 300
Old People's Home (60 beds / 10 bathrooms)	5 x 300 each

Applications using Tribune Xe Solar units

(Also suitable for other renewable energy sources)

Tribune Xe Indirect Solar units can be used in various ways:

- To couple two different boilers up to the Tribune Xe
- For systems with solar heating. Solar heat is fed in via the lower coil.
- Bio-mass*
- Micro - CHP*

* When independent thermostat isolation and controls are present.

Example illustration

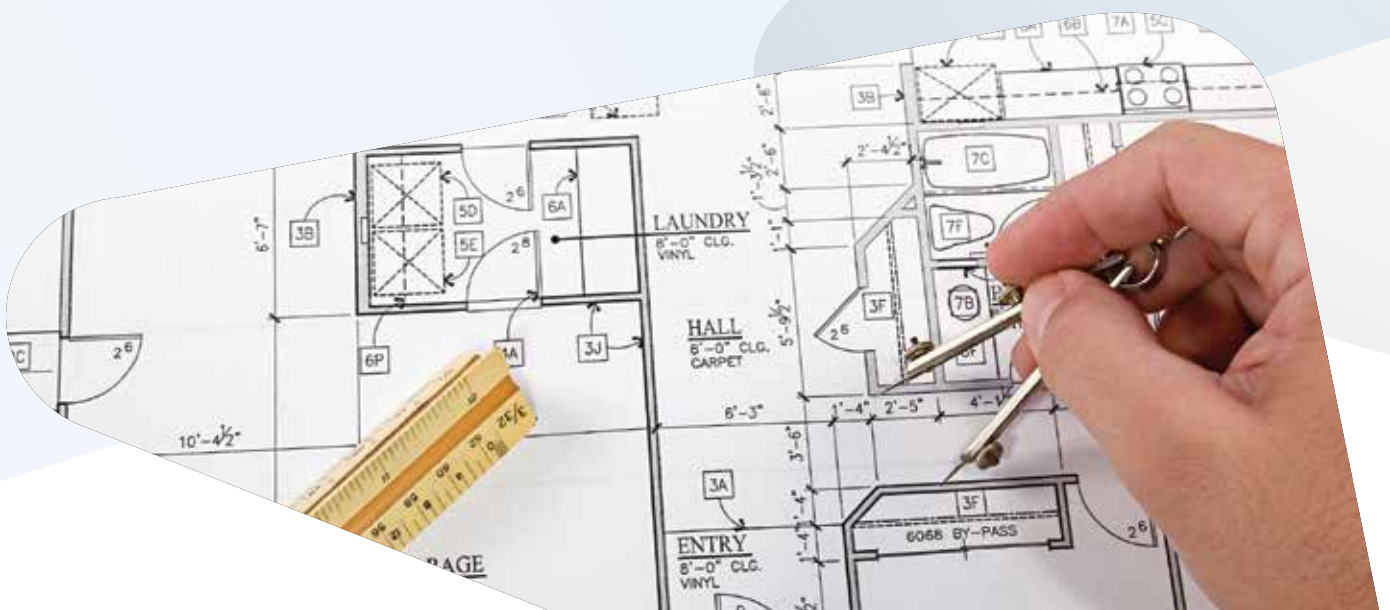
A school swimming pool has 5 showers in each of 2 changing rooms. The shower heads are flow-restricted to 9 ltrs per minute (2/3 rds of this will be hot water). Usually there are 45 minute lessons each morning and 4 each afternoon. Assuming a class size of 30 children.

Maximum demand = 10 shower heads x 9 litres / min = 90 litres / min. This is more than one Tribune Xe can supply.

At least 3 Tribune Xes will be needed to provide this (see flow rates graph) Total demand = 30 children x 6 litres / minute x 5 minute shower each = 900 litres

Therefore, 3 x 300 litre units will be required

Reheat time has to be a maximum of 45 minutes so it is reheated in time for the next lesson. A TXN300 can reheat its entire contents in 45 minutes with a boiler power of 20 kW. So total boiler power required = 60 kW.



