



# HAPPY NEW YEAR

We wish our clients, partners and friends a happy and prosperous New Year 2018





# **PUBLISHER/EDITOR**

**IBB Builders Merchants** 

# **EDITORIAL OFFICE**

18 Gorst Rd, Park Royal NW10 6LE London

T: 020 8965 7972 E: editor@IBBbuilder.co.uk www.IBBbuilder.co.uk

### **EDITOR**

Magdalena Rosół E: mrosol@ibb.pl

# **DESIGN**

Perfect Design Group Ltd T: 0747 345 8880 E: office@perfectdesigngroup.com www.perfectdesigngroup.com

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#### Dear Readers

Welcome to the January 2018 edition. Our Dear Readers, Customers and Partners, we wish you happy and prosperous New Year. Thank you for choosing IBB Builders Merchants as your building material supplier and for your loyalty. We are looking forward to providing you with the best service this year. 2018 will bring new challenges for the UK construction industry like for instance uncertain economic situation due to upcoming Brexit date. In this issue, you can read more about the prediction for a tough year for the building sector. The lower sterling value, increases in materials prices, difficulty in finding skilled tradesmen, and the negative forecast for fewer construction contracts to commence in the coming months. We as the builders' merchants will be diversifying the materials portfolio and offer incentives in the form of loyalty scheme and exclusive discounts to help builders in tougher times. Our materials and price catalogue will be available soon in all IBB Builders Merchant depots. The updated information about prices will be always available online at www.ibb.uk. We also encourage to visit our social media profiles so you can easily stay in touch with us.

Introducing our cover story, we would like to offer you great opportunity to become a shareholder of the volleyball team IBB Polonia London VC. Volleyball 2.0 is the IBB Polonia London VC's plan for the coming year. We encourage to come over to one of the team's home matches which are transmitted live by Polsat TV. Our team is playing their first home match this year as soon as on 13th January. Don't miss this excellent opportunity to meet players and see how they perform. You might be interested in investing in the team's shares and becoming the owner of the English national champions. The cost of the single share is only £100.00 and gives you the ownership rights. Read more about the team's offer.

Getting deeper into the current edition, in the technology section, you will find the informative content about the superstructure. Tips on the building work connected with brick and block wall will give you the insight on how to stay in



compliance with the Building Regulations. The guide to the controlled mechanical ventilation system MVHR is the interesting read encouraging the investment into green solutions. MVHR is the way for achieving so-called healthy buildings, and it is the standard in the case of the passive houses. What's more, for those interested in mechanical ventilation, NICEIC launched the Ventilation System Training. You will find details about this two days training inside.

With the beginning of the new year, stay informed about the most important construction events in the UK. On the pages of this issue, you will find the event calendar with selected by us 25 events you do not want to miss this year!

The importance of the healthy working condition is the priority of our customers. So we thought we'd give you a heads up on the mobile dust exactors. This innovative solution allows working in the dust free environment and helps to achieve the employer's compliance with the Building Regulations. With regards to the health and safety on the building site, we have prepared for you the safety workwear guide. Read what are the requirements when it comes to the PPE and our outfits' recommendations for the particu-

Happy New Year and All the Best for 2018.

Magdalena Rosół Editor



# **CSCS Cards for Carpenters**

**CSCS** has recently announced that Fellow and Member grades at the Institute of Carpenters (IoC) are now eligible for the CSCS Professionally Qualified Person (PQP) card.

Although it is not a legislative requirement, most contractors and major home builders reguire site workers to hold a valid CSCS card. The scheme keeps a record of those working in the construction sector who have achieved or are committed to completing a recognised construction-related qualification. Site managers check the information on the card using a smartphone, tablet, or PC, giving them reassurance that the cardholder is qualified for the job they do on site.

CSCS worked closely with the loC to carry out a detailed mapping exercise of their membership criteria and the Professionally Qualified Members of the institute

Institute of Carpenters President Geoff Rhodes said: "I am really delighted to see this CSCS PQP card project completed and now in place and available to our members. I would like to thank all those involved in bringing this particular piece of work to a positive conclusion. This



is very positive news and IOC is pleased to be working with the CSCS and other organisations to develop and recognise a fully trained and Test. qualified UK workforce."

CSCS Director of Operations Gordon Jenkins said: "This is fantastic news and CSCS is pleased Person card can now be offered to Fellow and to be working with the loC, this is another example of the industry working together to achieve a fully trained and qualified workforce. The IoC have been maintaining standards in carpentry for over 100 years and it is their commitment to continual professional development that really ties in with the objectives of the PQP card."

The PQP card is valid for five years and all

applicants must pass the CITB Managers and Professionals Health, Safety and Environment

When applying for this card applicants will need to provide a copy of their current IoC membership certificate (or card) or supply a letter/ email from the IoC confirming that they are a current, competence assessed member.

You can apply for this card over the phone by calling 0344 99 44 777.

You will need to email evidence of your IoC professional membership to cscs@citb.co.uk

(Source: CSCS)



# Brexit 'cliff edge'

# Construction Rosses fear ELI Workers won't return to LIK After Christmas

According to the Federation of Master Builders the construction industry employers are worrying about EU workers come back to the UK after Christmas. The UK Construction is currently dealing with skills shortages and the possible lost of EU workers will have negative influence on the industry.

The FMB has published some new research which focusses on how the bosses of small and medium-sized (SME) construction firms view their EU workers and the key findings include:

- 85% of construction SME employers that employ EU workers say that these workers are important in allowing their business to maintain and expand its
- 76% of these firms say it would have

a negative impact on the health of their business if any of the EU workers they employ returned to their country of origin, now or post-Brexit:

94% of firms describe the quality of EU workers they employ as 'good' or 'very

Brian Berry. Chief Executive of the FMB. said: "Our latest research shows that EU workers are vital to the success of the UK construction industry and our message to these individuals is clear - you are highly valued and we need you. Christmas is now upon us and there's a risk that those EU migrant workers who go home to their home countries for the festive period might not come back. With Brexit looming large on the horizon, EU workers in the UK are facing high levels of uncertainty over their future. Furthermore, since the depreciation of sterling in the summer of 2016, their wages aren't worth as much as they were previously. Construction employers are genuinely concerned that this mixture of uncertainty about

the future and less money in their pockets will make the UK a much less attractive proposition that it was pre-referendum."

Berry concluded: "Ministers haven't done enough to reassure EU workers that they have a future in the UK. In our joint 'Construction Industry Brexit Manifesto', published at the end of November, seven of the major trade bodies have called on the Government to embark upon a communications campaign that makes clear to our EU workers that they'll have no serious impediments to gaining settled status. Indeed, both the Government and the industry need to do all that they can to put a positive message across. In the medium term, the construction industry can and should do more to attract and train a greater proportion of domestic workers. However, such is the extent of the current construction skills shortages, we'll continue to need to draw upon a high number of EU migrant workers post-Brexit if the Government wants to meet its target for new homes and infrastructure projects."

(Source: FMB)



# 25 CONSTRUCTION EVENTS IN 2018 you do not want to miss!

### 1. Toolfair London

31 Jan - 01 Feb, Alexandra Palace, London www toolfair info

chester, Exeter, Harrogate, Coventry and Surrey. The exhibition focuses on novation, sustainability, BIM, Building Completion, systems and structures, power tools, hand tools and building equipment. It is free to attend.

#### 2. Surface Design Show

06-08 February 2018, Business Design Centre, London UK

http://www.surfacedesignshow.com

Surface Design Show is the only UK event focusing on interior and exterior http://concreteshow.co.uk surface solutions in the building design.

### 3. Build It Live North West

17-18 February 2018, EventCity, Manchester, UK

http://builditlive.co.uk/whats-on-at-build-it-live/build-it-live-northwest/

Build It Live North West is a 2 day event showcasing products like home technology, finance and insurance, exterior finishes, doors and windows, garage doors, lighting and electronics etc. in the Architecture & Designing, Building Construction, IT & Technology industries. If you are planning selfbuild, renovation or extension it is the exhibition to visit.

# 4. The Listed Property Show

24-25 February 2018, Olympia London, UK

https://www.lpoc.co.uk/property-show/

The Listed Property Show is a 2 day focused on the real estate market. If you are maintaining, altering or renovating your listed home - or even looking to buy one - The Listed Property Show is not to be missed!

# 5. Ecobuild

06-08 March 2018, ExCel London, UK

https://www.ecobuild.co.uk/

Toolfair events are run annually in various places in the UK including Man- Ecobuild is a 3 day event all about products like building technology and infinishing products & materials, better built environment, green solutions like green infrastructure or biodiversity, water management, efficiency and re-

# 6. The UK Concrete Show (UKCS)

21-22 March 2018, NEC Birmingham

The growing in popularity, the Europe's no 1 specialist concrete event focused only on the concrete industry. Explore new suppliers and products, find new technologies, plant and machinery or tools. UKCS2018 will build on this success and will repeat the exciting new features that were so well received at UKCS2017 including a Live BIM for Concrete Interactive Visitor Experience, a Technical Advice Clinic and Live Demos.

### 7. National Homebuilding & Renovating Show

22-25 March 2018, Birmingham

http://national.homebuildingshow.co.uk/

The biggest homebuilding & renovating event aimed at self-builders and home renovators. If you run your building services business you may consider exhibiting there to find potential clients.

### 8.The Health & Safety Event

10-12 April 2018, Birmingham

http://www.healthandsafetvevents.co.uk

Health and safety on site is key to any construction business. This event This two days event showcases products like cutting edge technologies, innetworking as well as learning.

# 9. The Property Investor & Homebuyer Show

20-21 April 2018, ExCel London, UK

http://www.propertyinvestor.co.uk/page/home

Free to visit, the most comprehensive exhibition of UK & International residential property (and services) with a broad selection of UK & International property features, finance and other services.

### 10. EcoShowcase London

10 May 2018. ILEC Conference Centre, London, UK

https://www.ecoshowcase.co.uk

This events combines exhibition and seminars with advice and quidance on http://www.visionlondon.com/ how to play part in creating a more sustainable built environment. Stay upto-date with innovations in sustainable design and technologies.

#### 11. Smart Cities Expo World Forum

15-16 May 2018, ExCel London, UK

http://smartcitiesexpoworldforum.com

features seminars on all manner of topics, from 'Training & Competence' to novative advancement in smart cities, Real case studies, development of 'Hearing'. There are also key industry exhibitors, so it's a great chance for Internet of Things (IoT), smart governance, smart grid, smart transportation, smart healthcare etc. in the Architecture & Designing, Building Construction industries.

