

# STEP-BY-STEP GUIDE TO COVID INDUCED REMODELING OF WORKSPACES

Solutions for converting existing spaces to meet the new normal.



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# INTRODUCTION

- As corporate interior solution providers, we at SKV believe that it is our duty to take in these unprecedented changes, comprehend them to the best of our abilities and provide viable solutions to our clients and others in the workspace industry.
- While norms of social distancing, flexible working, regular sanitation and other measures to be taken in workspaces are being widely debated, we aim to provide you a sphere - specific booklet on traversing your office one footstep and area at a time to implement these necessary and sustainable solutions.
- We understand that it is easier said than done in coordinating a seamless return to work. With immense pressure resting on employers and organizations, we have collaborated with our experienced vendors and informed consultants to craft a comprehensive guideline for a healthy office environment in future.
- From generic mandates to specific solutions, this booklet is a cover-to-cover guide on reworking offices that were known to us up until now.
- The key areas of intervention will be:
  1. Agile & flexible working
  2. Changing work culture as a result of social distancing norms
  3. Office hygiene
  4. Reviewing HVAC norms
  5. Reducing touch points
  6. Introducing technology
  7. Long-term “temporary” solutions

FLATTEN THE CURVE

# AGILE & FLEXIBLE WORKING

Office density is the foremost challenge for businesses that are preparing to return to work. With fewer people mandated to be in an office at any given point, companies will have to opt for smart scheduling and flexible rotational options.

Short term goals will have to ensure social distancing, which can be achieved through efficient management of the workforce, utilization of space including reconfiguration or removal of desks and the closure of certain communal spaces. These are cost-effective ways of ensuring that people can return to work in a faster and safer manner.

## CHANGING WORK CULTURE AS A RESULT OF SOCIAL DISTANCING NORMS

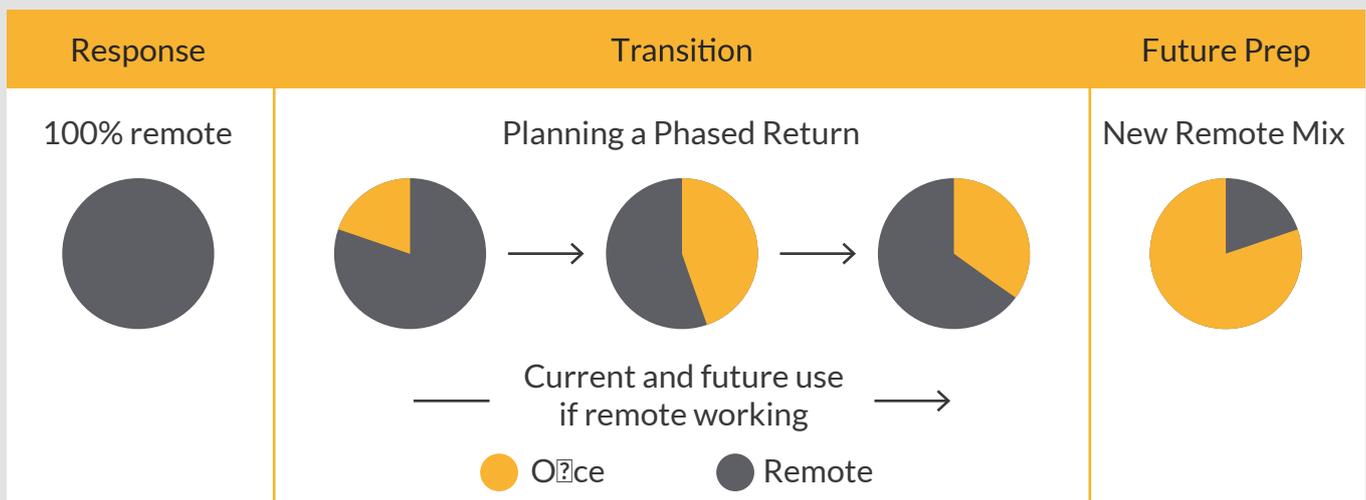
Covid-19 has enforced a global working from home experiment which has accelerated long-term underlying trends in several areas. One of these is rethinking how and where we work and the idea that work has to be tied to an office.

