

FETA review

2023/2024

The voice of the HVACR industry



**40th anniversary
celebration**



Increasing heat pump deployment

***ECS cards launched for
building controls industry***

A word from the Chairman

Welcome to this 2023 Annual Review and I am delighted to be writing to you in my capacity as Chair of FETA, which I had the privilege of taking on in September following Mark Hughes' successful 12 months in the role.

A lot has happened in the last 12 months, including the creation of the Building Safety Regulator in April last year under the stewardship of the Health & Safety Executive and established in the wake of the devastating Grenfell tragedy. Society as a whole has been forced to confront the importance of safety regulations and the need for continuous learning. This tragic event has highlighted the critical role that proper ventilation and effective regulation play in ensuring the wellbeing of individuals and communities.

As we move forward, it is essential to not only reflect on the lessons learned from Grenfell but also to examine upcoming consultations, such as the F Gas consultation, and the evolving European ventilation regulations and ensure that we keep wellbeing and safety at the top of the agenda. These developments present an opportunity to enhance safety measures and improve the overall quality of our built environment.

As part of the creation of the Building Safety Regulator, an Industry Competence Committee was established and I was delighted when Wendy Belfield of InTandem Systems Limited, a BCIA member, was appointed to a committee which will have a pivotal role in shaping how we develop skills, knowledge, experience and behaviour in our people. Competency has never been more important and many of the associations within FETA are considering and taking action to ensure that the right level of competency is attained by those working in the sector.

The Fluorinated Gas Regulations are undergoing review in both Europe and the UK and likely to have a large impact on how we manage the move away from high Global Warming Potential refrigerants. Europe has seen a 'compromise' achieved which is due to be voted on in January and the UK consultation is likely to be published in Q1 2024 – this is a key moment in the industry and it is crucial that FETA takes an active role in influencing the outcome. We have set up a Strategy Group to ensure we recognise the UK Government's ambitions aligned with the best outcome for industry, which would be a pragmatic phase down, keeping in mind that this is the first time that UK MPs have voted on this regulation.

The revised Ecodesign Fan Regulation is expected to be adopted by the EU Commission in June 2024 with challenging efficiency targets being broadly accepted by the fan industry, which has invested heavily in developing more efficient products. It is hoped that the UK Government adopts the revised Regulation and non-compliant products are prevented from entering the market through effective market surveillance. Future developments will include taking into account the overall product environmental footprint rather than solely focusing on the product energy usage. This more holistic approach is also seen in the recently published DEFRA Air Quality Strategy which recognises that the drive to reduce buildings energy usage must be balanced against any negative impact on indoor air quality, thereby protecting the occupants' health.

I would like to wish all FETA members a healthy, peaceful and prosperous 2024.

Alan Macklin
Chairman, FETA



FETA Chief Executive Chris Yates reflects on 2023 and highlights some of the issues that FETA will be tackling in 2024



2023 seemed to fly by and seemed to be full on for most of the year which I think is a reflection of the positive demands members are putting on the FETA team to develop the Federation and provide more opportunities to engage with other members and tackle the main issues facing our industry.

We launched new groups under the FETA banner covering Training & Skills, which had a number of meetings during the year as well as the CEO/MD forum which will be meeting in Q1 2024. The FETA Indoor Air Quality Group was rejuvenated as was the BRA Training Section, both of which have met a number of times during the year.

I am also delighted that following Catherine Walker joining us in 2022 to run BCIA, Charlotte Lee joined in April 2023 to run the HPA and Olivia Smalley as Head of Policy & Communications of HPA in July 2023. All three have made a big impact on their respective associations. I would also like to thank all the team based at Hare Hatch for all their work through the year and it is very much a team effort to keep the organisation running at its best.

We had some other significant events during the year. The FETA Annual Lunch in April was a complete sell out and we have made some improvements this year so that images of the speakers will be projected onto all the screens around the room which should make it a more immersive experience.

We then hosted in London the ISO/TC117 Fans meeting in June as we hold the secretariat for this committee. We had thirty delegates attend over three days and they are returning again in April 2024.