### 12. National Infrastructure Expo

12 June 2018, London

https://infrastructure.co.uk/

This event brings together people from multiple sectors, including construction, to exchange ideas and look at the latest products and innovations. It's a good way to stay on top of the latest trends and developments in the industry, as well as network with other key players.

#### 13. Vision 2018

21-22 June 2018. London

This event is aimed exclusively at UK architects, designers, specifiers and their clients working on commercial, health, education and retail projects. Visit to get insights into innovative building products or materials and solutions.



# 14. The London Design Festival

15-16 September 2018, London

http://www.londondesignfestival.com

of the world. The Festival will return to venues and institutions across the city from the 15-23 September 2018.

#### 15. Tent London

20-23 September 2018, The Old Truman Brewery, London

http://www.londondesignfair.co.uk

The largest collection of international exibitors, designers, brands, country pavilions, features and exhibitions including Tent London & Super Brands London http://www.ukconstructionweek.com/build-show/about/about-the-show in one destination during the London Design Festival. This event showcases product from Architecture & Designing industry. This event showcases prodics and vintage design etc. in the Architecture & Designing industry.

# 16. Homebuilding & Renovating Show- London

21-23 September 2018, ExCel London, UK

http://national.homebuildingshow.co.uk/

The biggest homebuilding & renovating event aimed at self-builders and home 20. Land Remediation Expo renovators. If you run your building services business you may consider exhib- 10-11 October 2018, ExCel London, UK iting there to find potential clients.

### 17. The Property Investor & Homebuyer Show

05-06 October 2018, Royal Victoria Dock, London, UK

# 18. UK Construction Week

9-11 October 2018, NEC Birmingham

http://www.ukconstructionweek.com/

London Design Festival celebrates and promotes London as the design capital The UK's largest construction trade show is back again, with UK Construction Week consisting of nine shows, including Timber Expo, Build Show, Civils Expo, Plant & Machinery Live, Energy 2018, Smart Buildings 2018, Surface & Materials Show and HVAC 2018, as well as Grand Designs Live, which is open to trade on 10-11 October, Over 33,500 people attended in 2017, so expect it to be another big event in the calendar.

### 19. Build Show

9-11 October 2018, NEC Birmingham, UK

The Build Show sponsored by Easy-trim is FREE to attend for trade visitors. ucts like furniture, lighting, textiles, digital media, architecture, graphics, cerammingham, looking for solutions and new products to enhance their projects and businesses. Covering a vast spectrum of professionals from Tradesmen to Housebuilders and Contractors, the event has quickly established itself as the benchmark for business and innovation within the sector. NEW for 2018 The Build Shows ponsored by Easy-trim will be launching new sections this year; Health & Safety, Tools, Roofing & Insulation and Windows & Doors.

http://www.landremediationexpo.com

During this expo exhibitors will be presenting innovative solutions, technology and market leading products and services to professionals working in land and waste contamination management and remediation.

#### 21. London Build 2018

24-25 October 2018, Olympia London, UK

http://www.londonbuildexpo.com/

London Build is the leading construction expo dedicated entirely to opportunities in London and the South East of England. It attracts contractors, developassociations, local councils, suppliers and many more.

# 22. Plant & Machinery Live

9-11 October 2018, Birmingham

http://www.ukconstructionweek.com/plant-and-machinery

Plant & Machinery Live is the event run alongside UK Construction Week at the **25. Homes Conference and Exhibition** NEC Birmingham. It is giving exhibitors the opportunity to showcase their equipment to visitors and demo some basic manoeuvres, such as earth moving, It is https://homesevent.co.uk the truly interactive show with presentation.

# 23. The Offsite Construction Show

20-21 November 2018. ExCel London, UK

https://offsiteconstructionshow.co.uk

It offers the largest selection of offsite construction specialists with the latest industry networking. products, services and technologies. 30 CPD accredited seminars and workshops. Visit for networking opportunity and to learn about offsite construction.

# 24. CIBSE Build2Perform Live

27-28 November 2018, Olympia London, UK

http://www.build2perform.co.uk

Over 175 experts, speaking in 80 sessions, will be presenting over the course of the two days. The event covers two days of interactive features and multiple ers, industry bodies and local authorities, architects, solution providers, housing in depth technical seminar streams, bringing built environment professionals and the wider supply chain together to help improve efficiency. It focuses on building performance, energy efficiency, reliability and productivity, providing utility, industrial, commercial, and residential sector buildings with safe, reliable and smart technologies for the distribution and monitoring of power etc. in the Building Construction industry.

28-29 November 2018, Olympia London, UK

The exhibition dedicated to the residential development, strategic asset management and procurement solutions. It will feature 120 Exhibitors, 5 Theatres, 100 Speakers, 3000 Visitors. It is the housings destination event for residential development, strategic asset management and procurement solutions. At Home Conference and Exhibition explore the latest thinking about housing supply, discover the latest innovations, speak to your supply chain and take part in the





The Government runs the consultation until 19th January 2018 about the reform of the retention practice in the UK construction contracts. The collective view of 23 associations and construction bodies is about the adoption of the statutory retention deposit scheme.

The retention clause allows clients to withhold tor. However, retention causes significant problems party trust scheme. for building firms waiting for payments. It is esti-

mated that approximately £10.5bn of the overall of business Paul Reeve and BESA director of comconstruction sector turnover of £220 billion is held mercial and legal Rob Driscoll jointly commented: in retentions by clients and main contractors from SMEs (small and medium sized building firms). An of cash retentions in construction have been identiapproximate £7.8bn in retentions has been unpaid over the last three years, and in the same period edged by government, the government has chosen

Building Engineering Services Association and the tion will be debated in the House of Commons on firm commitment to remove the retentions issue." the percentage of the contract value owned to the the 9th January, where the private member's bill contractor for the part of the time as the security introduced by Waveney MP Peter Aldous seeks to Affairs at the ECA: "This Bill aims to protect the for defects or other risk connected with contrac- amend the 1996 Construction Act to ensure that supply chain from the serious impact of lost retentor's work. It is the norm in the UK construction sec- retentions within construction are held in a third tions due to upstream insolvency. Way beyond

"While the significant and unacceptable problems fied by independent research, and even acknowl-£700m of retentions were lost due to insolvencies. to consult once again on the extent of the problem The campaign of 23 associations, led by the and what to do about it.

"The BESA and the ECA will continue to call on Electrical Contractors Association, is proposing the the government to ensure that all cash retentions Australian approach to retentions. The proposal offers launching a statutory retention deposit scheme them out entirely by the early 2020s. For the good instead of client's own bank accounts. This solu- of the economy, and the supply chain, we need a

Paul Reeve, Director of Business & External those companies who are damaged by upstream In a joint statement on the issue, ECA director insolvency, even the possibility of losing retention

money in this way hampers small business investment and growth. As such, this Bill is entirely consistent with the aims of the new Industrial Strategy, which looks for innovation, and investment in skills".

Rob Driscoll, Legal & Commercial Director at the BESA: "With central government and major projects the biggest single construction client, the case for reform is inherently connected to the Government's industrial strategy. To meet the challenges set by the recently launched Industrial Strategy and construction sector deal, enabling industry to re-invest in jobs, training, innovation and technological transformation, Government intervention is necessary to secure working capital that underpins the delivery models for the industry as a whole."

The government's consultation document is at https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/654258/2017.10.23\_Retentions\_Payments\_Consultation\_FINAL.pdf

You can reply to the consultation online at: beisgovuk.citizenspace.com/im/retention-payments-in-theconstruction-industry

The deadline for responses is 19th January 2018.

- Specialist Engineering Constructors Group
- British Constructional Steelwork Association
- Lift & Escalator Industry Association
- Scottish Electrical Contractors' Association SELECT
- National Federation of Builders
- Association of Plumbing and Heating Contractors
- Scottish & Northern Ireland Plumbing Employers' Federation
- Contract Flooring Association
- Structural Timber Association
- British Blind & Shutter Association
- Confederation of Construction Specialists
- Federation of Traditional Metal Roofing Contractors
- Lead Contractors Association
- National Association of Shopfitters
- National Federation of Demolition Contractors
- Chartered Association of Building Engineers
- Federation of Environmental Trade Associations
- Scaffolding Association
- Stone Federation Great Britain
- Glass & Glazing Federation
- Finishes & Interiors Sector

# **Tough 2018** for UK Construction industry

According to the **Construction Products** Association (CPA), the industry's output will not grow at all next year. It is a downward revision from the previous estimate of 0.7pc expansion. In Spring last vear the predicted by the CPA growth rate for 2018 was 1.2pc. The forecast was downgraded due to the decline of commercial. public and infrastructure projects.

This negative prospect means the construction firms will struggle in 2018 with the unstable economic situation, rising inflation and falling real

Noble Francis, economics director at the CPA, said: " While contractors are currently still reporting high current activity there are "clear signs" the sector is slowing.

He added: "Prospects for construction have been adversely affected by slowing UK economic growth and falling real wages on one side and sharp rising costs on the other. "A fall in new investment, especially where it is large international investment looking for a long-term rate of return, is construction SMEs are struggling to hire carpenforecast to lead to declines in the commercial and ters and joiners which has now surpassed bricklayindustrial sectors."

According to the Federation of Master Builders (FMB), the growth amongst London's SMEs in the construction sector in the third guarter of last year

October 2017 key results from the FMB's State of Trade Survey which is the only quarterly assess-

- 41% of construction SMEs predict rising workloads in the coming three months, down from 48% in the previous quarter:
- 82% of builders believe that material prices will rise in the next six months:
- 61% of construction SMEs are struggling to hire carpenters and joiners and 59% are struggling to hire bricklayers;
- Over half (58%) of construction SMEs expect salaries and wages to increase in the next six months.

FMB chief executive Brian Berry said: "Material price hikes and skills shortages are putting the brakes on growth among the UK's small building firms. Now that the general election is well and truly behind us, it was our hope that consumer confidence would spring back and spur growth among small building firms in the third quarter of this year. However, our latest research shows that rising costs are dampening the performance of construction SMEs. The spike in salaries is a direct result of the ever-worsening skills shortage in our sector. It's a simple consequence of supply and demand - construction workers know their worth and given the scarcity of skilled tradespeople, these individuals are understandably demanding higher wages from their employers. Indeed, nearly two thirds of ers as the trade in shortest supply."

