

Exhibitions

Over the next few months you can visit our stand at any one of the following exhibitions, where a selection of our latest 'A' rated gas and oil-fired boilers and renewable technologies will be on display.

For further information visit www.worcester-bosch.co.uk and click on the events page.

October 2010

Plumbing and Heating Trade Show

Ramada Hotel, Belfast
6/10/2010 – 7/10/2010

PHEX

Old Trafford, Manchester
20/10/2010 – 21/10/2010

Oil and Renewable Heating Show

Ricoh Arena, Coventry
28/10/2010 – 29/10/2010

Keep up-to-date with the daily goings on at Worcester, Bosch Group by following us on Twitter, Facebook and YouTube.



Twitter.com/heatingyourhome

facebook

Facebook.com and search for Worcester-Bosch-Group



www.youtube.com/worcesterboschgroup

SEPTEMBER 2010

THE INSTALLER'S CHOICE



**Part L Update –
The end of
band 'B' boilers**

**New Technical Bulletin –
Greenstar boiler cascades**

**Frozen Condensate -
Don't get caught
cold this winter**



The installer's choice for quality training.

Last year over 16,000 professional installers chose Worcester to meet their training needs.

- Hands-on training for installation, commissioning and servicing of gas- and oil-fired boilers and renewable technologies, plus regulatory courses
- Superbly equipped training academies and regional training facilities strategically located throughout the country
- All tuition by experienced heating industry specialists.

For full details call 01905 752526 or visit our website.



www.worcester-bosch.co.uk

CONTENTS

Pages 4 & 5
Latest news and views from Worcester



Pages 6 & 7
Part L Changes: The changing boiler bands

Page 8
Be Our Guest: Robin Mackinlay, William Wilson

Page 9
E2020 Winner: Chris Yates

Pages 10 & 11
Frozen condensate winter warning

Pages 12 & 13
Installer's Choice case study: Frank Welch

Pages 14 & 15
New Technical Training Bulletins

Page 16
Value Added Services: Engineering Services

Page 17
Your technical questions answered

Page 18
Win with Worcester

Page 19
Keep in Touch

Page 20
Diary Dates



Welcome from Steve Lister

Welcome to the September edition of Installer's Choice. Most of us have had our holidays, the kids are going back to school and hopefully we are refreshed and ready to take on the challenges of the upcoming heating season.

One of the many challenges we have as a business is how we communicate technical information to you, the installer. In this edition you will see we have introduced bulletins which will keep you updated on technical issues. We also have a detailed explanation of the new SEDBUK boiler classifications which will be changing in October.

Last year's severe winter weather conditions caught the industry out with frozen condensate pipes, so we highlight this with some installation advice.

On the environmental theme we have our Environment 2020 section plus contact details of our renewable products sales team on the Keep in Touch page.

Robin MacKinlay, sales and operations director of William Wilson Merchants, is our guest contributor this month. He highlights what the merchant can and should be doing for you, the installer.

Enjoy this edition of Installer's Choice and let's all hope for a rewarding heating season this winter.

All the best,

Steve Lister
Director of Sales

Worcester extends support to apprentices

We have recently highlighted our commitment to developing the installers of tomorrow through sponsorship of a brand new training centre.

The new extension to the Steve Willis Training facility is due to open in Burgess Hill, West Sussex later this month for the intake of new apprentices and will be supplied with a number of our products, which will be used regularly by the trainees. Steve Willis Training, which has an additional centre in Portsmouth, offers the building engineering services industry access to high quality training and assessment programmes across the South of England and has moved to develop this pledge by opening a new facility adjacent to their existing base at Burgess Hill. With over 60 young people already in training on their award winning Advanced Gas Apprenticeship



programme, the new facility means that both the plumbing and electrical sectors can access the same high quality apprenticeship training programmes.

Managing director Steve Willis was keen to praise us for our continued

support. He said: "Worcester has offered ongoing support to our training centres for a number of years. By supplying us with their latest products, they are ensuring that our apprentices can be trained using the most innovative technology available."

Fundraising pronto for Bedfordshire plumbers

A dedicated team of seven fundraisers, including two Worcester Accredited Installers, from a Bedford based plumbing company participated in a fun run as part of the Sport Relief Campaign and raised an impressive £600 for their chosen charity.

Pronto Plumber in Bedfordshire recently formed their own charity team in order to give something back to the community and hit the ground running, completing the 5km course with their very own mobile bath in tow. The complete sum of money raised was donated to The Prostate Cancer Charity Sports Relief.