In the short-term, it seems likely that many of us will remain working from home even after government orders for the same are lifted. A staggered workforce may become standard, with smaller groups coming in on alternate days and shifts that avoid transport rush-hour peaks. The first phase of resuming office life will involve making basic changes to keep employees safe and allay fears. For instance, integrating wayfinding signage, adhering to professional distancing standards and limitation of capacity in the work area, enclosed collaboration spaces and cabins.

### 1. Communication & Training

- Internal communication via. mails, memos
- Employee training & instructions on new processes and procedures in compliance with social distancing norms
- Printed vinyl graphic and signage depicting health and safety measures
- Additional support to employees working remotely

### 2. Remote working



### 3. Assessing maximum capacity

Assessing the office environment from social distancing perspective bespoke to your workplace will be one of the key areas of focus whilst ensuring a safe re-entry.

Based on 6' ring rule, the maximum capacity can be roughly calculated by adding the following parameters:

- No. of workstations @ 6' distance
- No. of cabins
- No. of collaboration seats @ 6' distance repurposed as work-seats

## OFFICE HYGIENE

Better hygiene practices have emerged to be of prime importance and many of these can be enforced without significant cost. It is more a matter of effort, discipline and mindset. This "convergence" of disciplines has been a growing trend for some time now but the pandemic has accelerated it considerably and been the stimulus for change.

Some key considerations that need to be made in the office environment before the workforce returns to the office space in addition to long term considerations are enlisted below:

- Disinfecting & deep cleaning initially and regularly
- Recurring disinfecting services – disinfecting high touch points in the office (switches, doors etc.)
- Setting up sanitisation stations all around the office – hand sanitisers, alcohol wipes
- Masks to be worn by employees
- Adding sneeze guards wherever 6' radius is not possible; reception table, between seats in the cafeteria etc.
  - Increase space division for existing workspaces by adding screens, storage element, plants or partitions
  - Installing shoe sole disinfectant and temperature scanner at the reception
  - Putting up hygiene signage; elevators, stairwells, restroom, parking
  - Ensuring PPE supplies – masks, hand sanitiser, wipes, gloves, tissue, spray disinfectant, infrared touch-free-thermometers
  - Providing disinfecting wipes next to all communal machines (tea/coffee, water dispenser) so individuals can wipe down after use



# REDUCING TOUCH POINTS

Investment in technology to assist in the management of people flow and space occupancy, and to enable things to be 'contactless' will indeed follow. For instance,

- Changing high-touch contact points like doors, access control system & attendance etc. to automatic/touchless
- Doors: Utilizing automatic doors activated by sensors or doors with mechanical opening mechanisms operated by foot pedals where budget poses a constraint.
- Washrooms: Automatic flushing, gesture controlled dispensers and water taps
- Automation – lighting systems, occupancy sensors, taps, soap dispensers, toilet flushes etc.

In addition to automation, we will also need to re-evaluate the types of material used in your office, based on how long COVID can live on different surface materials and implement antimicrobial coatings, surfaces, fabrics and wallcoverings wherever possible.



**PIR MOTION SENSOR**  
(Passive Infrared sensor)

PIR sensor detects a human being moving around within approximately 10m from the sensor. This is an average value, as the actual detection range is between 5m and 12m. PIR are fundamentally made of a pyro electric sensor, which can detect levels of infrared radiation.



**PIR PRESENCE SENSOR**  
(Passive Infrared sensor)

A passive infrared sensor (PIR sensor) is an electronic sensor that measures infrared (IR) light radiating from objects in its field of view. They are most often used in PIR-based motion detectors.