Berry concluded: "Although the SME construction sector is still growing, the Government needs to keep a watchful eye on this slowdown in growth. Construction is a strategic industry and without it, the Government will be unable to build the homes, schools, hospitals, roads and railways it needs.

ment of the UK-wide SME construction sector, in- With Brexit on the horizon, the Government must keep the needs of the construction industry in mind as it negotiates the UK's departure from the EU. In particular, Ministers must work closely with the sector to develop a post-Brexit immigration system that works for construction and a transition period that allows us to gradually reduce our reliance on EU migrant workers. On the domestic front, we are urging the Housing Minister to turbo-charge the SME house building sector by fully implementing the proposals in the Government's Housing White Paper which was published back in February. Eight months on, our sector is crying out for the very sensible proposals aimed at removing barriers to SMEs so we can once again get Britain building





# P(I) RS

# **National Plant Operators Registration Scheme**

The National Plant Operators Registration Scheme was established in 1992 and it is now one of the UK's leading Accreditation and Registration Bodies, working across a wide variety of sectors including the Construction.

NPORS is the preferred regulatory authority for workplace transport training and it offers flexibility and high standards, both nationally and internationally by working with industry and Accredited Training Providers.

### **NPORS CSCS Operator Card**

The NPORS Operator Card is a record of training/assessment an individual has undertaken to prove their ability to safely operate or drive an item of plant machinery or equipment. Registration with

NPORS lasts for three or five years from the date of

NPORS training and assessment is carried on in accordance with published course objectives and learning outcomes based on the National Occupational Standards. NPORS training and testing is conducted in accordance with published course objectives and learning outcomes which are derived from the National Occupational Standards.

Following the Government Strategy for Construction for a single logo applied to all card schemes, and

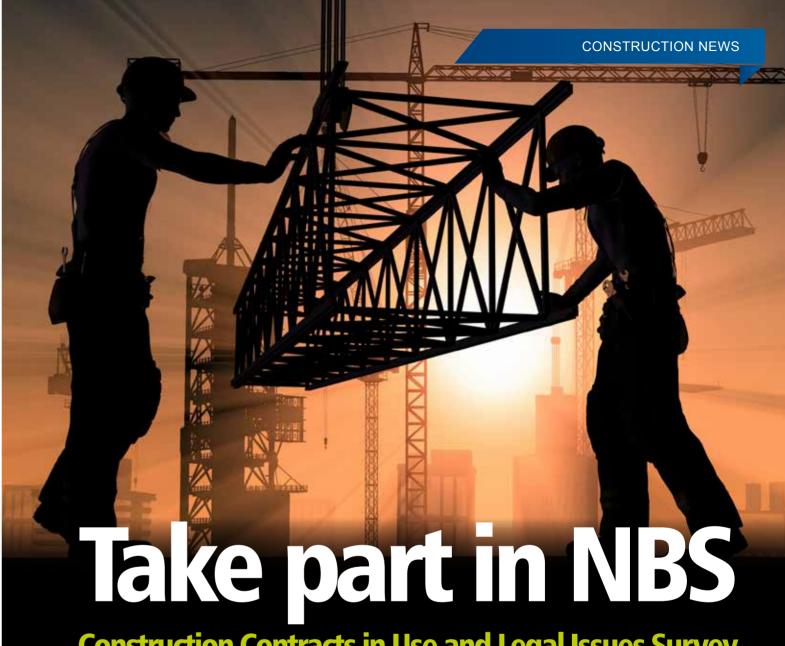
as a result of the Construction Leadership Council (CLC) decision to award the single logo status to CSCS, the NPORS Construction Operator Card will in future be issued in line with the requirements stipulated by the CLC and will display the CSCS logo.

The categories on the reverse of the Operator Card can be validated by scanning in the QR code on the front of the card, using the online card checker or by contacting NPORS on 01606 351240.

For more details visit www.npors.com

(Source: NPORS)





# **Construction Contracts in Use and Legal Issues Survey**

NBS is inviting all builders and building businesses to take part in the survey about construction contracts. Spend few minutes to share your views about any legal issues you may have encountered during the building contract. This survey covers the ongoing project, the completed one or one that was in dispute in the last 12 months. The survey is about UK based projects and international projects handled by the UK based companies. All information is confidential and the survey is carried out in accordance with the Market Research Society Code of Conduct.

legal issues and the impact of the adoption of BIM issues from across the industry.

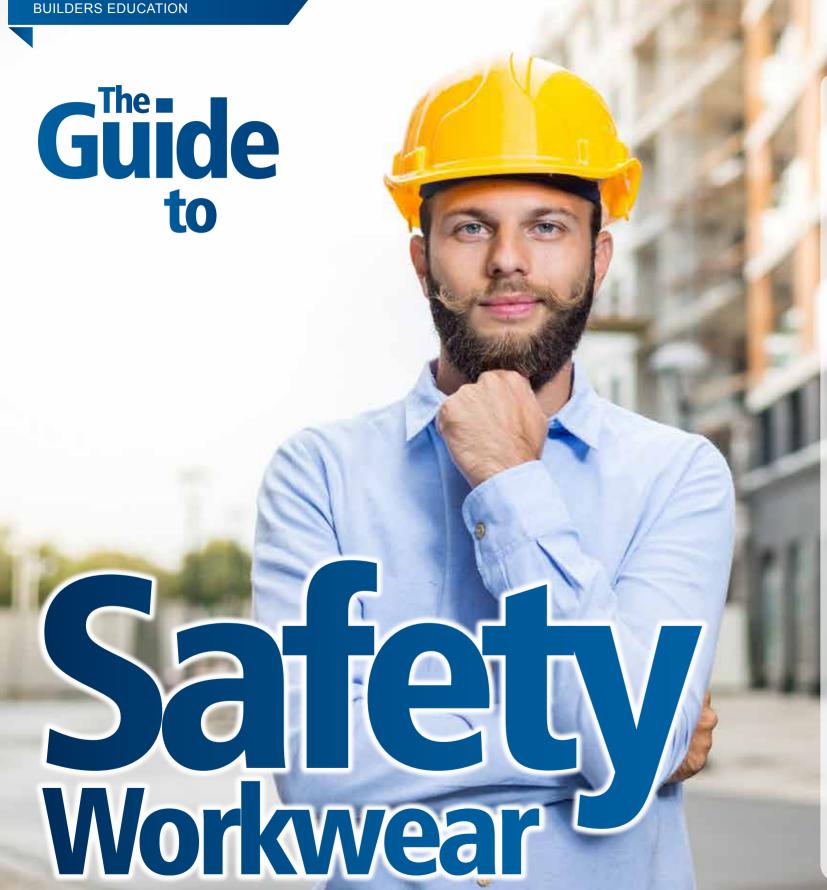
Head of research Adrian Malleson said: "Our vide a clearer picture of whether collaborative tech-

The survey covers subjects like for instance: independent and experienced NBS Research team niques and processes such as BIM are fostering main causes of dispute, their duration and value, has designed this survey to be the most wide- a less confrontational approach amongst project tendering and procurement practice, pricing and ranging independent review of contractual and legal

"We're expecting results of the survey to pro- lowing the 2016 mandate."

teams, as well as a strong indication of the legal implications that those adopting BIM is having, fol-

To take part in NBS survey visit: http://surveys.ribaenterprises.com/wh/s.asp?k=150089688417



There are regulations covering the safety workwear and PPE (Personal Protection Equipment), and employers must provide the adequate PPE at work to meet the requirements of the Personal Protective Equipment at Work Regulations 1992. The employer is obliged to provide safe working conditions including instructions, procedures, training and supervision.

Safety workwear will help to avoid or minimise the risk of injuries to:

- the lungs, e.g. from breathing in contaminated air- dust, vapour, gas, oxygen-defi-
- the head and feet, e.g. from falling materials, falling or flying objects, the risk of Types of the PPE head bumping, hair entanglement.
- the eyes, e.g. from flying particles or splashes of corrosive liquids, chemical or metal splash, dust, projectiles, gas and va-
- the skin, e.g. from contact with corrosive canal caps
- the body, e.g. from extremes of heat or cold, adverse weather, chemical or metal splash, spray from pressure leaks or spray guns, impact or penetration, contaminated dust, excessive wear or entanglement of own clothing

PPE is the personal protective equipment that will protect the user against health or safety risks at work. Safety hamlets, gloves, eye protection, high-visibility clothing, safety footwear and safety harnesses are considered as a PPE. It also includes respiratory protective equipment.

When choosing PPE use products that are:

- CE marked in accordance with the Personal Protective Equipment Regulations
- Ensure all PPE can be used at the same

time, e.g. wearing safety glasses may disturb the seal of a respirator, causing air

Provide instruction how to use it, e.g. how to remove gloves without contaminating their skin

Apart from PPE provision, the Regulations also require that PPE is:

- adequately assessed before use to make sure it is fit for purpose:
- maintained and stored properly;
- provided with instructions on how to use
- used correctly by employees

When it comes to the protective clothing and PPE employer never should charge for its provision or allow exemptions from using it. Moreover, the employer should ensure the appropriate storage, and keep the replacement PPE and regularly check the condition of the used one.

To protect eyes - safety spectacles, goggles, face screens, face shields, visors

To protect head & neck - Industrial safety helmets, bump caps, hairnets and firefighters' helmets

To protect ears- Earplugs, earmuffs, semi-insert/

To protect hands & arms - Gloves, gloves with a cuff, gauntlets and sleeving that covers part or all

To protect feet and legs - Safety boots and shoes with protective toecaps and penetration-resistant, mid-sole wellington boots and specific footwear, e.g. foundry boots and chainsaw boots.

To protect lungs - half and full masks, filtering facepieces and respirators and power-assisted respirators, fresh-air hose, compressed airline and selfcontained breathing apparatus

To protect the whole body - Conventional or disposable overalls, boiler suits, aprons, chemical suits, safety harnesses or life jackets, high-visibility

High-Vis - All high-vis clothing must be BS EN Consider appropriate size, fit, weight of the 471 standard and CE marked- different levels of retroreflection performance. Both factors run from Class 1 to Class 3.

Footwear - Slip resistant and with steel front. however it is recommended to resist using the same footwear for various tasks and in different working

Helmets - In most cases, the law requires head protection on construction sites due to the risk of injuries. The Employment Act 1989 gives an exemption for turban-wearing Sikhs working on construction sites from the need to wear head protection. Important fact about PPE like for instance helmets is that they have an expiry date, so use them wisely. We can distinguish between different helmet colours.