Pronto Plumber's charity team are keen to build on their impressive



fundraising debut and are looking to take part in future charity events later this year, supporting The Prostate Cancer Charity. Julie Bean of Pronto Plumber said: "We were keen to give something back to the community and decided that the best way to do this

would be to form our own charity team. Sports Relief seemed like the ideal opportunity to get active for a good cause and we were thrilled to raise so much money for the charity. We're looking forward to taking part in more fundraisers later this year."

Heat Pump Awards - get in early

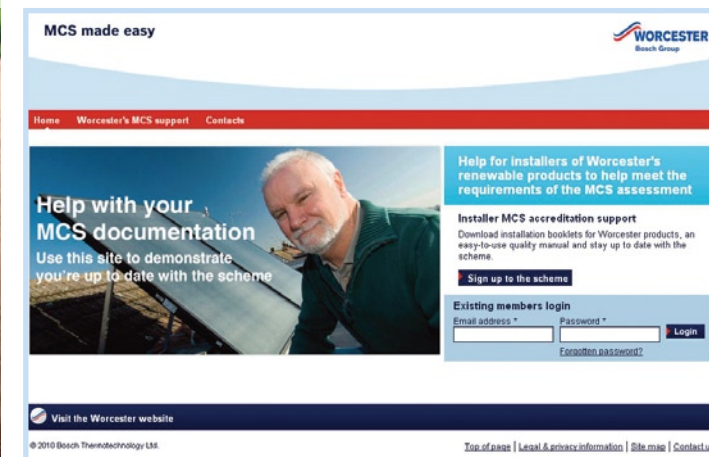


Although 4th March 2011 seems like a long way off, the next 6 months are sure to fly by, so we thought we'd get in early by making you aware of the first annual Heat Pump Awards. There are a number of categories which many of you who install either Greenstore or Greensource heat pumps may wish to enter, which include:

- Installer of the Year
- Heat Pump Champion
- Installation of the Year – domestic air source
- Installation of the Year – domestic ground source

The event doesn't take place until 23rd June 2011, but the closing date for entries is 4th March, so keep that date in mind. For more information on the awards or to enter a category visit www.national-heat-pump-awards.co.uk

Worcester makes MCS easy with new website



A couple of months ago we told you that our MCS Made Easy website was in the pipeline. It has now officially gone live.

The website is part of our MCS Made Easy programme and contains handy document downloads to help installers of our renewable products with their MCS office assessment. When these documents are updated, installers registered on the site can receive an email to stay up to date – a key aspect of the installer accreditation assessment.

The Microgeneration Certification Scheme or MCS was set up to help homeowners who want to invest in renewable technologies for their home.

There are two sections to MCS, one is the accreditation of domestic renewable products, which manufacturers are awarded if their products meet the standards set out within the scheme and the second section is to recognise fully qualified, high quality installers who can fit the products.

Martyn Bridges, director of marketing and technical support, said: "In principle, Worcester supports the requirement for an "over arching" scheme for this type of technology. However, we recognise that the way the scheme is currently structured, actually makes it difficult for installers to become accredited. We are now helping to make this process easier and have set up a special area on our website to help guide installers through the process."

The 'MCS made easy' website is aimed at installers who have attended or are thinking of attending training courses for our renewable products*. Once registered, installers will be able to access all the online information designed to help with the MCS office inspection process.

To view the new site, visit www.worcester-bosch.co.uk/MCS. For more information about Worcester's renewable training courses or MCS Made Easy, call 01905 752526.

* Installers who have attended a renewable training course prior to August 1st must also attend a MCS Made Easy seminar.



Changes to Part L of the Building Regulations will mean that the installation of SEDBUK Band B boilers will be outlawed from October 1st 2010. Martyn Bridges, director of marketing and technical support at Worcester, Bosch Group has all the details.



The end of **Band B**

Whilst the latest changes to Part L of the Building Regulations will not be as momentous as those which heralded the condensing boiler revolution of 2005, the 2010 changes will nonetheless be significant for the UK's installer base.

The 1st October changes to Part L affect both new build properties and existing housing stock. For new build, the efficiency bar goes even higher with the regulations effectively demanding a 25% improvement in energy performance compared to a house built today. This will be achieved via more efficient heating, insulation and air-tightness.

For existing housing stock, the new regulations are even more prescriptive. The October changes will mean that installers will not be

able to specify B rated condensing boilers from 1st October onwards. However, installers can continue to fit Band B boilers until April 2011 providing the order was taken before October 1st 2010. The exception to this rule is oil-fired combination boilers.

To make it slightly more complicated, from October the 2009 Building Regulations come into force which means the SEDBUK bands are changing. Going forwards there will be two listings, SEDBUK 2005 and

SEDBUK 2009. Under SEDBUK 2009 A-rated will no longer be classified as 90% and above, instead it will become 88% and above. What's more the letters that promote the Bands will be dropped, with installers being asked to promote the actual efficiency figure.