Using Tribune Xe units in parallel

For applications where very high flow rate or larger amounts of storage are required, two or more Tribune Xe units can be linked in parallel.

When linking two cylinders, a separate cold feed is taken to each one and the outlets are joined together. The flow rate available doubles (subject to the cold main).

The demand for hot water will vary considerably between types of buildings and the activities taking place there.

For Example:

An office building will require small quantities frequently to many outlets during normal & overtime office hours.

A factory production line will have a peak demand at the breaks in the shift or at the end when the workforce may all want to wash their hands simultaneously.

A sports pavilion will need to be able to provide large quantities of hot water for the teams' showering needs over a short period of time after the game.

So your selection must take into account a number of things:

- The maximum simultaneous hot water demand
- The total hot water demand required
- The required system reheat time



IMPORTANT NOTE

It is a requirement of building regulations that any heat sources connected to an unvented cylinder (such as Tribune Xe) are under full thermostatic control and are able to turn themselves COMPLETELY off.

Installation Overview



Regulations

All unvented units with a capacity over 15ltr must be installed by a competent installer in accordance with the following Regulations: England and Wales - Building Regulations G3, Scotland - Technical Standard P3, N Ireland - Building Regulations P5.

Siting

With no header tanks to consider, Tribune Xe units can be sited almost anywhere in the house. The side mounted hot water outlet enables the cylinder to be installed under shelving or other equipment. Tribune Xe can supply outlets both above and below its location. Tribune Xe must be fixed VERTICALLY on a flat surface capable of holding its (full) weight.

Water Supply

An adequate mains water supply is vital to ensure Tribune Xe produces the high performance of which it is capable. We recommend a minimum supply of 1.0 bar with a flow rate of 25 litres/min. The maximum supply pressure is 16 bar.

Compatible Boilers

Gas, electric or oil fired boilers fitted with an integral control thermostat and cut-out. Any heat source that lacks full thermostatic control such as most solid fuel boilers, Agas, Rayburns and Stanleys cannot normally be connected to any unvented system.

The primary circuit may be open vented or sealed (operating at up to 7 bar). The primary circuit must be pumped.

Connection Sizes

- Cold inlet - 22mm compression*
- Hot outlet - 22mm compression*
- Coil connections - 22mm compression*
- Safety valves - 15mm compression outlet
- Inlet control Set - 22mm compression inlet and outlet
- Tundish - 15mm compression inlet / 22mm compression outlet

Secondary Return

A dedicated 22mm secondary return connection is fitted to 210, 250 and 300 litre sizes. A swept tee (not supplied) maybe used to provide a secondary return on the smaller sizes.

Electrical Wiring

Controls should be wired to the boiler / programmer etc. in accordance with the control scheme being used. Although compatible with Y, W or S Plan layouts, Tribune Xe units are perhaps best suited to installation as an S Plan since we already supply one of the two port valves necessary, so reducing installation costs compared to other plans.

Each immersion heater must have a permanent connection via a double-pole linked isolating switch with a minimum rating of 13 amps.

All electrical wiring must comply with the latest IEE wiring regulations.

* Note this is not a standard 3/4" BSP thread so only use the compression nuts supplied with the cylinder.

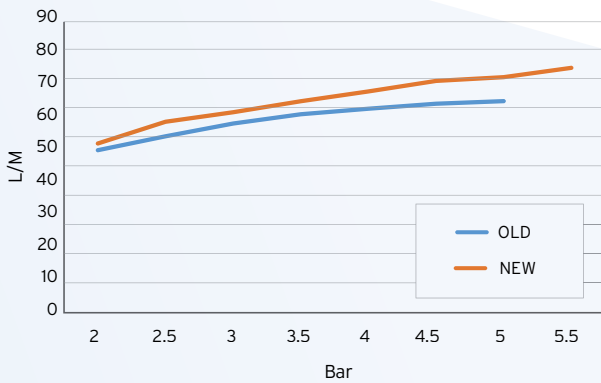
Performance and Specification

Coil Sizing

To ensure we using the optimum coil configuration we have undertaken a joint research project with Sheffield University, to analyse the efficiency of different heat exchangers. Using this data in conjunction with the latest modern boiler specifications we have selected the best coil sizing for modern cylinders to avoid waste.