The Health and Safety Executive (HSE) recently informed about the case where a roofing firm from Malton has been found quilty of safety breaches and fined £10,000 with £1,355 costs after a worker suffered severe skull injury following a fall from height during work on a construction company's office. HSE investigation proved there was no risk assessment carried before work commencement and no precautions have been taken to avoid falls from the roof. To reduce the risk of such accidents an appropriate type of safety helmets should be used. The helmet should meet the required parameters like shock absorption, resistance to penetration, adjust-

First of all the risk of any injury on the site should be assessed, controlled and reduced before works commencement. The safety helmets do not prevent head injury accidents but only reduce the severity. Other preventive methods include installation of toeboards, erection of nets and fans or securing the risky elements on site, etc.

The contractor has the legal obligation under Regulation 48 of the Construction Sites (Safety) Regulations (Subsidiary legislation of Chapter 59) to provide each worker employed on the site with a suitable safety helmet and to ensure that no one remains on the site without the head protection.

A safety helmet protects against impact with the force of the impact spread over the surface of the head lessening the chance of injury. To achieve the purpose, stringent performance/test requirements apply to safety helmets.

The shell and harness are two primary components of the safety helmet. They have to fulfil certain mandatory requirements of international/ national

### **BUILDERS EDUCATION**



# WHITE

- SITE MANAGER
- COMPETENT ORERATIVE
- VEHICLE MARSHAL (distinguished by the wearing of a different coloured high visibility vest)



# **BLACK**

SUPERVISOR



# BLUE

ALL THOSE COMING TO SITE WHO DO NOT FALL INTO ANY OF THE ABOVE CATEGORIES



# **RED**

SLINGER/SIGNALLER

standards on the constructional features like the helmet profile, the clearances between the shell and the harness at various locations or the adjustable increments of headband and nape strap. The materials for safety helmets should be of durable quality.

The helmets colours will have to be implemented on all new construction sites. All helmets must meet British Standard BS EN 397.

The Personal Protective Equipment Regulations 2002 and the Personal Protective Equipment at Work Regulations 1992 (as amended) give the primary requirements. The PPE at Work Regulations does not apply where the following five sets of regulations require the provision and use of PPE against these hazards. For example, gloves used to prevent dangerous chemicals penetrating the skin would be covered by the Control of Substances Hazardous to Health Regulations 2002 (as amended). The Regulations are:

- The Control of Lead at Work Regulations 2002.
- The Ionising Radiations Regulations 1999.
- The Control of Asbestos Regulations 2012.
- The Control of Substances Hazardous to
  Health
- · Regulations 2002 (as amended).
- The Control of Noise at Work Regulations 2005.

**Plumber** - full overalls, non-conductive clothing, eye protection, leather or latex gloves, enclosed mask with filter, protective earwear will be required when sound levels reach 85 decibels or more

**Plasterer** - proper face mask with filter, goggles or protective glasses, full-body coverings, gloves

**Electrician** - rubber insulated gloves or leather protective gloves, additional liner gloves, Arc rated jackets, trousers, and visors plus fire retardant clothing

**Bricklayer** - face masks and fully-enclosed protective eyewear, sturdy protective gloves, protective footwear, ear protectors, helmet, hardwearing apparel

**Carpenter** - safety glasses, hearing protector, face mask, full face shield.

General builder - A full complement of safety workwear, including ear protectors, eye protectors, hard hats, face masks, protective clothing, and protective footwear. It depends on task so variety of options should be provided- heavy-duty rubber gloves should be used when working with concrete, while insulated gloves and sleeves should be used when working around electrical systems

**Decorator** - safety glasses, safety gloves, hard yearing shoes

**Welder** - full-face shields, respirators, gloves and all clothing should be flame-retardant, and heavy-duty. Welding curtains could also give additional protection for other workers.

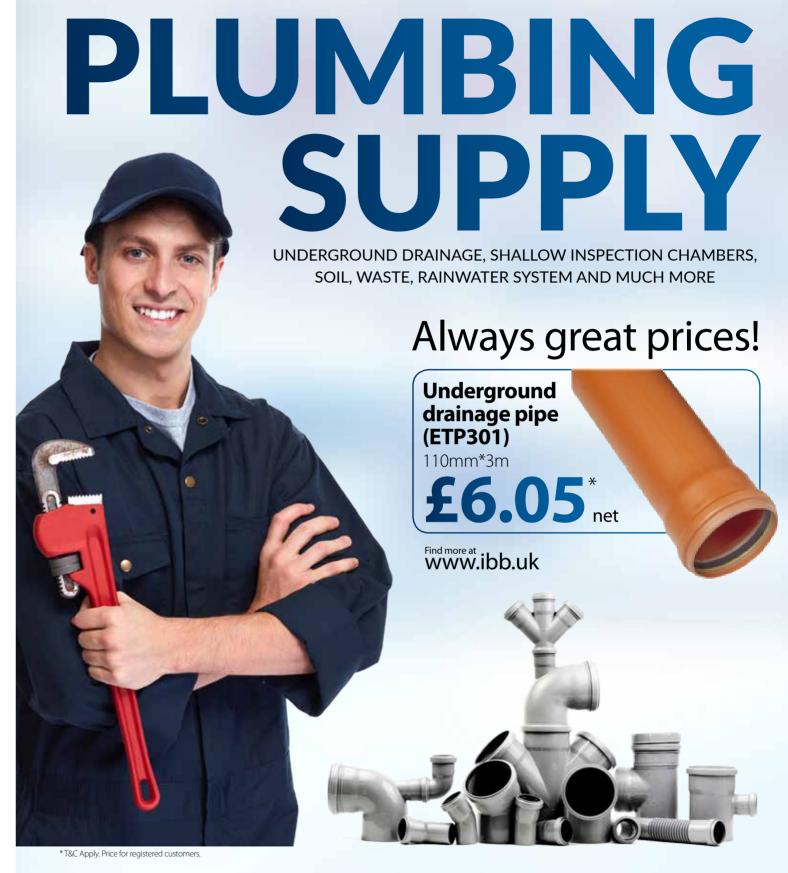
**Site Manager** - high-vis clothing ( heavy duty clothing when site condition requires it)

**Equipment Operator** - clothing adequate for weather conditions, high-vis, Steel-toed boots, padded gloves, ear protectors

Disclaimer: This guidance is the introductory information only, please refer to the adequate regulations on PPE and building site clothing for more detailed advice. For more information visit www.hse.gov.uk

(SOURCE: HSE)



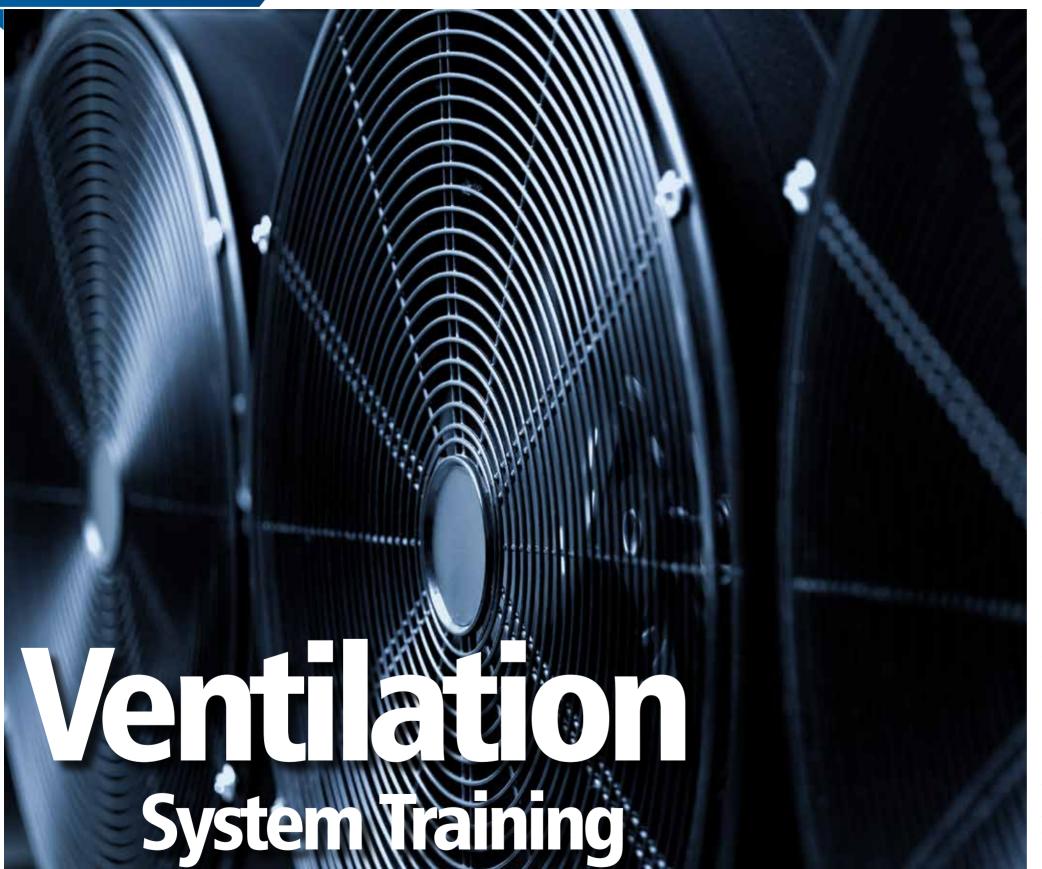




Park Royal 18 Gorst Rd London NW10 6LE 020 8965 7972 sales@ibb.pl Croydon
ZK Park, Unit 6, 23 Commerce Way
Croydon CR0 4ZS
020 8680 9026
croydon@ibb.pl

Birmingham 425 Walsall Rd Birmingham B42 1BT 0121 356 8655 birmingham@ibb.pl Manchester
Unit 24, Piccadilly Trading Estate
Manchester M1 2NP
0161 375 1210
manchester@ibb.pl

BUILDERS EDUCATION BUILDERS EDUCATION



All mechanical ventilation systems require air flow rates estimations and the notice to local Building Control body. However, it is not necessary to notify a **Building Control in advance** of work if the installer is registered with the NICEIC Ventilation Competent Persons Scheme. In order to join the Scheme the installer must demonstrate competence to carry out this particular type of work and also the ability to comply with all relevant requirements in the Building Regulations.