Face to face meetings have grown substantially during the year and we have invested further in sound absorption in the Hare Hatch Conference Room which was completed during January.

Competence is a common issue running through all associations, none more so than ADCAS and BCIA and good progress is being made to identify the best routes for Experienced Workers to gain competence. Many of these themes will continue into 2024 as well as our response to the Future Homes & Buildings consultation which arrived just before the seasonal break, and we will also be responding to the F Gas one in due course.

The Federation does not function at its best without the support and input from members so I thank all of you for your contribution this year and would encourage more people, particularly those in the early years of their career, to get involved and be ahead of the game when it comes to witnessing and influencing the changes in the industry.

Chris Yates
Chief Executive
FETA

FETA Annual Luncheon

The 2023 FETA Annual Luncheon took place on Thursday 20th April at The Brewery on London's Chiswell Street. Celebrating the hard work and effort that makes the industry tick, assembled guests were treated to a three-course lunch, followed by speeches from FETA Chairman Mark Hughes and special guest speaker Martin Sixsmith – a respected journalist, presenter and author.

The 2024 FETA Annual Luncheon will be held on Thursday 11th April 2024 at The Brewery in Chiswell Street and we are delighted to be welcoming snooker legend Steve Davis as our guest speaker this year.

For bookings and sponsorship enquiries [click here](#)



Appointments

FETA has appointed Alan Macklin as its new Chair, replacing Mark Hughes. Alan is also President of the HEVAC group and has spent more than 40 years in the ventilation industry, having broad experience in residential, commercial, industrial, mining and AHU sectors.

Neil Roberts, Senior Technical Sales Manager at refrigerant supplier Climalife, was appointed as the new President of the BRA in October. Previously Vice-President of the BRA, Neil takes over from Past-President Mark Hughes who spent two years in the role. Paul Arrowsmith, Refrigeration Design Manager for Sainsburys, has been named as Vice-President. Having worked in the industry for over 40 years, Paul is a Chartered Engineer and a Fellow of both CIBSE and the Institute of Refrigeration.

John Barker, Managing Director of Humidity Solutions, was appointed as Chair of the Humidity Control Group in September 2023. John has previously worked for JS Humidifiers and Draabe before setting up Humidity Solutions in 2008.

Phil Hurley has stepped down as Chair of the HPA after five years of dedicated leadership, with Craig Dolan, Senior Product Manager of Heat Pumps at Glen Dimplex, appointed as Phil's replacement, and Mark Wilkins, Training and Technologies Director at Vaillant Group UK, as the organisation's new Vice-Chair.

Charlotte Lee was appointed as the HPA's new Chief Executive in April 2023. Charlotte brings highly relevant experience to the role. Previously, Charlotte was Head of External Affairs at NAPIT, a Government-approved certification body that includes the plumbing and heating sector, including heat pumps. Prior to this, Charlotte led on policy development and Government affairs for heat pumps and energy efficiency whilst at Ecuity Consulting and the Micropower Council (latterly the Sustainable Energy Association).

FETA celebrates 40 years

2024 marks a significant milestone for FETA as the Federation turns 40.

Formed in 1984 following the merger of the BRA, HEVAC and BFCMA, 40 years on FETA is now a federation of six highly influential trade associations.

In recognising this 40th anniversary, FETA is planning to mark the occasion with a celebratory event in early July. Details of this event are being finalised but the anniversary celebrations will officially begin with the FETA lunch in April. Whilst these events will provide the ideal opportunity to reflect upon and celebrate the last four decades in the industry, the Federation will also be looking forward to the next 40 years and examining key themes around building safety and the race to net zero.



Keep an eye out for further announcements as FETA looks to celebrate this landmark anniversary with members, supporters and key industry stakeholders.

Obituaries

We were very sad to lose two members of the FETA family in 2023.

Dr Guy Hundy, a leading technical expert within the refrigeration, air conditioning and heat pump sector for over 50 years, passed away in January.