Many of our installers will be unaffected by this as from 2005 when the Building Regulations changed, we took the decision to only manufacture the Greenstar condensing series in A-rated versions only.



The Worcester team promoting A-rated boilers ahead of the condensing boiler legislation in 2005

Admittedly, the resources of the Bosch Group were a great help in achieving this, as we were able to pull in technical expertise from across Europe while we designed and built our new boiler range.

However, not all manufacturers were fortunate enough to have Bosch resources behind them, which prompted the Government to offer some leeway by allowing Band B, which going on the SEDBUK scale could be 5-6% lower in its value or efficiency compared to an A-rated product.

My own view is that this was probably a wise decision. Band B has served a purpose, allowing many installers who were comfortable with less efficient technology to continue to install what they know and recognise.

When a Band B is opened up installers see a familiar boiler with just a secondary heat exchanger in place to extract more heat. Band B boilers contained an atmospheric burner rather than the sophisticated pre-mix low emission burners of a typical A-rated product

Currently according to industry statistics, Band B accounts for approximately 10-15% of the UK boiler market, which in real terms is circa 150-180,000 boilers per year. Often, these boilers are bought through DIY chains or internet merchants, as Band B is a more competitively priced product than a Band A boiler.

However, regular readers of this magazine or any of the installer trade titles will know that the European

Commission is gradually setting the bar higher and higher in terms of what it expects in terms of energy efficiency with its Energy Using Products Directive. Unfortunately Band B boilers are a long way from meeting the criteria set down. From 1st October then Band B will be phased out and I would urge any installer who still gets the majority of their work from installing Band B to get themselves onto a manufacturers training course. Once on a course, Band B installers might be pleasantly surprised. Band A boilers can offer much more flexibility in terms of where the boiler can be sited mainly due to its greater flueing flexibility.

Things will change on October 1st, but a good manufacturer will be able to offer all the help an installer needs to get up to speed.



Robin Mackinlay, Sales and Operations Director at William Wilson, tells us why merchants have an important role to play in promoting renewables.

THE MERCHANTS' ROLE IN HELPING TO PROMOTE RENEWABLES

William Wilson
PLUMBING • HEATING • BATHROOM • SUPPLIES

There is no doubt that the growing demand for renewable products as an alternative form of heating for homes offers many exciting opportunities for the trade, the merchant and the manufacturer.

What, therefore, is the merchants' role in helping their customers embrace this technology and enjoy a share in this rapidly developing market?

In my opinion, there are two key objectives for merchants:

- To develop the knowledge of their staff.
- To work closely with manufacturers who have a merchant policy and who can provide a range of accredited products with the necessary support services to satisfy the requirements of the market.

It is vitally important the merchant industry develops its knowledge of these products so it can promote and sell renewable technologies to its customers with confidence.

Providing technical advice and support to trade customers to help guide them through their first experiences of installing new products is extremely important. By working closely with manufacturers such as Worcester to ensure staff

have an in-depth level of training to enable them to confidently provide designs, technical support and advice on a wide range of renewable products is very valuable.

It is also important that merchants assist in facilitating training for their customers not just through factory visits to manufacturers' premises but also by arranging training events for their customers and staff at a much more local level by providing displays and working models of a wide range of renewable products.

“There is still much work to be done before the trade, merchants and manufacturers are comfortable that they can regard renewables as everyday products, and currently the demand is probably not there yet.”

I believe a high level of local support is essential, particularly for some installers who may want to get involved but are perhaps a little nervous in taking those first steps.

Product availability from manufacturers such as Worcester of renewable heat source products has vastly improved over the last year or so. They have worked hard to ensure they have a range of products suitable to meet the requirements of this developing market in the UK.

Ideally merchants should source products, where available, from manufacturers where an established relationship exists as this helps when agreeing a strategy to work together to help promote new products and new technology to the trade.

There is still much work to be done before the trade, merchants and manufacturers are comfortable that they can regard renewables as everyday products and currently the demand is probably not there yet. However, if and when incentives such as the Renewable Heat Incentive are introduced, this will encourage a much greater level of activity and we all need to ensure we are ready to embrace it.

Colwyn Bay heating engineer, Chris Yates, was one of our runners up at the Environment 2020 Awards in July for his energy efficient installation of Greensource air source heat pumps at a 16th century home in Cumbria.



Award winning Yates turns period farmhouse into modern **eco-home**

Chris who runs Yates Renewable Energies has turned a 500 year old farmhouse in Wigton into a futuristic eco-home by installing both Greensource air to air and air to water heat pumps to provide renewable heating and hot water to the property.