NICEIS with BEAMA and ventilation systems manufacturers like Johnson, Starley and Vent Axia offer a training for system installers. It covers broad aspects of domestic ventilation systems, its design, installation and maintenance. The course is approved by the SummittSkills and mapped to the Minimum Technical Competences (MTC)

\Here is the list of works that require notification:

- Install a mechanical ventilation system in a dwelling
- Install a mechanical ventilation heat recovery system in a dwelling

The qualications required to be registered on a competent person scheme are detailed in the Minimum Technical Competency document. For ventilation work, the nominated competent person is required to hold either a BPEC or the NICEIC Domestic Ventilation Qualification or qualifications that meet the requirements of the Minimum Technical Competencies.

For additional guidance on application, assessment and registration please refer to NICEIC Competent Person Schemes Guide www.niceic.com

The NICEIC ventilation system course meets the minimum technical competency requirement for Installers looking to apply to join a Competent Person Scheme in England and Wales for Domestic Ventilation Systems. It is also relevant for installers working Scotland and Northern Ireland.

The course lasts two days and it covers the following aspects:

#### Day 1

- Fundamental working principles of ventilation systems
- · Minimum legal requirements
- The types of ventilation systems
- Passive Stack Ventilation
- Intermittent extract fans
- Continuous Mechanical Extract Systems
- Continuous Mechanical Extract Systems with Heat Recovery
- Why ventilation is important
- The varying techniques used for installation of the different systems
- The pitfalls associated with poor workmanship and misuse of ventilation systems
- · Basic system design
- Preparation prior to installation

#### Day 2

- Competent Person Schemes
- Commissioning of a mechanical ventilation heat recovery unit
- Inspection and testing
- Certification and documentation of a mechanical ventilation heat recovery unit
- Assessments

#### Course cost:

Registered list price: £340.00 + VAT Non registered list price: £370.00 + VAT

For more details visit www.neiceic.com

(Source: NEICEIC)



BUILDERS EDUCATION BUILDERS EDUCATION

# The importance of the clean working conditions

Mobile Dust Extractors

Dust control is playing the importance during any dust causing works on site. Dust control includes practices used to reduce or prevent the surface and air transport of dust during construction. Dust on building sites causes various occupational lung diseases and occupational asthma.

A large volume of fine dust arises when sanding wood or mineral materials, which can pose a serious health risk. Many studies show that this can lead to permanent problems for the respiratory tracts. Therefore, in the interest of their own health and in compliance with legal regulations, painters and decorators should ensure the air in their working environment is clean. This can be achieved by choosing the certified and approved mobile dust extractor.

According to the Dutch TNO testing institute, the limit values are always exceeded when working without dust extraction – sometimes over 100 times more. For instance, when sanding drywall filler in a 90 square metre apartment up to 54 litres of dust is generated\*1. For these reasons, one should always consider the health of all those involved, employees and customers, when working with materials that generate dust. Dust arises when processing and machining materials, which can pose a serious health risk.

The types of dust are as diverse as the materials from which they come. The composition decides how hazardous the respective dust is to our health. For example, quartziferous substances in mineral dust are particularly dangerous, as they can lead to lung cancer, among other things. As well as the type of dust, the duration of exposure and amount of dust are also essential in determining the level of health risk. The longer the exposure to the dust and the greater the volume of dust, the more dangerous it becomes. The size of the dust particles should also be considered, because the finer the particles, the deeper they can penetrate into the lung tissue. It is also important to know that the same occupational exposure limits\*2 in the bodyshop also apply on the construction site. This is why mobile dust extractors also always have to be used on the construction site.

# Keeps your lungs healthy. And your customers happy.

Mobile dust extractors impress not only on account of their health benefits, but also from the customer's point of view. Because, in addition to a cleaner working environment, better work results can be achieved which ultimately leaves a lasting impression on customers and leads to more recommendations and follow-up orders.

# It comes down to the proper dust class

As dust occurs in various forms, dust extraction is simply not enough – for your health or under legislation. For all hazardous dust there are occu-



### **BUILDERS EDUCATION**

pational exposure limits in mg/m2 of air, which are defined within the framework of dust classes. This standard classifies the dust into three classes: L. M and H. With its product portfolio, Festool covers the entire range for dust extraction: Dust class L (simple and harmless dust such as household dust, clear coats and plaster, as well as materials such as earth, M (all wood dust and dust from fillers, repair compounds and cement, tile adhesive and paints. as well as latex and oil-based paints or quartziferous materials like sand and gravel) and H (carcinogenic dust, dust with carcinogenic and pathogenic particles, as well as dust with mould spores, asbestos, mineral fibres, bitumen and artificial mineral fibres like glass wool). Festool also offers special Class B dust extractors for combustible and explosive dust When it comes to dust extraction, Festool always recommends using a dust extractor with the proper dust class for the corresponding material

#### **Dust extraction with a system**

Mobile dust extractors are an integral element of the Festool system concept. This is why Festool not only develops its own tools, but its own extractors too. They are compatible with all Festool electric power tools and air tools. For instance, there are extractors with container volumes ranging from 10 to 48 litres, as well as some with or without automatic main filter cleaning (at Festool AC stands for AUTO-CLEAN). They\*3 are equipped with an integrated hose garage, Sys-Dock for holding the Systainer, Sortainer and Workcenter and embedded in a complete system of accessories and consumables - from selfcleaning filter bags to various suction hoses through to handles or tool holders.

Festool also offers mobile dust extractors for dust class H - for carcinogenic dust, dust containing carcinogenic or pathogenic particles, as well as dust containing mould spores, asbestos, mineral fibres, bitumen and artificial mineral fibres such as glass wool.

The guicker a sander removes material, the more powerful the connected mobile dust extractor needs to be. The powerful CT 36 AC PLANEX was designed specifically for the extreme material removal rate of the PLANEX long-reach sander.

In summary, a dust extraction system is the vital investment as it not only helps to meet the legal requirements, ensurers cleaner air but also brings healthy benefits for workers and clients. Further information on the "Dust-free initiative"\*4 is available online at www.festool.co.uk/dustfree

- 1. Basis of example: 90 m living space, entire area filled, sanding of wall and ceiling using the longreach sander LHS 225 PLANEX
- The occupational exposure limit is the timeweighted average concentration of a substance in the air at the workplace, at which acute or chronic damage to the health of the employees cannot be expected. When defining the occupational exposure limit, it is generally understood as eight hours exposure over five days a week during the working life. The occupational exposure limit is specified in mg/m and ml/m (ppm).
- Applies to all CT mobile dust extractors except the CT 17
- Festool mobile dust extractors can collect up to 99.995% of dust generated during classic sanding, sawing and routing applications.



















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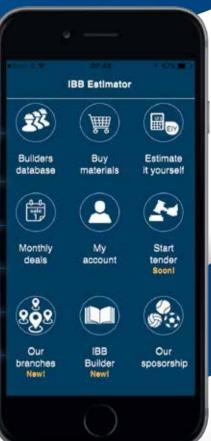
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CONSTRUCTION TECHNOLOGIES CONSTRUCTION TECHNOLOGIES

as a key to low-energy building

Mechanical ventilation heat recovery (MVHR) systems are getting more popular due to increasing interest in the better-built environment and healthy homes. The healthy building is the one that is airtight and adequately ventilated what improve its energy efficiency and prevents dampness. Mechanical ventilation heat recovery systems are currently the standard ventilation solution for new builds and are an essential part of Passivhaus and low energy building design.

MVHR system is the smart ventilation technology where a whole house ventilation system both supplies and extracts air throughout the property. Such solution offers a balanced low energy ventilation for new builds and re-uses up to 95% of the heat that could be lost. The heat from the extracted air is going through a heat exchanger located in the

heat recovery unit and then reused and supplied to rooms as the filtered air. The Heat Recovery Unit runs continuously on trickle and can and is boosted when higher rates of ventilation are required, e.g. bathing, cooking. In warmer months a summer bypass function ensures that the dwelling is well ventilated and receive fresh filtered air. However, the heat recovery process is intermittently switched off.

The Building Regulations with regards to the MVHR system are set out in Approved Document F 2010. What's more, the Domestic Ventilation Compliance Guide is an associated document to Approved Document F 2010 and has been introduced to support the transition of ventilation to become a controlled building service.

MVHR systems allow for the sufficient ventila-

lable 5.1a Extract ventilation rates					
Room	Intermittent extract	Continuous extract	us extract		
	Minimum rate	Minimum high rate	Minimum low rate		
Kitchen	30 l/s adjacent to hob; or 60 l/s elsewhere	13 l/s	Total extract rate should be		
Utility room	30 l/s	8 l/s	at least the whole dwelling ventilation rate given in Table		
Bathroom	15 Vs	8 l/s	5.1b		
Sanitary accommodation	6 l/s	6 Vs			

Table 5.1b Whole dwelling ventilation rates						
	Number of bedrooms in dwelling					
	1	2	3	4	5	
Whole dwelling ventilation rate *-b (I/s)	13	17	21	25	29	

#### Notes

- a. In addition, the minimum ventilation rate should be not less than 0.3 l/s per m² of internal floor area. (This includes all floors, e.g. for a two-storey building add the ground and first floor areas.)
- b. This is based on two occupants in the main bedroom and a single occupant in all other bedrooms. This should be used as the default value. If a greater level of occupancy is expected add 4 l/s per occupant.

Table source: Approved Document F 2010



CONSTRUCTION TECHNOLOGIES CONSTRUCTION TECHNOLOGIES

tion of the building and minimising the loss of indoor heat. It is achieved by use of heat exchanged driven by two low energy fans. The incoming air passes the outgoing air through the heat exchanger (without being mixed) so that energy is extracted from the outgoing air and is transferred into the incoming air.

MVHR systems are often designed, quoted and installed by the supplier. The prepared 3D drawings for the system and ductwork allow the installation to be prepared by the builder or the qualified engineer. Also, the 3D plan of MVHR system enables to check the performance of the system regarding noise, pressure, balance and

airflows. MVHR systems ensure the excellent air quality.

To choose the proper system for your building needs the airflow rates will have to be calculated, so it is essential to give the number of bedrooms, floor area and a number of occupants.

The proper design of the system is vital to ensure its efficiency. It is recommended to plan it as soon as possible during the project works so it can correspond to the structural elements of the building or routs for services. Moreover, it has to work well with more compatible services like trickle vents, air bricks, letter boxes or cat flaps. Appliances such as log burners or flue-less gas

products, extract fans in the bathrooms, kitchen cooker hoods or micro-exhaust air heat pumps. Often manufacturer or supplier provides detailed drawings during the quotation stage. The number of appliances or services that corresponds to the MVHR system makes it best for the new builds and most costly for retrofits.