A Fellow and former President of the Institute of Refrigeration, Guy was instrumental in the development of scroll compressor technology and heat pump efficiency. Guy was a member of the FETA Technical Committee from 1992 to 1996, during its transition from a HEVAC only technical committee to a FETA-wide one. Guy chaired the committee from 1994 to 1996.

Michael Ohly, former ADCAS President and founder of the organisation, sadly passed away at the age of 78 in October.

A charming and charismatic industry leader, Michael was instrumental in shaping the ductwork industry during his 18 years as part of the ADCAS Executive Committee.

Appointed as the first President of ADCAS in 1997, Michael helped the association to establish itself as the voice of the ductwork industry and enabled members to forge closer links with the wider construction sector. Michael was the owner of the Hotchkiss Group for 50 years from 1971 to 2021 and will be dearly missed by colleagues and industry associates.

Everyone at FETA offers condolences to Guy and Michael's families and friends.

HPA urges Government to firm up commitment to phasing out fossil fuel boilers

Industry has warned that the 2035 phase-out of fossil fuel boilers must become a firm commitment rather than an “ambition” to avoid further damage to investor, installer and consumer confidence following the Prime Minister’s announcements in September 2023 on decarbonising home heating.

Reacting to the Government’s policy changes, Charlotte Lee, Chief Executive of the HPA, said: “The Government has once again moved the goalposts for heat

decarbonisation in the UK, and this risks damaging investor, installer and consumer confidence in this space unless this re-confirmed end date for fossil fuel boilers is strengthened from being an ‘ambition’ to being a firm commitment.

“We call upon the Government to take swift action to reassure the heat pump market—by making the 2035 end date for fossil fuel boilers a firm commitment, by introducing the Future Homes and Buildings Standards in 2025 for new build, by increasing the



budget available for the Boiler Upgrade Scheme and to take urgent action to reduce the price of electricity relative to fossil fuels.”

Read more [here](#)

HPA releases report on transforming UK’s heating methods

The HPA has published a new report, titled “Unlocking Widescale Deployment of Heat Pumps in the UK”.

Heat pumps are an established technology and demand for them is booming across Europe, and they are set to become a more dominant heating technology in the UK over the next few years, with radical change expected to the way we provide heating and hot water in all our buildings.

The report summarises the HPA’s views on why heat pumps remain a core option for the impending revolution in how buildings are heated. It uses evidence, research, and analysis to demonstrate that heat pumps remain the most cost-effective heating option for the UK to reach net zero. It tracks recent progress and the performance of key policies and sets out the HPA’s views and recommendations on what is still to be done.

The report can be downloaded [here](#)

Supporting Scotland’s ambitious efforts to increase heat pump deployment

Scotland has taken a momentous stride in its commitment to combatting climate change and reducing carbon emissions by consulting on changes to accelerate the uptake of more environmentally-friendly central heating systems such as heat pumps.

The Scottish Government has committed to installing 170,000 heat pumps by 2030 in off-gas grid properties and is consulting on banning fossil fuel heating installations in new build homes and other buildings seeking a building warrant from April 2024. Alongside these proposals, changes to Energy Performance Certificate (EPC) ratings, resulting in homes with gas boilers being downgraded compared to those with climate-friendly systems such as heat pumps, are also being consulted on alongside the requirement for properties to meet EPC band C standards at key moments such as when they are bought and sold.

HPA Chief Executive Charlotte Lee said: “It is great to see Scotland reaffirming its commitment to support the deployment of heat pumps, and consulting on steps to actively reflect their low carbon nature



through EPC ratings. Furthermore, the opening of the new mobile training unit is the perfect depiction of industry and government working together to solve key challenges in the journey to decarbonising heat.”

Read more [here](#)

Changes to BCIA Management Committee

Jen Vickers of Crown House Technologies has been elected as the next Vice-President of the BCIA. Jen joined the BCIA Management Committee in January 2023 and will take up her position as Vice-President in March 2024. Stacey Lucas will step up to take on the role of President, replacing Graeme Rees who will become Immediate Past-President. After serving as

Vice-President, President and Immediate Past President, Terry Sharp will step down after six years serving the Committee.