In 2006, Chris changed the company name from Yates Plumbing & Heating when he began receiving hundreds of enquiries about renewable heating products.

“I soon realised that in order for the business to grow, I had to diversify into the renewables market which has proved to be very successful. Air source heat pumps are now becoming very popular and when visiting the customer it was clear that this technology was the ideal solution,” said Chris.

“Because the property is so large and because of its age it is very hard to heat, so we used the Worcester 9.5kW Greensource air to water heat pump to feed radiators throughout the property and provide heat for the hot water supply. We then installed an air to air heat pump to provide separate air heating to the dining room and front room. Unlike boilers, air source heat pumps do not use gas or oil, instead they are powered by electricity but are exceptionally efficient, producing approximately 4 units of heat energy for every unit of electricity used.”

The Environment 2020 Awards is now in its 11th year and as well as rewarding installers and specifiers, the initiative also rewards the artistic efforts of young people up to the age of 16 who have created an outstanding piece of artwork that highlights the need to be energy efficient and addresses the causes of climate change.

For further information and to download entry forms, please visit www.worcester-bosch.co.uk.

Frozen condensate - Don't get caught cold this winter

During the winter of 2009/10 the UK experienced prolonged spells of extremely cold weather. This resulted in a significant increase in the number of calls to boiler manufacturers and heating installers from householders with condensing boilers where the condensate drainage pipe had frozen, causing temporary boiler shut down. In the vast majority of cases, this occurred where part of the condensate drainage pipe was located externally.

In order to minimise the risk of freezing during cold spells, the following methods of installing condensate drainage pipe should be used, in order of priority:



1. Wherever possible, the condensate drainage pipe should be routed and terminated so that the condensate drains away from the boiler under gravity to a suitable internal foul water discharge point such as an internal soil and vent stack, internal kitchen, bathroom or washing machine waste pipe or similar. A suitable permanent connection to the foul waste pipe should be used and all other relevant guidance in British Standards and/or the boiler manufacturer's instructions should be followed.

Note: where a new or replacement boiler is being installed, access to an internal "gravity discharge" point should be one of the factors considered in determining boiler location, alongside flue position, convenience of supply and system pipe runs etc.

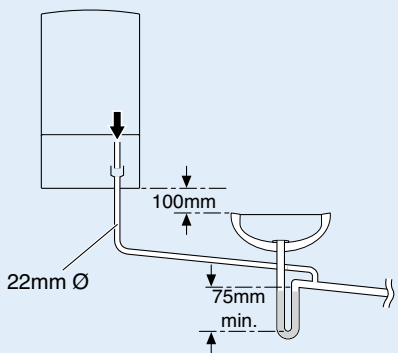


Fig.1

2. Where "gravity discharge" to an internal termination is not physically possible, or where very long internal runs of drainage pipe would be required to reach a suitable discharge point, condensate should be removed using a proprietary condensate pump, of a specification recommended by the boiler or condensate pump manufacturer. The pump outlet pipe should discharge to a suitable internal foul water discharge point such as an internal soil and vent stack, internal kitchen, bathroom or washing machine waste pipe. A suitable permanent connection to the foul waste pipe should be used and all other relevant guidance in British Standards and/or the boiler and condensate pump manufacturers' instructions should be followed.

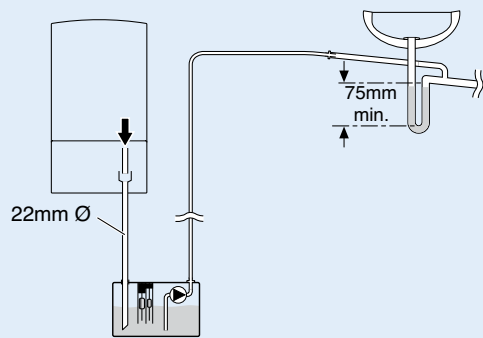


Fig.2

3. If no other discharge method is possible then the use of an externally run condensate drainage pipe terminating at a suitable foul water discharge point, or purpose-designed soakaway, may be considered. If this method is chosen then the following measures should be taken:

- The pipe should be run internally as far as possible before going externally and the pipe diameter should be increased to 32mm before it passes through the wall to the exterior. The pipe should be insulated using suitable waterproof and weather resistant insulation
- The external pipe should take the shortest and least exposed route to the discharge point, and should "fall" as steeply as possible away from the boiler, with no horizontal runs in which condensate might stand.
- The use of fittings, elbows etc. should be kept to a minimum and any internal "burrs" on cut pipework should be removed so that the internal pipe section is as smooth as possible.
- Where the pipe terminates over an open drain or gully, the pipe should terminate below the grating level, but above water level, in order to minimise "wind chill" at the open end. The use of an additional drain cover may offer further protection.

