

## Influence of Coronavirus to the Archural Design

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**ABSTRACT:** The interior and overall architectural design will certainly be modified according to the strength of the Corona Virus. Together the building HVAC system is more critical. The details of modifications due to the Corona Virus are discussed in the regions of the United States and South Korea. The conclusion is we will not and we should not surrender to this deadly Virus, we can overcome.

### I. INTRODUCTION

The death rate of Corona Virus is never down to zero, instead it is fluctuating. As we isolate in our homes, we become increasingly aware of how our interior spaces affect our moods, our ability to work and our physical comfort. We believe that the current Corona virus crisis will impact how we design spaces in the future.

We must design our homes and our commercial and public spaces with new awareness of personal safety concerns. Mr. Cha of E&S Solutions in Tae Gu Korea is especially interested in the science of light, and the physiological and psychological response people have to lighting. Here are the ways he believes interior design practice may change because of today's quarantine culture. Currently, there are primarily physical environments and virtual spaces, and Video conferencing with the help of current AI Technology is making people more aware of how they are efficiently exchange opinions. The spaces in the future will be designed with that in mind.

### II. IMPORTANCE of SPACE PLANNING and HVAC

Amenity spaces in condominium or apartment buildings will be designed to allow groups to separate from each other. The way in which we look at comfort zones in social environments will begin to expand, creating a visual shift in how our interiors function.

The importance of interior design and mental and physical health will become more prevalent issue than ever. Designers will need to consider how we can assist in mental health through interior environments, using lighting, materials, sound and acoustics. In homes, spaces will become more flexible. We will have to consider what elements of design we can use to protect the public's health, including materials, distancing, physical separation or proximity, and interaction with objects.

Opening windows and doors (when the weather permits), operating window or attic fans, or running a window air conditioner with the vent control open increases the outdoor ventilation rate in a home. Do not open windows and doors if doing so poses a safety or health risk to children or other family members (e.g., risk of falling or triggering asthma symptoms). Local bathroom or kitchen fans that exhaust air outdoors and remove contaminants directly from the room where the fan is located also increase the outdoor air ventilation rate.

### III. NIPPON PAINT INVENTED ANTI-CORONAVIRUS PAINT

The paint comes with Silver Ion technology, proven effective to inhibit the spread of bacteria such as the *Escherichia coli* and *Staphylococcus aureus*; as well as viruses such as the human coronavirus (strain 229E) and influenza A (H1N1), as well as helps prevent the spread of diseases such as hand, foot and mouth disease (HFMD). The Nippon Paint VirusGuard was tested against the Human Coronavirus, ATCC VR-740, strain 229E by Analytical Lab Group earlier this year and VirusGuard demonstrated a 99.9 per cent reduction in viral titer upon contact of the virus on the paint film.



Figure 1. Study-Work Room

#### IV. CONCLUSION

Significant reconsideration of how we can create beautiful, functional office, bedrooms and living rooms at home will be designed and set up to accommodate full time places.

A study suggests that ultraviolet rays could slow the virus, though not enough to wipe it out, and not as a treatment.

We know summertime slow the virus that causes Covid-19, as it has done with many other viruses that are flu, colds, and pneumonia. Also, the pandemic resurges in the fall.

We found that ultraviolet light was most strongly associated with lower Covid-19 growth rates. Projections of the overall effect suggest that the disease will decrease temporarily during summer, rebound by autumn, and peak next winter.

That was obvious in Australia and Korean Peninsula.

#### ADVERTISEMENT

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