**MICROWAVE SENSOR**  
(RF or Doppler sensor)

Microwave sensors, also known as Radar, RF or Doppler sensors, detect walking, running or crawling human targets in an outdoor environment. Microwave sensors generate an electromagnetic (RF) field between transmitter and receiver, creating an invisible volumetric detection zone.

**FACE RECOGNITION TEMPERATURE MEASUREMENT SYSTEM**  
Accurate Temperature Measurement



Based on the accurate thermal imaging Temperature measurement, facial recognition thermometer can detect the forehead temperature. And quickly identify the information of the person with a mask. Optional warning to ask the user to wear a mask if they are detected not to be wearing one

# INTRODUCING TECHNOLOGY

The dissolution of global boundaries has become even more prominent as we communicate and collaborate across digital channels, embrace new technologies and acclimatize to our “new normal”. This is truly epitomized in the way we work. Part of what has made working remote possible for many organizations is the easy availability of technologies allowing us to collaborate, meet and ideate virtually.



## LONG-TERM “TEMPORARY” SOLUTIONS

With so much uncertainty, it's unlikely that major refits will be undertaken anytime soon. While updating furniture could be a relatively responsive way of adapting your workspace to support people both initially returning to the office environment and serving the long term goals of the business, it may not be a financially viable solution for all. A large number of small and medium-sized organisations are unwilling to invest a significant sum on solutions that could be rendered ineffective by our slowly expanding understanding of Covid-19, or a vaccine.

Therefore, keeping a holistic approach, we have also proposed a handful of smart and cost-effective design options in adherence to the social distancing norms to help you modify your existing workplace.

# ENTRY & RECEPTION

- If possible, designate separate entry and exit points to ensure uni-directional movement
- Devise action plan to manage crowd effectively.
- Recurring disinfecting services; disinfecting high touch points (switches, doors etc.) regularly
- Changing high-touch contact points like doors, access control system & attendance etc. to automatic/touchless
  - Doors: Utilizing automatic doors activated by sensors or doors with mechanical opening mechanisms operated by foot pedals where budget is a constraint
- Installing shoe sole disinfectant and infrared touch-free-thermometers at the entrance
- Setting up sanitisation stations – hand sanitisers, wipes
- Ensuring PPE supplies – masks, hand sanitiser, wipes, gloves, tissue, spray disinfectant
- Clearly communicating the requirement to wear masks when entering
- Adding 6' high sneeze guards in front of the reception table
- Putting up hygiene signage – elevators, stairwells, entrance lobby
- Adding vinyl floor signage in adherence to social distancing norms (6' distance)



3m graphic safety signs and symbols to be pasted on walls



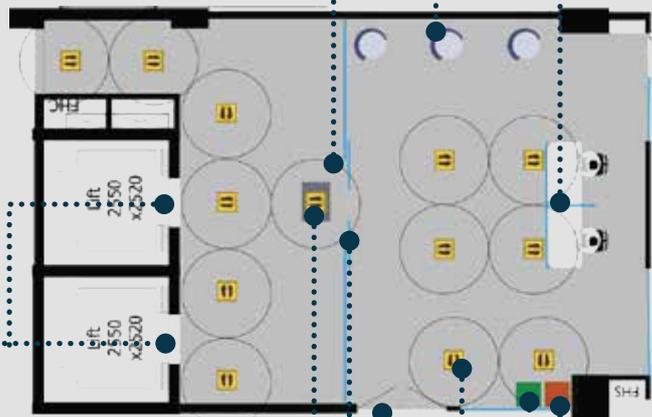
High-back chairs facing away from each-other



Shoe sole Disinfectant

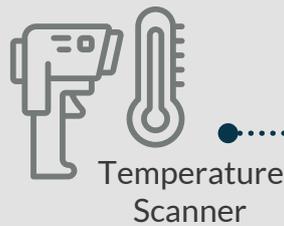


Touchless ACD & attendance



Sticks to operate lifts (Both inside & outside)