■ In situations where there are likely to be extremes of temperature or exposure, the use of a proprietary trace-heating system for external pipework, incorporating an external frost thermostat, should be considered. If such a system is used, the requirement to use 32mm pipe does not apply.

■ Internal pipe runs in unheated areas such as lofts, basements and garages should be treated as external runs.

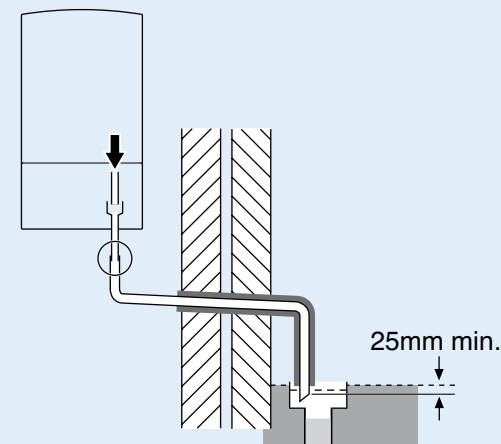


Fig.3

INSTALLER'S CHOICE

Spotlight

Frank Welch, FG Welch



After establishing his business in Wigan in 1985, Frank soon discovered that 80% of customers in the market for a new boiler specified Worcester as their preferred manufacturer.

As a result Frank decided to focus his attentions on our products and soon became a Worcester Accredited Installer.

He attended a Greenskies solar training course nearly five years ago and has since installed the product on his own home. He installed two Greenskies FKT panels linked to a Greenstar 24Ri

condensing boiler and a Greenskies twin coiled cylinder and he now uses his house as a showcase to help him sell the technology to customers.

Frank says: "I installed the panels in June 2008 and during most of the summer I had 100% hot water for 'free'. Having the Greenskies panels on my own property enables me to

properly demonstrate the system to customers and it has certainly helped to increase the interest.

"As the only Worcester Accredited Installer who fits solar in my area, FG Welch is once again at the forefront of the heating and hot water business in Wigan."



New Technical Bulletin

Our technical team produce technical bulletins which you can download from our website. Over the last few months they have been working on new content, based on queries they receive from installers via our technical helpline.

Cascading of boilers with cylinders and zoned central heating

For larger properties one boiler may not have enough output. For these cases we recommend a cascade system, which should be an arrangement of no more than two boilers. Here are our frequently asked questions on how to cascade two Greenstar boilers.

What is the maximum output of the boilers that I can join together?

When working under domestic ACS qualifications in domestic dwellings, a maximum total output rating of 70kW should be adhered to. Although some flexibility is allowed and a common sense approach should be taken, keeping under this limit will ensure your customer has no difficulty finding a registered engineer to work on the cascade in the future.

What is a DRV?

A double regulating valve is a device used to set the design flow rate for a particular circuit. Hydraulic problems can occur when the flow rates either side of the low loss header become very unbalanced. Fitting regulating valves to each circuit ensures you have the means in place to rectify any issues. By setting the design flow rate to make sure you have the correct Delta T, you also help the boiler to achieve maximum efficiency.

What diameter should my pipe work be between the boiler and the LLH?

This must be sized to suit the flow rate from the total boiler output. Pages 62 and 63 of the Domestic heating design guide (2004) can be used to calculate the flow rate and pick a suitable pipe size. Remember that the flow velocity should not exceed 1.5m/s or noise issues will become apparent.

What pump speeds should I set?

Hydraulic balance either side of the Low Loss header is the aim. Use the lowest pump speed that delivers heat to all radiators on the circuit. Use a differential thermometer to check that you have the correct delta T across all radiators (typical DT 10K on older systems or standard efficiency boilers and DT 20K for modern condensing systems where the radiators are capable of delivering the design temperature at DT 20K). Check the delta T across the main flow and return to all circuits, adjusting with the DRV if necessary.

What is the thermostat pocket on the LLH for?

For proper control of a cascade a sequence controller is desirable to ensure the boiler output is matched to the system demand. If a third party controller is used the header sensor can be placed in this pocket.

If there is no sequence controller, a lead and lag arrangement can be used, where one boiler thermostat is set 5 degrees higher than the other. The lead boiler should be changed at each annual service to even out the use.

Can I install a system like this in a commercial property on domestic ACS?

