



Mechanical, electrical, and plumbing



Mechanical, electrical and plumbing (MEP) refers to these aspects of building design and construction. In commercial buildings, these elements are often designed by a specialized engineering firm. MEP design is important for planning, decision making, accurate documentation, performance- and cost-estimation, construction, and operating/maintaining the resulting facilities.

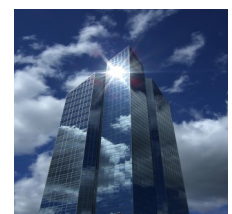
MEP specifically encompasses the in-depth design and selection of these systems, as opposed to a tradesperson simply installing equipment. For example, a plumber may select and install a commercial hot water system based on common practice and regulatory codes. A team of MEP engineers will research the best design according to the principles of engineering, and supply installers with the specifications they develop. As a result, engineers working in the MEP field must understand a broad range of disciplines, including dynamics, mechanics, fluids, thermodynamics, heat transfer, chemistry, electricity, and computers.

As with other aspect of buildings, MEP drafting, design and documentation were traditionally done manually. Computer-aided design has some advantages over this, and often incorporates 3D modeling which is otherwise impractical. Building information modeling provides holistic design and parametric change management of the MEP design.

A major concern for people designing HVAC systems is the efficiency, i.e., the consumption of electricity and water. Efficiency is optimised by changing the design of the system on both large and small scales. Heat pumps and evaporative cooling are efficient alternatives to traditional systems, however they may be more expensive or harder to implement. The job of an MEP engineer is to compare these requirements and choose the most suitable design for the task.

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Green Homes Grant

You can apply for Green Homes Grant vouchers at the end of September

The Green Homes Grant scheme, announced by chancellor Rishi Sunak in July, will provide £2bn for home improvement projects as part of a wider £3bn government plan to cut carbon emissions.

The grants will be provided in the form of vouchers which can be used towards making specific energy-efficient improvements to homes.



The Treasury claims that utilising these vouchers could help families make an average annual saving of £200 on their energy bills.

While no specific launch date has been announced yet, the government has confirmed that applications will begin at the end of September, and the scheme will run until March 2021.

Under the scheme, the government will pay two-thirds of the cost of energy-efficient home improvements up to the value of £5,000 per household.

The Green Homes Grant will give homeowners and landlords vouchers to install:

Solid wall, cavity wall, floor or roof insulation

Air Source Heat Pumps (ASHP) or Ground Source Heat Pumps (GSHP)

Solar thermal

In addition, households can use vouchers for further energy-saving measures. These include one or more of the following:

- Double or triple glazing/secondary glazing, when replacing single glazing
- Upgrading to energy efficient doors
- Hot water tank/appliance tank thermostats/heating controls

Gas boilers are a notable omission from the list of home improvements covered by the scheme, and this has divided experts.

<https://www.gov.uk/guidance/apply-for-the-green-homes-grant-scheme>

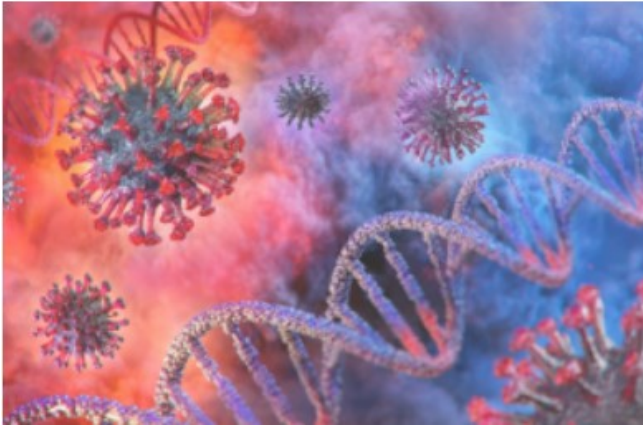
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HSE warns again over Lockdown Legionella following West Bromwich

The HSE has warned building owners again over the risk of Legionella forming in closed properties as a result of lockdown. The warning follows a confirmed outbreak of Legionnaires' disease by Sandwell metropolitan borough council in the Midlands last week.