The BCIA will also welcome three new members to the Management Committee, with Simon Ward of Distech, Clare Grams of Westminster Controls and Lewis Locke of BGES all being appointed. Simon, who

has previously served on the Management Committee, will officially join in March while Clare and Lewis will take up their positions in January.



ADCAS highlights challenges facing small and large companies

SMEs continue to weather the ongoing economic storm but are becoming increasingly frustrated by a lack of qualified workers available to fill positions. The ductwork sector has long struggled to address a widely acknowledged and well documented skills gap but a pronounced shortage of trained sheet metal workers has now exacerbated the issue still further.



A recent Building Engineering Business Survey revealed that staff shortages are currently the biggest immediate concern for SMEs in the building sector – 45% currently have vacancies in their organisation. Interestingly, unaffordable pay expectations was cited as the reason that 40% of SMEs have been unable to fill these vacant positions – a symptom of the lack of qualified individuals competing for jobs.

With higher running costs to deal with, many SMEs can't afford to offer employment packages on a par with large businesses and not only find themselves with unfilled vacancies but face the threat of losing existing employees to larger competitors offering more attractive pay and benefits.

There are also plenty of larger businesses (ADCAS members included) facing similar challenges as well as a host of other deep-rooted industry-wide problems. Though these organisations are often well equipped to deal with short-term concerns, there are a number of ongoing business issues which can't be solved overnight and demand further attention from the private sector and government.

After collating feedback from large organisations in the industry, here are some of the current issues cited as significant business challenges:

- Recruitment - A shortage of skilled labour and employee demands have made it harder to fill positions, particularly in areas where highly trained operatives are required.
- Inflated business premises prices - Increasing property lease costs coupled with rising transportation costs has left many organisations with the dilemma of choosing to be local to customers or switching to a centralised distribution model.
- Increased energy costs - Soaring energy costs have increased the emphasis on improving production efficiency. Many businesses have explored renewables such as solar but making the switch takes time and comes with challenges such as property surveys and landlord approvals.

Read more [here](#)

BRA round up

- The F Gas regulation review is proceeding in the UK and FETA is in close contact with DEFRA on the subject. A consultation will be issued in early 2024 and FETA is encouraging all interested members to make submissions to it. FETA will be holding a webinar on the subject in early 2024.
- The subject of PFAS (Poly/Per Fluoro Alkyl Substances) remains an issue that BRA – and indeed FETA as well – are keeping a close watch on. FETA is part of the stakeholders group being run by the DEFRA Chemicals team and has been able to contribute to a policy paper which is currently being finalised. The UK is clearly taking a different stance on PFAS to the EU.
- The BRA Training Section has now been relaunched as it is clear there will be a need for wider training in F Gas alternative gases – many of which are flammable – in order to meet the requirements of the new F Gas regulation. Equally, there is a need to encourage new blood into the industry, and as such the group is looking to involve itself with T levels.
- As always, members of BRA are involved in work on a number of standards relevant to the refrigeration industry - this gives the BRA a voice in the whole standards process.

Flexibility of chilled beams and ceilings

With energy efficiency becoming more important as the UK aims to hit its net zero target by 2050, the CBCA has issued a reminder to commercial letting agents and facilities managers about the financial and environmental benefits of chilled beam technology.

Chilled beams and chilled ceilings may not be the most appropriate system for every building project - no HVAC system is the best solution as one size doesn't fit all. However, there are a growing number of applications where chilled beam technology is ideal – particularly in commercial office developments, hotels, universities and hospitals, given the high energy efficiency, long life expectancy and low maintenance and optimum in thermal comfort.

The CBCA believes there is a common misconception, particularly in the UK, about the technology's lack of flexibility, and that commercial letting agents are potentially missing out on significant savings by overlooking chilled beams as an energy efficient HVAC system.