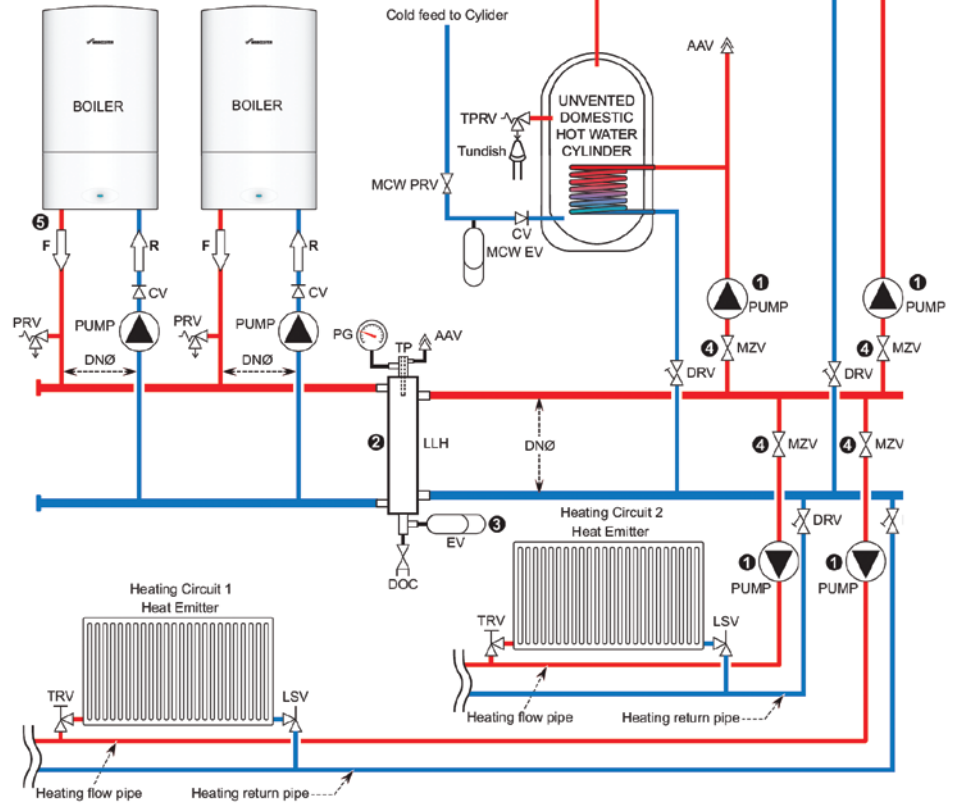
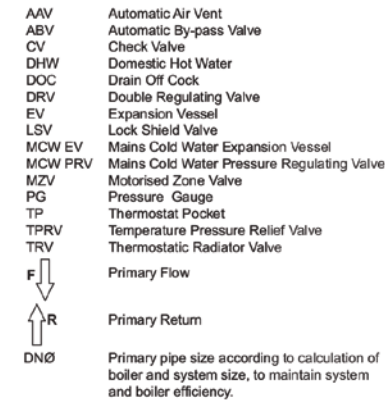
No, installations in a commercial property would use different standards and will typically incorporate a gas meter larger than 16m³/h. Installers should hold commercial ACS qualifications to install a system in a commercial property.

Will my gas supply be large enough?

When assessing this all of the appliances installed in the property must be taken into account. The change to IGE/UP/1b has allowed installers holding domestic qualifications to work on a system up to a meter size of 16m³/h and 35mm pipe work as long as the system volume does not exceed 0.35m³.

Can I use a filling loop to fill the system?

Water regulations state that a system over 45kW comes into fluid category 4. This means that as long as the dwelling is a "house" that it can still be filled via a filling loop. A "Non House" must incorporate an RPZ valve to ensure no contamination of the water supply can take place.

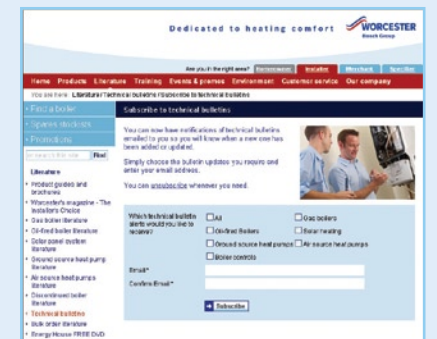


New technical bulletins direct to your inbox

All of the new bulletins can be found at www.worcester-bosch.co.uk/literature

You can also get the latest ones sent direct to your inbox as soon as they are uploaded for free when you subscribe.