The Executive warned that water system stagnation as a result of buildings being closed or with reduced occupancy during the Covid-19 pandemic increases the risks of legionella growth. To further complicate matters, the symptoms of Legionnaires' disease can be similar to those of Covid-19, including a dry cough, muscle aches and breathing difficulties.

The council said three laboratory-confirmed cases of Legionnaires' disease and six suspected cases had been identified in the West Bromwich area. Eight of the cases were reported to Public Health England and a further case in July has subsequently been linked to this outbreak. Six of the patients are receiving treatment in hospital. The source of the outbreak hasn't been identified yet, but PHE and Sandwell said it had been sampling and advising on the disinfection of potential sources of the bacteria, such as cooling towers in areas around West Bromwich.

The HSE reiterated that risk assessments should be reviewed and the legionella risks managed wherever managers and owners reinstate a water system or start using it again, or when some types of air conditioning units - either those with a water source or larger systems which may have stagnant water in the condensate tray - are restarted. If the water system is still used regularly, managers should maintain the appropriate measures to prevent legionella growth.

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Coronavirus: Work from home 'if you can',

In July, the prime minister said people should "start to go back to work now if you can" and last month the government launched a campaign to encourage workers back to offices. The new message is now Work from home if you can.

The government says it is changing tack on its guidance for England because the risk has changed - and that is why it wants pubs to shut early too.

There's been passionate discussion among ministers about how far to go with these measures - some wanting the prime minister to go further, faster - others urging restraint.

The government's chief scientific adviser, Sir Patrick Vallance, has warned there could be 50,000 new coronavirus cases a day by mid-October without further action - which, he said, could lead to more than 200 deaths per day by mid-November.

There seems to be a disconnect between the two groups. Why?

COVID—7 Ways Your Business Can Adapt to Win

Most experts agree that post COVID, it is going to take some time to restore the economic prosperity, growth and productivity that we have previously enjoyed.

Some estimate up to two years to recover to pre COVID levels, others are less optimistic.

Even the most highly successful businesses are facing disruptive change that is resulting in closures and lay-offs. But whatever the future, now is the time to look at your strategy and try to extract whatever positive learnings you can from the impact of COVID.

Businesses will need to be adaptable to meet the New World Order and be willing to speedily identify and implement new models and ways of working. Some businesses will simply not be able to survive – and as always, there will be winners and losers.

Now is the time to explore and develop new business models that are appropriate to meet whatever the “new normal” will look like.

So who will be the winners in what has been described as a “new world economic order?”

Not surprisingly, it is the most adaptable that will win out. Not necessarily the strongest, biggest or most well-known, but those that can adapt to, and then take advantage of, new market conditions.

So how can a business adapt to operate in this new world order?

Well, there are no easy answers, but here are seven considerations that might help you embrace a post COVID world.

1 Engage customers early on with Design Thinking – Developing a deep understanding of the needs of your customer will be even more vital to ensure that your product or service does not become irrelevant or is substituted by a more appropriate product that more accurately fits the “new need.”

2 Client interactions – Finding and retaining clients when there is so much noise and clamour in the marketplace is difficult.

3 Staffing and skills – Having the right staff with the right skills has always been important. However, the development of a clear skills and recruitment strategy that matches the changing needs of your business and your clients will help.

4 A safe place to work – One positive learning from COVID has been the need to understand some of the wider issues associated with staff, not only risk management, social distancing and how people work, but also a real focus on mental health and welfare.

5 ICT tools, resources and working practices – In recent years, ICT has seen a major migration towards cloud based services, and those businesses who have adopted this strategy will have possibly seen less disruption from lockdown than others.

6 Product and Service Repurposing and finding new markets – Incidents of businesses with single product, single client models are all too frequent, particularly with smaller early stage SMEs.

7 Managing Supply Chains – The breakdown of supply chains has done significant damage to many businesses.

<https://www.businesswest.co.uk/blog/covid-7-ways-your-business-can-adapt-win-new-world-order>

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