



## Post Corona Architecture

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### ABSTRACT

*Though much of the world is still under some degree of coronavirus effect, we have already proposed a way for office workers to accommodate the risk in the office work through a workspace concept called "the six by six" Here we mean the first six is 6 Ft distance and the other six means average life time of the corona virus is 6 Hours. Based on the six by six facts, we found and confirm the new basics of the post corona architecture. Because it is based purely on the pandemics, there is no local and cultural effects on the buildings. Sanitary of building HVAC system cannot be over emphasized for Corona Virus.*

**Key words:** Corona, Architecture, building, HVAC

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### INTRODUCTION

We anticipate what the post-coronavirus pandemic office could look like, a workspace designed to encourage employees to intuitively practice social distancing.

The "six feet office" includes an array of design tools to keep coworkers six feet apart from one another, including barriers between desks, pedestrian lanes that keep traffic flowing in an orderly way, and disposable supplies to keep germs from spreading.

In the South Korean office, large circles imprinted on the carpet create a visual guide to staying six feet away from other employees at all times, while arrows on the perimeter of rooms encourage anyone passing by to walk counter-clockwise to prevent getting too close, similar to the measures put into place at some hospitals.

Last week, an engineering outfit responded to coronavirus with a new proposal that would see new, less-crowded floor layouts and meeting rooms, more hand sanitizing stations and wipe dispensers in common areas, and one-way traffic paths to be rolled out in locations over the next six weeks.

Experts say coronavirus will leave a legacy in how our workspaces are designed.

### THE HEALTHY BUILDING

While trapped at home during quarantine, you may have become hyper aware of the shortcomings of your personal surroundings. Expect more people to embrace the Healthy Building Movement, an approach to improving health through strategies like greater natural light, improved ventilation, fewer toxic substances and the incorporation of plants and other natural materials. Think skylights, large windows, rooftop terraces, balconies and courtyards. Spaces for exercise and meditation could become standard along with home offices.

The most valuable healthy building tool during the COVID-19 outbreak has been advanced ventilation, particularly in hospitals. These technologies include negative air pressure (which keeps pathogens from spreading to other parts of a hospital), displacement ventilation (in which cooler air enters from below and lifts contaminants), clean air ventilation (which brings in fresh air, rather than recirculating existing air), and various filtration and humidity systems.

These kinds of techniques will likely become standard in hospitals after the pandemic, but might they expand to wherever people congregate, like homes, offices, factories, warehouses and schools? They could save lives where occupants don't have a choice about social distance: prisons, homeless shelters and refugee facilities. Perhaps they could be complemented by germ-resistant strategies like antimicrobial polymer surfaces, copper alloy surfaces (which naturally kill germs and viruses) and flexible spatial designs to accommodate social distancing.

Will forced familiarity with teleconferencing and other technology change how we go to work, see the doctor or seek entertainment? And what do those changes mean for where we live, how much we drive and how we connect?

### CONTEMPORARY CITY PLANNING

Another potential change, one that is somewhat paradoxical in this germophobic time: With social distancing dominating our lives, it's becoming clearer how much we crave human contact and community interaction. Yes, we will all be nervous to socialize for a while, but when this pandemic is over, the call for connection will be that much greater.

How this will play out in the urban realm is an open question. Some cities may neglect public space in favor of other priorities. But I would argue that we will eventually devote more resources to help us congregate and to strengthen our frayed community bonds, be it through parks, plazas, promenades, community centers or streets turned over to pedestrians. Many of us are getting used to walking more, facing less interference from cars, and finding nooks without too many people. Several cities have closed (or partially closed) streets to cars to aid residents with social distancing.

We will need to think more carefully about how to keep these spaces safe in emergencies. Perhaps the digital systems now being used to track and contain the virus could play a role? They could, among many other things, assess potential threats where we congregate, act as early warning systems, help us maintain social distance, quickly alert authorities to close spaces, or ensure that those infected are not out socializing.