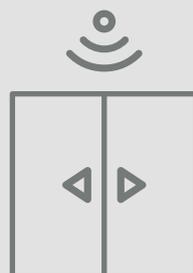
6' high glass screen



Temperature Scanner



Sensor-operated sliding door



Foot-operated Hand sanitiser

Footstep signage to Maintain distance

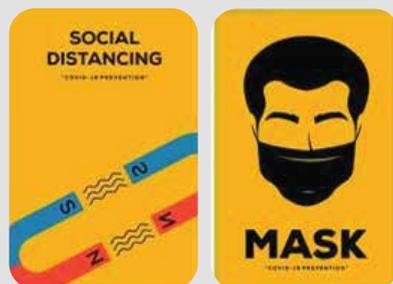
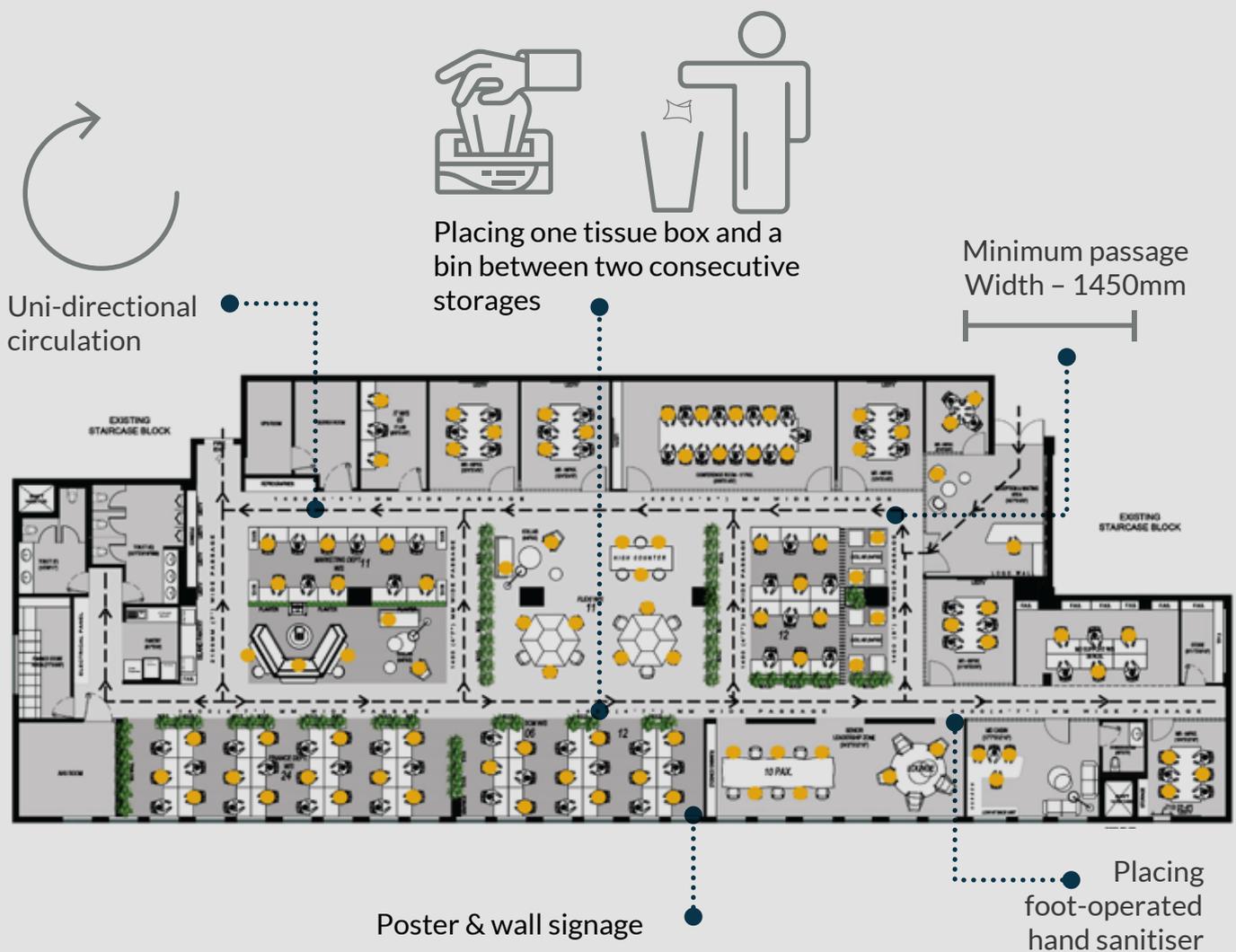