Andrew Gaskell, Chairman of the CBCA, said: "Flexibility can be designed into the system solution for future cellularization to a pre-agreed planning grid as tight as 1.5m x 1.5m and most often designed to cater for a 3m x 3m partitioning grid availability. At a time when sustainability is higher up the

building engineer's agenda than ever, a system that uses minimal energy to achieve excellent comfort conditions, involves no moving parts, has a long lifecycle and is designed for decommissioning with 100% recyclable components ticks almost every box."

The importance of using a competent engineer

David Sowden FlntR, Chair of the BRA Training Section, explains why it is important to use a competent refrigeration engineer for service work.

Using a competent refrigeration engineer for service work is important for several reasons. Firstly, refrigeration systems are complex and require specialised knowledge to properly diagnose and fix any issues that may arise. A competent engineer will have the necessary expertise to identify the root cause of a problem and provide an effective solution.

Additionally, refrigeration systems often contain various components, such as compressors, condensers, evaporators, and expansion valves, which must work together harmoniously for the system to function optimally. A skilled engineer will be able to understand these components (and all their variations from different manufacturers) and their interactions, ensuring that any repairs, adjustments or maintenance are carried out correctly.

Furthermore, refrigeration systems play a crucial role in many industries, such as food storage and pharmaceuticals. A malfunctioning system can lead to spoilage of perishable goods or compromised product quality, resulting



in financial losses. By hiring a competent refrigeration engineer, you can minimise the risk of system failures and maintain the integrity of your products.

Lastly, a skilled engineer will prioritise safety during service work. Refrigeration systems involve working with potentially hazardous substances, such as refrigerants, which require proper handling and disposal. An experienced engineer will be well versed in safety protocols, risk assessments and ensure that all necessary precautions are taken to protect both the environment and individuals involved.

In summary, a competent refrigeration engineer is essential for service work due to their specialised knowledge, ability to diagnose and fix complex issues, expertise in system components, focus on preventing financial losses, and commitment to safety.

HEVAC round up

- The A/C Technical Committee has seen a change in Chair from Graham Wright, after many years of excellent service to the group, to David Sowden of Chemours. We would like to thank Graham for all the work he has put in which has raised the profile of the group within industry and the Government. Chris Taylor-Hamlin of Daikin has been appointed as Vice-Chair of the group.
- The Fan Coil Unit group has been working on guidance for linking heat pumps and fan coil units which should be completed shortly. It has also had a strong focus on Embodied Carbon which will be consulted on by the Government in 2024. It is also developing a number of guides to assist industry.
- The Fan Manufacturers Association has discussed the issue of non-compliant product and how this can be covered with Office of Product Safety and Standards (OPSS). FETA went back to OPSS to advise them on the issues for this particular group and how can they help the FMA and the FMA help them.
- FMA/FETA are again hosting the 2024 meeting of ISO/TC 117 at BSI with Geoff Lockwood as Chair and we are expecting around 30 delegates to attend as London is always a popular venue. FMA follows closely the work being done by EVIA in Europe which FETA are members of and are also on the Steering Committee for the Association.
- The Smoke Control Association has continued to build its profile with key stakeholders and has launched a technical working group to handle enquiries through the website, which is working well. The SCA attended the Fire Safety Event at the NEC last April which proved to be very successful, and the Association will be exhibiting again in May 2024.
- Impacting the Air Handling Unit Group, Chilled Beams and Ceilings Association and Humidity Control groups in regard to HTM-03 (ventilation in healthcare buildings), FETA has had a number of positive conversations with the NHS on future involvement in consultations and we are also looking at how we support funding of the technical standards in the future.
- The Residential Ventilation Association is currently looking at developing a Code of Practice for installing ventilation equipment having been exploring different options for improving competencies during the year. It has also liaised with the Building Safety Regulator over the Future Homes & Buildings Standard consultation prior to its launch.
- The Humidity Group changed its name to Humidity Control Group with John Barker coming in as Chair and Nichola Whelehan as Vice Chair. An International Industry wide initiative is being developed for humidity control, more details of which will be released in due course.
- The Air Distribution Group continues to closely track important standards in BSI and CEN and has developed liaisons with ADCAS, ASFP, BESA and NAADUK. There is a new ASFP group focusing on competence in installation of fire-resistant ducts and dampers and a number of ADMG members are involved with this.
- Michael Hims from the Air Curtain Group is now representing the UK on both the BSI technical committee for fans and the ISO working group for air curtains. The ISO WG is working on a revision to testing for aerodynamic performance rating and a new test standard to determine energy effectiveness.