Flow Rates

The new Xe cylinders are supplied with a high performance monobloc cold inlet set with superior flow rates to the previous model, see the graph below:



Cylinder Weight

Always ensure cylinders are installed vertically on a flat surface capable of supporting the weight of a plumbed cylinder when full

Capacity	Weight when full (Kg)
120L	155.6
150L	192.7
180L	225.7
210L	262.7
250L	310.8
300L	371.5

EuP Pumps

In compliance with the latest energy using products directive (EuP) all Range Tribune pre-plumbed cylinders are supplied fitted with an 'A' Rated circulating pump. This pump has many advantages and out performs the previous specification.

Manufacture	OLD	NEW
	Grundfos	Wilo
Model	UPS 25-60	Yonos Para
Max. delivery of head (m)	6	6.2
Max. volume flow (m3/h)	3.1	3.3
Max. static pressure (m)	6	6
Power supply	230V 50/60 Hz	230V 50/60 Hz
Pump housing length (mm)	130	130
Water temperature range (°C)	2 to 110	-10 to 110
Max. ambient temp. (°C)	40	70
Weight (kg)	2.6	1.7
Body construction	Cast iron	Cast iron
Power rating EEI	n/a	<0.23
Venting	Manual	Program



Tribune Xe Unvented Cylinders Specification Summary

Materials

Inner shelf - Duplex Stainless Steel
Coil - 22m Diameter Stainless Steel
Bosses - Stainless Steel
Every Tribune Xe is water tested to a pressure of 15 bar.

Insulation

Polyurethane foam, nominal thickness 62mm
The foam is CFC-Free and HCFC-Free
The foam has an Ozone Depletion Potential of Zero
and a Global Warming Potential of 3.1.

Casework

Toughened case coating to protect and provide pleasing aesthetics.

Control Settings

Pressure Reducing Valve - 3.5 Bar
Expansion Relief Valve 8
Pressure and Temperature Relief Valve - 10 Bar/90°C
High Limit Thermostat In Dual Thermostat 82°C
High Limit Thermostat in Immersion Heater 82°C

Immersion Heater

1³/₄" BSP Parallel Threaded Head
Long Life Incoloy Sheathed Low Noise Element 14" Long
Long Life Incoloy Sheathed Thermostat Pocket 11" Long
Brazed Construction
Element Rating 3kW at 240V A/C

Approvals

KIWA Approved to Building regulations C3 & L
CE Compliant and fitted with BEAB Approved
Immersion Heater

Guarantee Terms*

The Tribune Xe stainless steel vessel carries a fully transferable 25 year guarantee against faulty materials or manufacture provided that:
It has been correctly installed as per the installation instructions and all the relevant standards, regulations and codes of practice in force at the time.
It has not been modified in any way, other than by Kingspan.
It has not been misused, tampered with or subjected to neglect.
The system is fed from the public mains water supply,
It has only been used for the storage of potable water.
It has not been subjected to frost damage.
This unit has been serviced annually.
The Benchmark Log Book has been filled in after each annual service.
The guarantee period starts from the date of purchase or in the case of new build, from the date of legal completion of sale by the builder.
Please note that Invoices for servicing may be requested to prove that the unit has been serviced annually.
All components fitted to/or supplied with the unit carry a 2-year guarantee.

Exclusions - The Guarantee does not cover:

The effects of scale build up.
Any labour charges associated with replacing the unit or its parts.
Any consequential losses caused by the failure or malfunction of the unit.

*For full terms and conditions see Installation instructions booklet or our website.

Kingspan Environmental Ltd. have a policy of continuous product development and may introduce product modifications from time to time.
As a consequence details given in this brochure are subject to alteration without notice.



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