See the website for more details





Value Added Services from Worcester: **Engineering Services**

In the fourth and final part of our 'Value Added' series, we cover our Engineering Services department. The vision of this team is to provide the customer with world class customer service as standard in all areas of Engineering Services, by meeting the following key objectives:

- Guiding the customer from enquiry, to design and installation.
- To provide technical support throughout the complete life cycle of a product.
- To support all areas of the industry from specifier, architect, merchant, installer, engineer and homeowner, pre and post installation.

- whole product range.
- Extensive opening hours to support our customers, including Saturdays and Bank Holidays.
- Highly responsive teams have a target of answering the phone within an average of just 20 seconds.

Heating Design & Sales Technical Support

- The team offer a full system design service.
- Calculation of heating loads, sizing of systems and generation of plans including full pipe work layouts.
- Generation and supply of energy ratings.
- Advise on boiler selection by liaising with specifiers and architects.
- Calculation tools which enable comparisons of other products and to see if a heat pump is viable in a certain property.
- Offer specifiers, installers and

The team is made up of 48 staff, working across 4 divisions: Technical Support, Heating Design & Sales Technical Support, Technical Documentation and Technical Liaison. These divisions deliver the following:

Technical Support

- Technical Support offers advice for installers, engineers, specifiers and home owners via phone, email, fax and letter.
- Multi disciplined highly competent technical support advisors provide advice and support across our

- homeowners an estimated running cost on a heat pump.

Technical Documentation

- Responsible for the creation and rollout of existing literature of Worcester branded technical documentation.
- The team create documents and technical illustrations ensuring the documentation is suitable for both the installer and end-user market.

Technical Liaison

- All of the employee's within this area are experts in the fields they cover e.g. gas, oil or renewable technologies.
- They have a significant involvement in our product development.
- Technical liaison officers are the link between field service operations and our internal departments such as Research & Development, Quality and Product Management.



Brian Murphy and his team of technical advisors answer one of the most common questions they have received from installers at this time of the year:

Your questions answered



How do I test the fan pressure in a Greenstar i, Si, or Ri boiler?

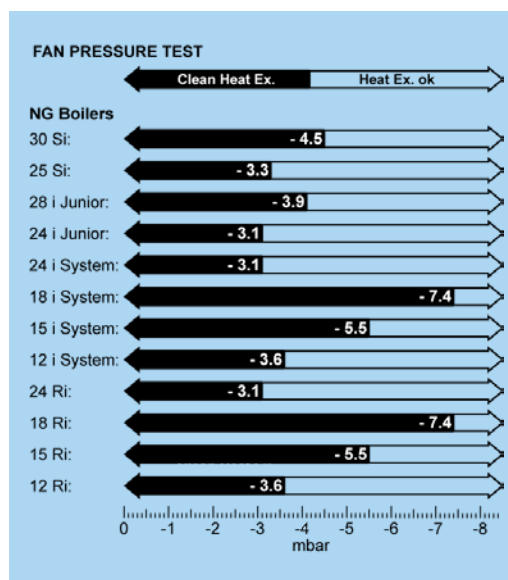
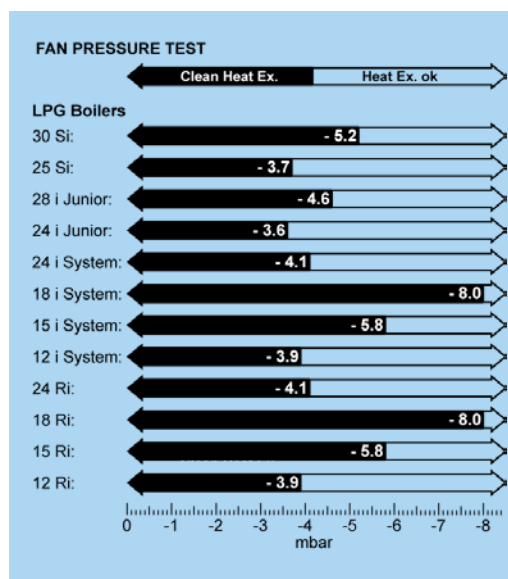
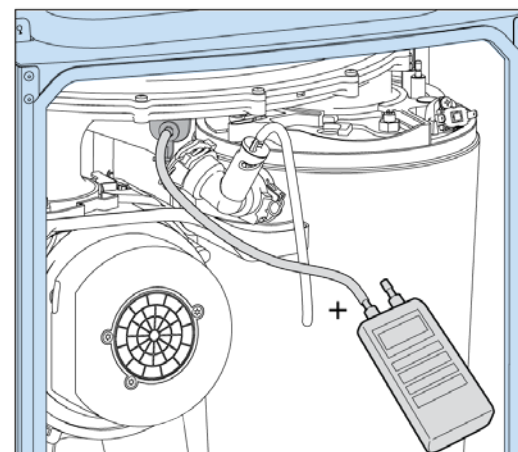
The fan pressure test should be performed on the boiler before any adjustments are made to the combustion settings. This test can indicate blockages and/or restrictions in the air intake, heat exchanger and flue path. Any blockages and/or restrictions can affect ignition and CO₂ readings and would require further investigation.

