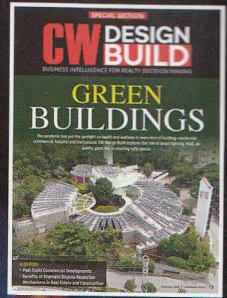


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# LEGACY CREATORS!

The 18<sup>th</sup> CONSTRUCTION WORLD Annual Awards – which were a part of the 6<sup>th</sup> India Construction Festival – and the first-ever online - saw emerging players racing ahead along with industry stalwarts...22





# The Job at Hand

MANIT RASTOGI and JOHN ALOK DECRUZ share their insight on the re-evaluation of workspaces after COVID-19.

As governments start to ease lockdowns, the immediate priority for organisations is to bring people back to work as swiftly and safely possible while making spaces more humane and safe. In the post-COVID era, there is a significant need for re-evaluation of spaces and developments, both in terms of design and policy. However, before we examine and reimagine spaces, it is important to zoom out and recognise that work is a 24-hour

process and not just limited to the workspace. It also entails various modes and levels of transportation to commute to the office.

Over the past 25 years, infrastructure policies have been about increased development and densification. We have embraced the 'high-rise, high-density' model of urban planning that has resulted in densely packed colonies, increased FARs and high-rise structures. However, as we

approach a new normal, the future of our cities lies along a polycentric and multi-nodal model. A polycentric model will help negate the aggregation of population in the city centre and promote the decentralisation of both employment and the population. It will allow for higher levels of liveability and sustainability while optimising positive accumulation in cities.

Further, the re-emergence of the

'hub-and-spoke model' will give rise to multiple small offices spread throughout the country connected through virtual and digital solutions. It is viable to have four small offices instead of 200 people travelling from different corners of the city to one large office. This will limit movement across cities, thereby reducing pressure on the infrastructure of the city. The implementation of the hub-and-spoke model will result in a re-densification exercise that will reduce the physical workplace requirement by up to 50 per cent while adhering to physical and social distancing norms.

In India, the majority of



A prime example where these strategies have been implemented is the Campus for Wipro in Hyderabad.



workspaces are occupied by the IT & ITES sectors that directly or indirectly employ about 10 million people. Their return to the workplace will be accompanied by challenges of navigation within the offices and require measures to optimise entry and exit routes. Further, the number of passengers in a lift will be 1/4<sup>th</sup> their capacity (i.e. six people instead of 24) to ensure adequate distance between passengers. Hence, even if waiting lobbies are made larger, a bottleneck shall always remain at the core: the lifts. However, a simple design intervention can help mitigate this. Consider a typical 1 million sq ft commercial development that is 12 storeys high. This development can be treated as four distinct offices, each consisting of 4,000 people who are serviced by independent lifts and lobbies accessed from different parking levels. This allows one building to function as four separate vertically stacked offices without any overlaps in movement. This approach will not only cater to physical distancing norms but help optimise waiting times and avoid bottlenecks.

Also, to provide a safer environment, it will be crucial to eliminate the transmission of viruses while working in the office. It is imperative to design floor plates for maximum daylighting and UV ingress while controlling glare and negating the sick building syndrome. After working from home for most of the year, employees recognise that enhanced air quality and proper ventilation are key to preventing the spread of COVID-19. The air-conditioning design for hermetically sealed buildings will undergo significant re-engineering such that a zone-wise separation of the air distribution system will become the new norm. Another way to dilute

airborne contaminants and toxins from within the office is to conduct a 'night purge'. By simply reversing mechanical air-conditioning systems during non-working hours, the indoor space within is flushed with fresh external air, thereby mimicking a natural ventilation system. The night purge is a simple and inexpensive intervention that enhances the health and wellness factors of users.

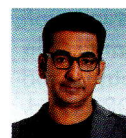
With the fabric of developments getting denser and going vertical, the indoor-outdoor connect is diminished. It has become essential to establish a connect with the outdoors and provide semi-enclosed breakout spaces that act as an extension to the workspace. In buildings where offices are sealed units, a part of the glazing could be opened and cordoned off to act as a small veranda. These spaces could be used for informal meetings and eating, and even feature working pods and hotdesking. This would help employees to psychologically be connected to an open-air environment rather than being in a contained environment for 8-12 hours a day.

Today, people are more comfortable in the open than they are indoors. The use of passive design techniques can help temper the environment and make the outdoors comfortable and useable throughout the year. Implementing simple strategies such as tensile roof shading, dry misting and natural ventilation ensures protection from the rain and sun. Additionally, using air filters and sonic mosquito control systems will further make the outdoors comfortable. A prime example where these strategies have been implemented is the Wipro campus in Hyderabad. Water has been introduced as an experimental layer throughout the stepped landscape court to bring

down temperatures using evaporative cooling. Temperatures of the augmented breeze across the site are lowered as they flow through a series of water curtain features, to mimic the working principles of a desert cooler. The central court houses nearly 10 per cent of the building programme, such as a 1,500-seater cafeteria, exhibition space and meeting areas, making it useable throughout the year. Additionally, post-pandemic developments will need to incorporate appropriate infrastructure, like sanitisation chambers and UV sanitisation stations for electronic devices besides using easily cleanable surfaces and anti-microbial surfaces and finishes.

As organisations eventually return to the workplace, measures must be taken to ensure safe and improved environments with reduced opportunities to transmit viruses. Through smart design and building techniques, we have the opportunity to make commercial spaces truly agile, functioning seamlessly across the indoors and outdoors, giving us the best of both.

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To share your views, write in at [feedback@ConstructionWorld.in](mailto:feedback@ConstructionWorld.in)