Moreover, the correct design of the MVHR system is vital to avoid the condensation within the system which could cause damage to ductwork, the unit or the building fabric. Nowadays, the MVHR systems are designed with the silencers to lower the possible noise. Maintenance of the system is not expensive and consists of the

inspection of the system, check for debris and the exchange and clean of filters.

MVHR system is a whole house ventilation system that both supplies and extracts air throughout the property. It offers a balanced low energy ventilation solution for new dwellings and re-uses up to 95% of the heat that would have otherwise have been lost.

# MVHR system consists of ducting, units and air valves.

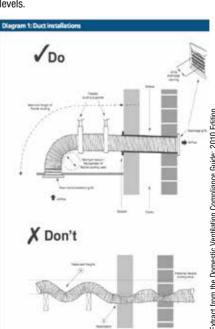
The well-designed high-quality ducting system is critical to the efficiency of an MVHR system. There are two types of the duct layouts like branch

types and radial types. These models have rigid large bore ducts connecting the heat exchange unit with the outside of the property. To minimise the risk of condensation, ducts should be short and insulated. Insulation of ducts can be in the form of foiled back mineral wool or cell foam wrap.

Branch duct layout- it is the layout with the main central duct and branches going to different rooms. Ducts diameter varies between 100mm and 200mm. One branch layout will distribute fresh air to rooms while the second branch network will draw air from the humid areas like kitchen or bathroom. Both systems have to be balanced with the similar number of terminals on each network. The so-called cross talk silencers are fitted where two rooms are connected to the same network to minimise the noise levels. Each room also has terminals to balance the right amount of air to each room.

Radial duct layout it is the layout where narrower ducts 75mm and 92mm all coming from a central manifold. Radial ducts are in longer lengths of up to 40m or 50m. The system is balanced at the manifold to deliver the right amount of air to each room. It is different to branch duct system as it does not have the adjustable terminal in each room. Moreover, radial duct systems do not require silencers fitted as the noise levels are much lower.

The installation of the ductwork should be faultless to ensure its proper working, increasing the energy efficiency of the MVHR unit, reducing energy losses from the system itself, providing good air quality and long-term performance with low noise levels.



# Innecting the heat exchange unit of the property. To minimise the on, ducts should be short and on of ducts can be in the form of

- Install fan unit with the fixings provided by the manufacturer.
- The hole for the fan unit should be cut to the minimum required size.
- The performance of the MVHR depends on the efficient air distribution.
- Only ducts in sizes designed by the specialist should be used.
- Ducting should be insulated where it pass through unheated areas
- Ducts should be supported in intervals not exceeding 600mm
- All ducts connection should be sealed

Heat exchange unit is the most significant part of the MVHR system. Its size varies from the small shoebox size to the size of a fridge. The MVHR system design has to take into account the additional free space required next to the unit to allow for the installation of ducts and insulation and a unit maintenance. Due to its large size, it is common to place the heat exchange unit in the loft, an airing cupboard or a utility room.

# How much does it cost to install mechanical ventilation?

The cost associated with the installation of the MVHR in the new builds or retrofitting ventilation in the existing building includes the cost of the system design for the particular building, cost of materials and installation.

The approximate costs for the average-sized UK home with the high quality MVHR unit and ducting-designed, installed and commissioned:

- £1000 +VAT design
- £3,200 +VAT MVHR unit
- £3,600 +VAT ducting
- £3.000 +VAT installation
- £800 +VAT commissioning

The approximate total cost of £11,600 +VAT is for the modern high-class system providing healthy, fresh and filtered air in the house. The cost of running the MVHR is approximately £90 per annum in electricity, while the savings in heating reach up to £1000, with the payback on the investment into MVHR system within 15 years or less.



CONSTRUCTION TECHNOLOGIES CONSTRUCTION TECHNOLOGIES



### CONSTRUCTION TECHNOLOGIES

Before any work commences on the superstructure, the service providers should be arranged for the connection of water, gas and electricity. It is necessary to schedule the connection earlier to ensure the services will be ready to use at later stages of the build process.

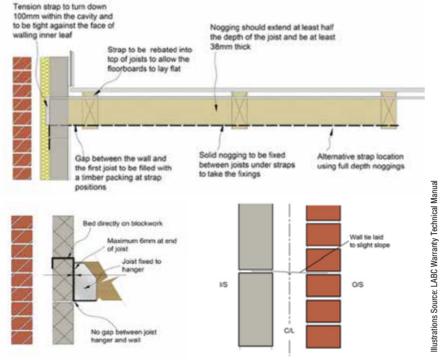
Depending on the type of the superstructure different specialists will be required. For traditional and most common brick and block superstructure. the bricklayers will be needed, while for timber construction the timber frame manufacturers and general builders or erectors. Timber frame structure also requires scaffolders to accommodate for erectors needs during the installation of the external skin by lowering and opening or closing and increasing the open horseshoe scaffold, which is different than in the case of brick and block works.

# **Brick and Block** superstructure frame

The masonry walls should be built in compliance with the Approved Document A.

Before commencing works, it is recommended to load bricks and blocks conveniently around the wall in stacks no more than 1 meter high at 1.5m intervals and approximately 1m from the wall. Ofbricklayers to put their mortar.

Bricklayers should position the profiles and string lines and start from building up walls corners. In the next step, the string lines should run between corners and block courses should be infilled there. This method allows checking for correct levelhorizontal and upright. After the laid course of four blocks, the check for levels is recommended. Wall ties will be required, and door or window openings will have to be made.



Walls should be restraint at floors, ceilings and verges what can be done with the restraint straps, or joists hangers. Wall ties are essential ten the OSB or ply is positioned between stacks for for the stability of masonry walls. Only stainless steel wall ties should be used and should be long enough to overlap on each leaf of masonry.

> Vertical movement joints should be installed to the outer leaf of masonry to allow for movement. For concrete clockwork walls such joints should be positioned every 6m and should have 10mm thickness. Movement joints will absorb the expansion and contraction of construction materials, any vibration or movement due to ground settlement, etc.

The first level of blocks is approximately 8 block courses high. If there will be a first floor building the timber profiles or joinery is required. Also, the cavity wall insulation in the form of rigid foam or mineral wool is laid. In case of timber first floor, the carpenters have to install all joists and beams using hangers built into the external walls. For light loading the joists should be covered with scaffold boards or external ply shuttering screwed to the joists. Following works include the bricklaying for another floor, positioning lintels where required and fixing restraint straps, trusses and





# **GUIDE TO LAYING BRICKS AND BLOCKS**

CONSTRUCTION OF WALLS	
Set out walls using securely marked profiles with reference lines and datum levels.	
Check wall lengths for squareness.	
Cross check against diagonal measurements from Architect plans.	
Ensure correct and even bonding occurs at openings.	
Build rises of no more than 1.5m per day.	
Build both leaves of a cavity wall at the same time.	
For rendered or plastered walls provide raked out joints of 15mm deep.	

LAYING BRICKS AND BLOCKS	
Bricks and blocks should be laid level (please refer to article for more details).	
Use a regular bond with a nominal 10mm horizontal bed joint (unless otherwise specified by the designer).	
Fill cross joints.	
Install perpend joints with minimum width of 7mm and fully bed into the mortar.	
Ensure perpends are vertically aligned as the work proceeds.	
Lay 'frog' bricks with 'uppermost frog' filled with mortar.	
Lay hollow blocks on shell bedding with the vertical joints filled.	
Ensure a consistent bond, especially at corners.	
Set each wall tie a minimum of 50mm into both masonry leaves.	
Keep the cavity and or insulation clear of any mortar droppings.	



Wood-based boards are commonly used in both first and second fix carpentry. Sheets are used to structure or cover large surfaces. Thae description and comparison table below presents usage of different wood-based boards' types.

WOOD BASED BOARD TYPE	VOOD BASED BOARD TYPE DESCRIPTION	
Plywood	It is formed with the layers of wood bonded together (3-Ply, 5-Ply, Multi-Ply), with adjacent are with their wood grain rotated up to 90 degrees to one another what creates very strong board. Its thickness varies and the most common sizes of sheet are 2400mm x 600mm or 2400mm x 1220mm. Highly versatile product. Can be manufactured from various wood types- softwood (easily cut, drilled), hardwood (ideal for furniture), marine (ideal for external use) to be suitable for various purposes, even for heavy duty applications. It costs more than OSB and it has higher stiffness than OSB board.	Ideal for roofing, flooring, hoardings, boxing and decorative purposes. Exterior and interior usage.
Shuttering plywood	Wood composite sheet that is resistant to moisture penetration and do not stick to concrete. It can be used for shuttering, hoarding and other construction purposes, not suitable for prolonged external use unless suitably covered. Not suitable for decorative purposes.	Only exterior usage. Various purposes- shuttering, hoarding
WBP plywood	A high quality plywood especially for use in domestic, light industrial and commercial applications. It is manufactured with the external Water and Boil Glue which is a form of treatment for making plywood water resistant and applicable externally.	Exterior and interior usage
OSB board	Oriented strand board, engineered board, consists of compressed layers of wood and adhesive with standard dimensions of 2240x1220mm. Strong and stiff, water resilient, a cheaper alternative to plywood or chipboard. Different grades of the product are available for different levels of loading and different environmental conditions.	Variety of load-bearing applications- flooring, roofing, underlayment, interior fitments, etc.
Block board	Contains similar features to plywood, two layers of wood durable.	For furniture
Medium-density fibreboard (MDF)	Composed of compressed wooden fibres. It is strong structural element. Available in various thicknesses and veneering options. MDF board when cut gives the dust- use of the face mask is obligatory. There are lightweight and water resistant options.	Decorative carpentry- shelving, furniture units, window sills, etc.
Moisture-resistant MDF	A version of MDF which is resists moisture attack. It has green colour.	Used in kitchens and bathrooms
Fibreboard	A light version of MDF.	Underlay for flooring, or as an alternative to plasterboard on a ceiling
Chipboard - very versatile product	Composed of small wooden fibres. No decorative features, available in various thicknesses.	Alternative to floorboards. Used for furniture, shelving and worktops.
Moisture - resistant chipboard	More water-resistant than normal chipboard. Has green colour and smooth surface. It is easily cut, veneered or decorated.	General flooring application.
Veneered chipboard	Decorative wooden veneer. Available in various sizes, thicknesses and veneer cuts. Veneers options include: Oak, Ash, Walnut, Cherry, Beech, Maple.	Used for furniture, shelves.
Hardboard	Thin, compressed fibreboard. One smooth side, one rougher side. Very durable.	Used as a subfloor, or for kitchen units with melamine surface or veneer. Doors, panels, furniture

# ESTIMATION

# Timber-frame ceiling construction

Ceiling construction is one of the most important structural element of the building. In this example we will estimate one of the most popular timber-frame ceiling construction formed in situ. In addition timber-frame construction is used to support for the floor above.