New range of ECS cards launched for building controls sector

The BCIA welcomes the introduction of a new suite of ECS cards for the building controls sector.

The Electrotechnical Certification Scheme (ECS) is the sole ID and competence card scheme for electrotechnical operatives in the UK and has worked closely with the BCIA for a number of years to ensure that a range of cards exists which reflect the skills and competencies required in the building controls industry.

During the development and launch of the Building Energy Management Systems (BEMS) Controls Engineer apprenticeship standard, an occupational qualification structure was developed by the building controls industry which included members of the BCIA, employers and training providers to define and align the skills needed by the industry both now and in the future.



This structure has now been in place for a number of years and has recently been reviewed and updated by industry employers and other stakeholders to ensure this is fit for purpose while maintaining the standard set for building controls engineers in the BEMS apprenticeship.

The new card types include: Building Controls Apprentice, Building Controls Associate, Building Controls Installer (Electrical), Building Controls Technician (Commissioning) and Building Controls Engineer.

Read more [here](#)

2023 BCIA Awards winners revealed at glamorous dinner and ceremony

The winners of the 2023 BCIA Awards were announced at an exclusive ceremony and gala dinner on 4th May at the Hilton Birmingham Metropole.

The event was hosted by actor, comedian and impressionist Jon Culshaw, who entertained guests with a range of hilarious impressions, ranging from Boris Johnson to Donald Trump, and Steven Gerrard to Michael McIntyre. The ceremony itself welcomed the highest attendance yet for a BCIA Awards, with more than 600

guests enjoying fine food, drink, and evening activities, including curling and a game of 'Higher and Lower', organised by Immediate Past-President Terry Sharp.

BCIA President Graeme Rees' chosen charity is the Teenage Cancer Trust and an impressive £5,102 was raised on the night of the Awards alone.

For the full story including all of the 2023 winners click [here](#)



The benefits of specifying BS7346-8 for smoke control projects

Allan Meek of the SCA examines the industry standard that can help eliminate confusion surrounding the way that smoke control systems are commissioned, installed, tested and maintained.

Over the past few years there have been several reasonably high-profile examples of failures of smoke control systems in occupied buildings and details published in the CROSS Safety Report suggest that an estimated 60-80% of buildings have failed cause and effect testing.

These failures have been attributed to flaws such as vents opening in the wrong direction, design critical vents not opening at all, or systems not 'locking out' allowing the operation of vent doors beyond the fire floor.

Many of these issues can be put down to unfamiliarity on the part of specifiers and the Authority Having Jurisdiction (AHJ) who may not deal with complex smoke control systems on a regular basis and consequently have no system in place to monitor effective implementation. The prevalence of fire engineered solutions being employed instead of ADB compliant provision exasperates the issue as there is no handbook to refer to for a definitive answer.

There is, however, a relatively simple way to avoid common problems and guarantee a positive outcome by managing design, installation, commissioning and maintenance in a systematic way - as detailed in BS 7346-8:2013 Components for Smoke Control Systems.

This standard provides a comprehensive route map for successful delivery of a smoke control solution, from design all the way through to handover and maintenance



and can be applied to all system types. Areas covered include:

1. Identifying System Requirements
2. Planning and Design
3. Installation
4. Commissioning and Verification of Correct Operation
5. Maintenance and Servicing

The code defines the key processes to be managed and identifies roles and responsibilities for these with clear guidance on performance requirements and documentation to be provided. Evidence of compliance is required throughout the lifetime of the project and there are useful templates for areas like handover and performance testing. Employing this

standard at the outset of projects would eliminate a high number of the faults that we have seen come to light recently.