Fan pressures are measured by connecting the positive tube of a digital manometer to the fan pressure test point on the boiler, refer to the illustration below.

The test must be performed when the boiler is running at maximum output and the reading must always be a negative figure.

Actual pressures vary depending upon the boiler model and can be found in the relevant installation manual.

The examples given opposite show the specific fan pressures for our most popular Greenstar boilers. Only when the fan pressure is found to be correct should the next stage of servicing / fault finding procedure be started.



Get ready for the winter chill with a free Worcester jacket



Heating season is upon us once again, which means the temperatures will soon be dropping, so to help keep you warm, we're giving away a selection of our popular Worcester branded jackets. For your chance to win one of ten Worcester jackets all you need to do is complete our crossword correctly and send it to the following address with the details requested below:

To enter, simply complete the entry form below and send it back to our editorial office: **Installer's Choice, September 2010 Competition, Willoughby PR, 43 Calthorpe Road, Edgbaston, Birmingham, B15 1TS.**

Good Luck!

Name: _____

Business Name: _____

Business Address: _____

Daytime Telephone Number: _____

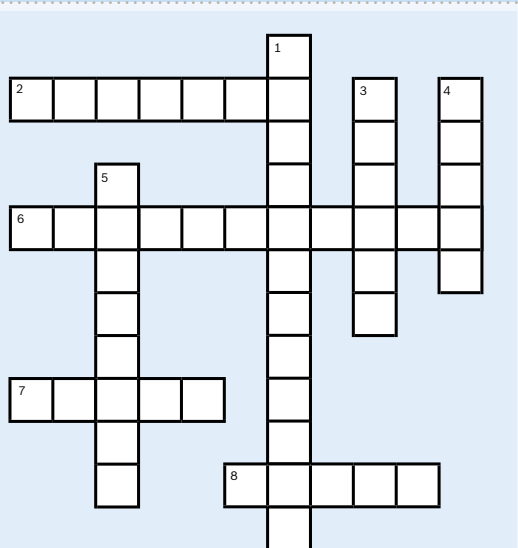
Email: _____

Tick box as appropriate:

- I would like to receive further information from Worcester, Bosch Group
- Please do not contact me with further information

Terms and Conditions

1. No cash alternative
2. The decision of Worcester, Bosch Group is final
3. One winner will be notified by the 5th October 2010



ACROSS

2. Took over from CORGI (3, 4)
6. Worcester's air source heat pumps
7. World Cup Winners
8. The bright side of renewables

DOWN

1. Current Formula 1 Champion (6, 6)
3. Pub Landlord, AI ...
4. Governing body for oil installers
5. Part of the distribution chain

Keep in touch

No matter where you are based around the country, we have a team of local representatives available to help with your specific requirements.

This month we focus on the Renewable Products Sales team, which is headed up by Barry Wilson. Here are the details of the team:



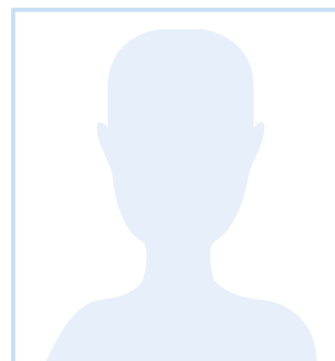
Barry Wilson
 Business Development Director
 Contact Barry on: **07767 432 569**



Mick Bawtree
 Technical Sales Manager, Renewables
 Contact Mick on: **07790 489 939**
Areas covered: CB, CM, CO, DE, HP, IP, LE, LN, LU, MK, NG, NN, NR, PE, SG



Steven Green
 Technical Sales Manager, Renewables
 Contact Steven on: **07790 489 812**
Areas covered: BB, BD, BL, CA, DH, DL, DN, FY, HD, HG, HU, HX, LA, LS, M, NE, OL, PR, S, SK, SR, TS, WF, YO



Vacancy
 Technical Sales Manager, Renewables
Areas covered: B, CF, CH, CV, CW, DY, GL, HR, L, LD, LL, NP, OX, SA, ST, SY, TF, WA, WN, WR, WS, WV



Tony Oldfield
 Technical Sales Manager, Renewables
 Contact Tony on: **07790 489 748**
Areas covered: BA, BH, BS, DT, EX, PL, SN, SO, SP, TA, TQ, TR



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