## **Estimation conditions**

- materials are delivered on site
- internal transport horizontal and vertical is included in the average building situation
- labour included fitting light scaffolding up to 4m high
- calculation of materials includes an allowance for waste
- water, electricity, sand paper and other small materials are added with 1.5% rate calculated form basic materials

# **Sequece of operation**

- take a measurement of area for timber-frame ceiling construction and mark axis
- ioists are spaced at 400mm centres
- fix steel wall plates to the wall
- cut to size and join joists into a joists hangers
- all metal parts like joists hangers or restraint straps are not included in this estimation
- cut to size and join noggings creating frame as shown on a drawing below
- joists and noggings screwed together create one unit
- cover with sheet of plywood 18mm

# 1sqm of timber-frame ceiling construction

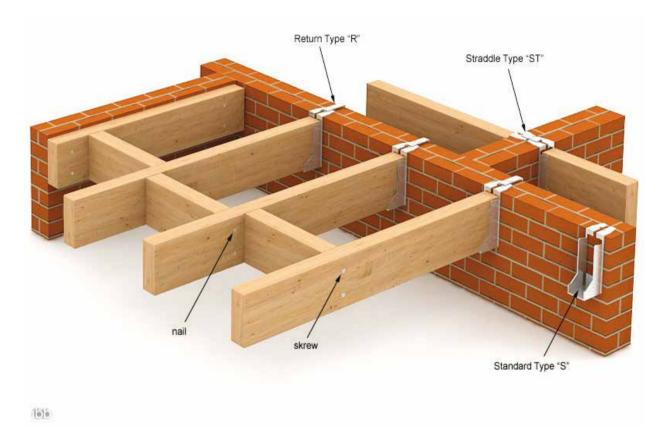
No	Material	Measurement	Unit	Price* excl VAT [unit]	Coverage per 1sqm	Price excl. VAT for 1m²	Price incl. VAT for 1m²
1	Sawn timber for joists	47*200*4800mm	length	£18.61	0.60 length/m <sup>2</sup>	£11.17	£13.40
2	Sawn timber for noggings	47*200*4800mm	length	£18.61	0.463 length/ m <sup>2</sup>	£8.62	£10.34
3	Wood screw	KDH 5*100mm	kg	£4.99	0.10 kg/m <sup>2</sup>	£0.50	£0.60
4	Wood screw	KDH 5*50mm	kg	£4.99	0.10 pcs/m <sup>2</sup>	£0.50	£0.60
5	WBP plywood 18mm	18*1220*2440mm	sheet	£34.96	0.37 sh/m <sup>2</sup>	£12.94	£15.53
6	Additional materials 1.5%					£0.51	£0.61
Total – regular prices						£34.24	£41.09*

<sup>\*</sup> materials available at above Retail Prices at IBB Polish Building Wholesale Ltd, London - before discounts

# Expenditure of Labour for making 1sqm of ceiling construction

No	Description	Labour hours	Company rate [GBP] excl. VAT	Rate [GBP] per 1sqm excl.VAT	Rate [GBP] per 1sqm incl.VAT
1	Fixing timber joists 200mm@400mm	2.385 lh/m <sup>2</sup>	£27.00	£64.40	£77.28
2	Fixing noggings 200mm@1200mm	0.90 lh/m <sup>2</sup>	£27.00	£24.30	£29.16
3	Sheet covering WBP 18mm	0.24 lh/m <sup>2</sup>	£27.00	£6.48	£7.78
	Total	3.525 lh/m <sup>2</sup>		£95.18	£114.22

Attention: in our quotation we have only described positions marked \*, the rest you have to calculate individually eg. fixing corners with mesh according to how many reveals there are on the elevation, it is also important that for reveals you have to increase the quotation, the same for scaffolding or colour render



# Price per 1sqm of timber-frame ceiling construction = M + L = 34.24 + 95.18 = L 129.42 net

#### Important:

- timber frame ceilings should be fixed only to loadbearing walls and transfer their load to the foundation
- timber joists should be dry and sawn
- use proper size of joists hangers
- use proper zinc plated screws
- galvanised or stainless steel straps are required to prevent movement of wall

Our norms and rates should be taken as a guide only and there are no obligations for anybody to adhere to them. You have to take sole responsibility and apply your own rates to your quotations. Cost of materials can vary from prices shown. We cannot accept any responsibility for anyone using this information - you must make your own checks.



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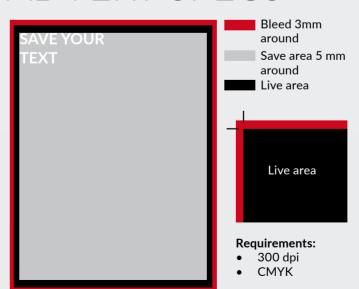


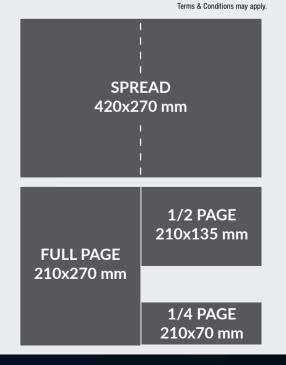
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- IBB Builder is media partner during the leading construction events in UK.

# **CLOSING DATES**

No	Issue	Closing	Availability
1	January 2018	30.12.2017	01.01.2018
2	February 2018	30.01.2018	01.02.2018
3	March 2018	28.02.2018	01.03.2018
4	April 2018	30.03.2018	01.04.2018
5	May 2018	30.04.2018	01.04.2018
6	June 2018	30.05.2018	01.06.2018
7	July 2018	30.06.2018	01.07.2018
8	August 2018	30.07.2018	01.08.2018
9	September 2018	30.08.2018	01.09.2018
10	October 2018	30.09.2018	01.10.2018
11	November 2018	30.10.2018	01.11.2018
12	December 2018	30.11.2018	01.12.2018

# **ADVERT SPECS**







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# A great win for IBB Polonia London to Wrap up 2017

The end of 2017 finished on another successful result. On 16th December, the current Champions of England, visited Malory Eagles and took the result and all three league table points. IBB Polonia London dictated the majority of the match with a solid victory 1:3 (23:25; 23:25; 25:22; 22:25). Thanks to this the players and staff have lots to celebrate over the festive period.

"We approached the match with the recent 2-3 loss still fresh in our minds. Malory Eagles previously had played a simple strategy, throwing the majority of balls to ex- IBB Polonia London VC player Mihail Stoev, who was on spectacular form and was unstoppable for the majority of that game. This time we had a much more effective block defence arranged working off a specific serving strategy to eliminate this issue. Malory Eagles, as a result add to utilise both outside hitters and their opposite more evenly. The victory was led by the recent return to the squad of talisman and triple League winner Bartosz Kisielewicz who set almost faultlessly all match. We have the entire squad to thank who trained at a level higher recently under the watchful eyes of Piotr Graban and Patrik Selep who together constructed a solid game plan. I would like to thank everyone for their focus to attention in the last two weeks and also to our faithful fans who banged their drums relentlessly." - said Chris Hykiel, IBB Polonia London Director of

The victory was celebrated by the Champions and their fans who dined together following the match. It was a great opportunity to exchange Christmas wishes and to look forward to a well-earned rest over

the festive period. Together everybody watched the semi-finals of the Club World Championships that featured PGE Skra Belchatow – partners of IBB Polonia London.

"2017 ended in a very joyful manner with a victory and a gathering of the squad and their fans. I hope that the good form will stay with us into 2018, and that the wishes sent in our direction by our fans will come true. We would also like to wish all of our supporters a very happy and peaceful Christmas and ourselves lots of energy to realise our own dreams. We would like to congratulate our friends at PGE Skra Belchatow for being one of the top four clubs in the World once again!" – commented Bartek Luszcz, IBB Polonia London Chairman.

Apart from the Christmas wishes, IBB Polonia London would like to suggest a unique present for sports fans. The suggestion is to buy shares in The

Club as Christmas presents. This is a first in British volleyball and will delight all followers of the sport! Becoming a shareholder brings with it a wealth of benefits as well as a real link with The Club. More information about this offer is available here.

In the meantime, the players from the London club will enjoy the Christmas break. They will return to squad training in 2018 and continue the Super 8 on January 13th at Brentford Fountain Leisure Centre with Wessex Volleyball Club. More information about the match will appear on The Club's website and Facebook pages.

"The new year starts with a home game; which we are already excited about. We are expecting many volleyball moments of glory in 2018 and so I would like to invite everybody in joining our Fan Club" – commented the President of the Official IBB Polonia London VC FanClub Jan Ploszaj.





Sport is a tough world where you don't always win. The end result comes from a number of factors that IBB Polonia London are becoming experts at. The team from the capital of England had an outstanding season in 2016/17 defending the National title and the Cup title as well as a historical result in the CEV Challenge Cup. The cherry on the cake was the signing of current World Volleyball Champion -Krzysztof Ignaczak. Following on from that a very ambitious plan was developed: the Champions made a plan to play the next season with a crop of young, talented players. A lack of experience has resulted in a baptism of fire at the start of the new season. The president of the club Bartek Luszcz and the co-owner Jacek Ambrozy discuss the future.

IBR

On Saturday, IBB Polonia London played against the joint leaders of the table - Malory Eagles. Only one point was taken from the match. How can you sum it up?

BL: This was a tough match. We fought to the end, and the result was never certain. The tension was unbelievable, and the fans seemed to enjoy it. JA: From a sporting perspective, we watched a

close fought match, the very essence of sport.

The young squad is gathering experience, but the results are not showing. Is the current squad aiming for the title of England?

BL: We are optimistic. We have a young team. If we include some more experienced players, we have the chance of returning to the top of the table. We know how sport works and it is not always possible to be at the top, especially when you are trying to give young players a chance. Our current situation shows that the journey to the top isn't easy, but we look for the positive in everything. Our position isn't great at the moment and we find ourselves in a tough situation, but we aim to become a powerhouse in the future. We are learning a difficult lesson which will strengthen us before we enter the fully professional world of international volleyball. We certainly will not surrender. We will fight until the very end to realise

the short and long term goals. We are aiming to be a complete team that can deal with life in every given

JA: For the fourth time this season we have to accept defeat. We find ourselves in the bottom half of the table, and despite the fact we still have the chance to win the title, it seems only possible with total commitment from everyone concerned. As a co-owner of the club, and the head sponsor I prefer a deeper analysis and to make concrete decisions to support my colleagues. The team needs strengthening in a number of positions. We are looking to make some transfers immediately to improve our roster.