### BUILDINGS OF COVID 19

We are not going to scrap how we have been building architecture and cities. But as our world moves faster and becomes more interconnected, we need to embrace a new tool kit of options that are more flexible, holistic, and responsive. Yes, to better address pandemic response. But also, to help tackle urgent issues like climate change, terrorism, migration, social disconnection and inequality, community disintegration, housing shortages, traffic, pollution, sprawl, and over-development. Our architectural and urban planning systems, developed in a vastly different time, are long overdue to address many of these complex contemporary issues.

The time to reassess our built world is now, not after the next catastrophe. What if we more effectively employed modular building tools not just to face pandemics or natural disasters, but also to create less costly, more quickly built buildings in general, from pop-up shops to affordable housing? What if we broadened our sense of what a building could be and turned vacant malls into schools, or vacant offices into transitional housing for the homeless? What if we harnessed telecommuting as not just a way to social distance, but a way to help employees achieve work-life balance, spending more time with family, or exercising, or doing any number of things that would make them healthier?

The coronavirus has reminded us that we can see many challenges coming if we pay attention and listen to the experts. We cannot wait until we are overwhelmed. We need to be proactive, not reactive. Do we want our response to be as flat-footed as our country's initial response to COVID-19? Let us learn from this tragedy.

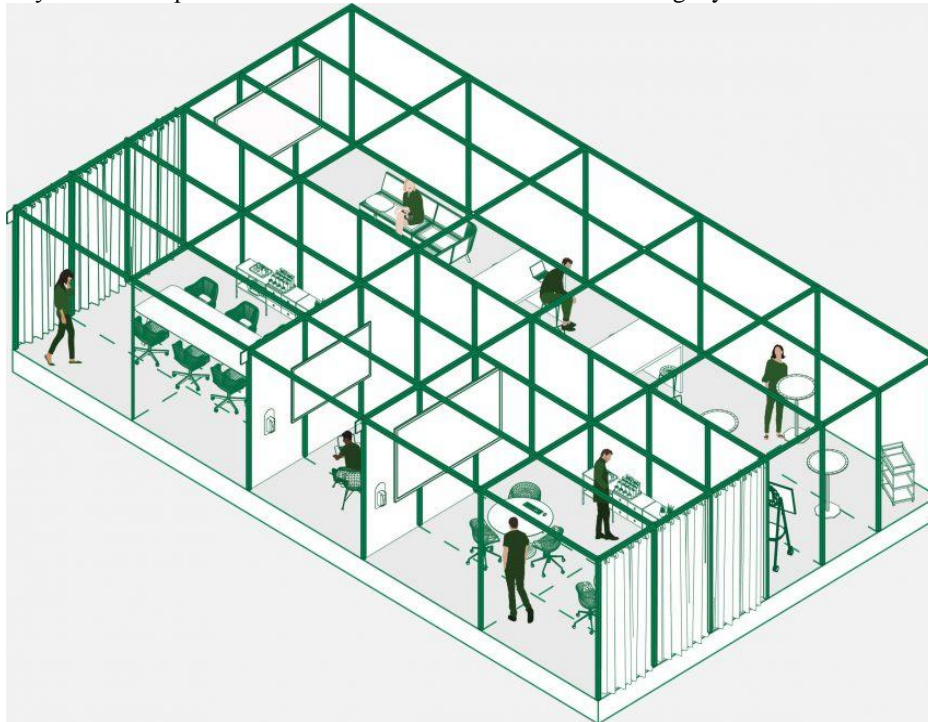


Fig. 1 A Typical Building

### CONCLUSION

The office concept is meant to allow companies to have employees safely back at work as quickly and as cost-efficiently as possible. With some countries beginning to ease lockdown restrictions, this may be a way for economies to gradually reopen while preventing additional spreading and waves of the virus. Architects internationally have reportedly already helped hundreds of buildings in South Korea and get close to save billions of budgets.

Because this virus is that basically the aerosols become airborne and potentially infectious for 6 Hours or longer as mentioned earlier in this article and others, ventilate a room and everybody breathes that air, that just opens up the number of people who can be infected. Department of Harvard's Healthy Buildings Program exceptionally, weighed in on aerosols.

We cannot over emphasize the importance of the HVAC system design of the buildings. That comes with a sanitation system at the end or at the start of duct system,

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