As well as detailing all aspects of the design and installation process, the standard highlights certification and verification by authorised bodies and this provided the platform for the SCA introducing its IFC SDI 19 third party certification scheme – a mandatory requirement that all SCA members must sign up to as a membership requirement. This means that every SCA member carrying out installation of smoke control systems is suitably skilled and experienced in fire strategy verification, system design, installation and commissioning with highly trained staff that consistently adhere to industry best practice.

High Standards

BFCMA President Dennis Milligan provides an update on chimney and flue design and industry standards.

At long last the log jam for chimney product and installation standards is starting to be cleared. The first revised standards to be published will be BSEN 1856 Chimneys, Requirements for metal chimneys, System chimney products and BSEN 15287, Chimneys. Design, installation and commissioning of chimneys.

Chimney/flue requirements

When published these standards will make Approved Document J even further out of date. The Health and Safety Executive (HSE) is now responsible for the building standards and as yet there is no commitment to update Approved Document J. The BFCMA continues to push for the document to be updated without delay. In the meantime, the BFCMA Guides reflect the impact of the latest product standards. The guides can be freely downloaded from the [BFCMA website](#).

While the design and installation of chimneys and flues in the residential sector are covered by Approved Document J, there is no equivalent document in the commercial sector. To provide much needed guidance the BFCMA has published a Commercial Flue Guide. The guide covers chimney principles, regulations, chimney and flue design, chimney/flue height and the Clean Air Act. The aim of this guide is to provide a clearer understanding of how chimneys and flues should be selected and installed in commercial applications.

The CE mark and the planned UKCA mark (UK Conformity Assessed) are your guarantee that the product meets the prevailing product standards. After a number of false dawns, the UKCA mark will not be implemented before 2025. The CE/UKCA mark is based on the achievement of exacting product standards that have been developed to give the user confidence that the product is fit for purpose. Specifiers and installers should always look for the CE/UKCA mark. The CE/UKCA mark applies to both flue components and to system chimneys. The CE/UKCA mark for a system chimney applies to the complete flue system, including add on components like

rain caps. The use of components that have not been tested with the flue invalidates the CE/UKCA mark and turns the flue into a custom chimney.

Different types of flue will be required to safely handle the different gases that need to be discharged. A key feature of the chimney and flue standards is a user-readable classification system that designates the features of the flue components. The features covered include temperature and pressure rating, fire, condensate, corrosion resistance and distance to combustibles. With stainless steel components a label showing the classification must go with each flue component, so that its specification can be easily verified.

Chimney/flue design

The purpose of a chimney or flue is to discharge the products of combustion safely to the atmosphere. Most chimneys operate under negative pressure, relying on natural draft to transport the flue gases to the atmosphere. This requires a clear path to the top of the flue. A straight chimney/flue is always the best solution but where this is not possible, due to the construction of the building, the number of bends should be kept to a minimum and not exceed more than four. The angle of the bends should be no greater than 45 degrees from the vertical,



with the exception that 90 degree factory made steel bends or tees may be treated as being equal to two 45 degree bends.

The chimney/flue must also maintain the temperature of the gases above the dew point. Good chimney/flue design requires consistent insulation along the complete length of the flue. Clay, concrete and pumice liners require insulation to be prepared and added on site, while stainless steel system chimneys are supplied with effective insulation. Double wall pumice chimney systems have an air gap between the walls of the inner and outer blocks, and the air gap combined with the natural insulating properties of pumice provides effective insulation.

The appliance and the chimney/flue have to work together for the appliance to perform correctly. The velocity and temperature of the gases entering the flue can be important elements in how well the chimney/flue will operate. Advances in wood burning stove technology, designed to reduce emissions have highlighted the need for sufficient draw in the chimney/flue.



If you are interested in joining FETA call 0118 940 3416 or email info@feta.co.uk

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