Currently the young squad is chasing the other teams; but in terms of business and marketing, IBB Polonia London has no rivals in Great Britain.

BL: Our sporting performance is slowly gathering momentum. Business and marketing is where we are firing on all cylinders at the moment. We have implemented a number of advertising/marketing investments; and this is just the start. There are

many surprises to be announced in the future! We want to involve sports fans and business people to join us in the development of professional volleyball

JA: Amidst the poor sports results, the future of the club looks very bright indeed. We are involving new partners all the time and some of these have huge financial potential. Our aim is to popularise volleyball in the UK and to support IBB Polonia via investments and the purchase of shares.

So there is a lot of work for the entire club, not only on the court of play, but in other areas too?

BL: Having the whole group involved is certainly the way forward. We are all working hard with passion, because we want the best for the club. If we work as a unit, we can move mountains. We have very faithful fans and partners, who are totally involved in order for the club to develop and gain even more success. We think optimistically and this spurs us on to working even harder.

JA: Hard work and self-reflection carried out by

ibberrous passionate people will bring results. I am an opti-

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mist. We are destined for success.

IBB Builders Merchants - IBB Polonia London strategic sponsor, which owner is Jacek Ambrozy - have been trading since 2005 in British markets. The company has significant experience in construction in many European countries such as Poland, Sweden, Germany and the UK and has built its foundations on importing construction materials mainly from Poland. More information is available here.



2017, IBB Polonia London played against London Lynx in the Super 8 league. Playing away from home, the team under the leadership of Piotr Graban, won 1:3 (22:25; 18:25; 25:22; 21:25) and enjoyed the flavour of success. The three points help the team to start climbing the table towards the top.

The Saturday encounter was an east meets west of London volleyball and the first two sets went the way of the current Champions of England thanks to some good play by their main squad members. In the third set, an ongoing injury caused outside hitter Roman Mizerak discomfort and as a result he was substituted allowing London Lynx the chance of winning a set In the fourth set, IBB Polonia London came out with determination and maintained this form until the final whistle giving them the badly needed win.

"Saturday's game was not the easiest for us. It was vital we took all three points. I'm pleased we managed to do this, despite finding the challenge very hard. I want to mention three of our players who played well today: Vitor de Oliveira and

On Saturday, 9th December Michal Bartoszak who played solidly but also one of our most experienced players Roman Mizerak. We are working hard for all squad members to many elements of our game to improve upon. a historical event: the design of "Niepodlegla" Recently I have been enjoying the philosophy: "if is to be found on the sleeves of our shirts and crawl, but make sure it is in the right direction". With this in mind we will aim to make progress be made online up until 13th December 2017. every single day." - commented IBB Polonia Head After this the official personalised match shirts Coach, Piotr Graban.



The Team presented not only good volleyball level, but also unique away shirts. The Club ish Independence gained in 1918. Orders can will not be available.

The shirts are not the only current offer from IBB Polonia London. Shares in The Club are currently available. Becoming involved like this helps The Club to realise its plans of becoming a fully professional team, the first in Great Britain. For all of the benefits associated with the purchase of shares of The Club visit

The next match, and final encounter of 2017, will be played on Saturday, 16th December 2017. The opponents will be Malory Eagles and the match will take place at Ernest Bevin College, in Tooting South London. This is everybody's last chance in 2017 to watch some top level volleyball. IBB Polonia London returns to competitive matches on the 13th January 2018 at Brentford fountain Leisure Centre against Team Wessex.



# **INVEST IN SHARES BE PART OF VOLLEYBALL 2.0.**

www.polonia vc

# Invest in Shares\*

# Offer



The new 2017-2018 league season, which has just started, brings new challenges and new long-term goals for IBB Polonia VC, the reigning English Champion.

The purpose of the intense efforts, which are already under way, is to create conditions for the club to raise capital and, as a result:

- Create a professional volleyball team by providing the best possible training conditions and attracting the best players
- Provide impressive tifo display, livestreaming, and broadcasting matches on TV channels
- Provide assistance for the Official Club Supporters and helping the organisation develop
- Popularise of the development of volleyball in England
- Promote the sporting union between Poland and England on the basis of longstanding historical and cultural conditions to which we can now add sporting ones as well.

Raising capital will take place by means of the following actions:

- obtaining funds to cover the club's current expenditures and its marketing activities from IBB Builders
   Merchants – the club's current sponsor
- introducing tickets-donations for the team's home games
- receiving income from advertisements shown during the matches and TV broadcasts
- attracting club sponsors and partners
- manufacturing and distributing marketing materials, merchandise, etc.
- **issuing shareholder's certificates**\* which are to be sold on the free market; the price of one such certificate, until the end of 2017, amounts to £100
- Purchase a certificate, support our activities, and become a shareholder of the first professional volleyball team in the UK!!
- ✓ Promote yourself, your company, or your services by taking advantage of the marketing possibilities provided by sport today!

Starting from our first home game which was played on Saturday, 14 October 2017 at the Brentford Leisure Centre hall in London, we intend to provide a sports event of a new quality:

- increased number of seats for supporters,
- professional court surface,
- digital advertising banners,
- live broadcast on the UNILAD Sport, Facebook channel as well as a TV broadcast in Poland on the Polsat Sport channel on Saturday, 14 October 2017.

The holder of shares in IBB Polonia acquires:

- 0.5% discount on marketing services listed below for 1 share and up to 50% maximum; planned sales price per share for 2017 - 100 GBP; 2018 - 150 GBP; 2019 - 200 GBP
- The right to a ticket donation at a reduced price reduced of 5 GBP or VIP
- **50% discount** on team merchandise

We invite everyone to participate in the development of new quality – both of our team and volleyball in England as a whole. **Join us!** 

\* We have in total 10,000 shares to sell from 2017 up to end of 2018. Price offered 2017 - £100.00 each and 2018 - £150.00 each



Find details at www.polonia.vc



# Sponsorship & Advertising Offer

The marketing and ticketing goals of the IBB Polonia VC club primarily consist of rising funds for: improving the professionalism of the team, improvement of match fixtures & coverage of television broadcast costs.

TICKET-DONATION FOR THE MATCH	
Normal	£10.00
Discounted	£5.00
Children under 16 / seniors over 60	FREE
VIP (Sponsors and invited guests)	FREE

MATCH ADVERTISING OFFER WITH TV BROADCASTING	
Electronic banner during live matches - 1 spot * 2 minutes	£500.00
Sticker next to the pitch	£1 000.00
Roll-up 2*1m	£800.00
Own banner on the stand (one piece) held by theadvertiser	£1 000.00
Individual photo with the team after the match	£500.00
Ball with player signatures	£200.00
T-shirt with player signatures	£300.00
Club mascot during the match with the advertiser's logo	£1 500.00

	OFFER FOR SPONSORS	
	Main Sponsor Gold - Large logo on the shirt, front and back (price per year)	£30 000.00
	Sponsor Silver - Medium logo on the shirt, front and back (price per year)	£20 000.00
	Sponsor Bronze - Small logo on the shirt or shorts	£10 000.00
	Sponsor of an event/match - live and broadcast on Facebook, Polsat, Unilad and later available on YouTube and IBBTV	£6 000.00
	Electronic banner for live matches - respectively: 4 spots x 2 minutes (Sponsor Gold and Match Sponsor), 3 spots x 2 minutes (Silver), 2 spots x 2 minutes (Bronze)	included in package*
	In addition to the Sponsors' offer: article, photos, company profile in IBB Builder and at www.IBBPolonia.vc	included in package*
	The right to distribute Sponsor's merchandise during the match	included in package*
	Club shirt with player signatures	included in package*
	Volleyball balls with player signatures	included in package*
	Crystal trophy with thanks for support after the season	included in package*
	Gold, Silver and Bronze Sponsor Logo on season tickets and on printed, distributed team materials	included in package*

# NOTE TO THE SHAREHOLDERS. "PLANNED SALE PRICE" The holder of shares in IBB Polonia acquires:

- 1 0.5% discount on marketing services listed below for 1 share and up to 50% maximum; planned sales price per share for 2017 100 GBP; 2018 150 GBP; 2019 200 GBP
- 2 The right to a ticket donation at a reduced price reduced of 5 GBP or VIP
- 3 50% discount on team merchandise

\* gold, silver, bronze and match sponsor (during the sponsored match) only

For more details visit www.polonia.vc



# In 2018 Join **IBB Polonia Football Club**

Let your kids become a part of a sport tradition that started in 1973. Our groups train twice a week at various locations and times - so there is always something suitable. Call now to book your no obligation, free training session and to speak directly to our Head Coach Mr Pawel Jurgielewicz (FAN 59183546)

### Why choose IBB Polonia FC

IBB Polonia Football Club offers the opportunity for girls and boys aged 4-11 to develop their love for sport, to learn football and to gain confidence, selfcontrol and persistence. We have fully qualified and screened coaches, we use the best equipment and make sure our players can compete in a top leagues suitable for their age groups.

- Top coaches
- AmateurFA accredited
- For girls and boys
- Convenient trainings

For more details visit www.poloniafc.com



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9.17m roll; 2\*600mm; 11m<sup>2</sup>

\*T&C Apply. Price for registered customers.

£23.95 \* Find more at www.ibb.uk





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**Treated Regularised** C16 47x50mm

£3.75 net\*

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**Treated Regularised** C16 47x100mm

£4.35 net\*

(RP £7.25 net)

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**Treated Regularised** C16 47x150mm

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**Treated Regularised** C16 47x175mm SPECIAL

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4.8 m

**Treated Regularised** C16 47x225mm

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**Treated battens** C16 25x50mm

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Treated battens

C16 25x38mm

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£16.97 net\* (RP £28.29 net)

18mm £22.48 net\*

(RP £37.46 net)



**OSB 3 board** 1220x2440mm

**£10.14** net\* (RP £16.90 net)



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Wood screws KDH

5x50 - 5x100

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105x105x90x2.5mm £1.00 net\*

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**OSB 3 tongue and groove** 

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£0.47 net\* (RP £0.79 net)

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105x105x90x2.5mm £1.00 net\*

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