Mask dispenser

RECEPTION | POST COVID

# WORK AREA

- Adding vinyl floor signage to define unidirectional movement pattern
- Widening passages – 1450 mm being the minimum
- Staggered seating arrangement to ensure minimum 6' distance between adjacent workstations as per social distancing norms
- Adding front and side screens to existing modular workstations
- Setting up sanitisation stations – hand sanitisers, wipes next to storages
- Putting up hygiene signage all around the office



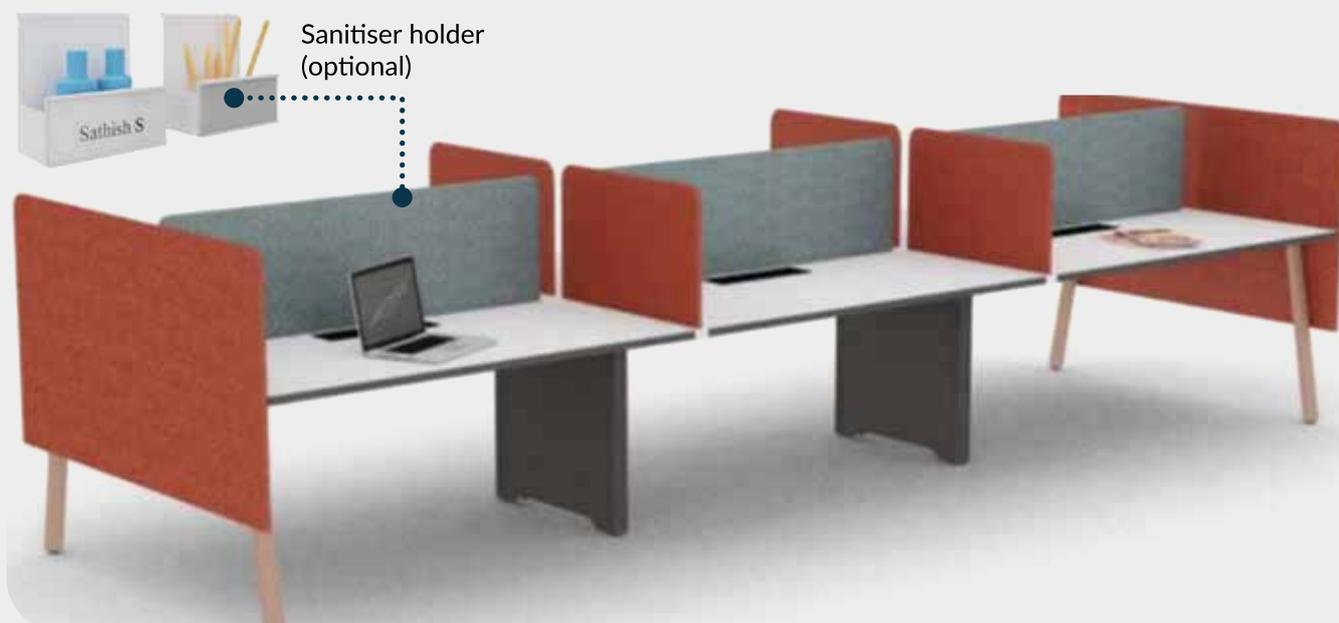
## BEFORE – LOW OR NO FRONT SCREEN



## SHORT-TERM – DIY SCREENS USING CARDBOARD/CORRUGATED SHEETS

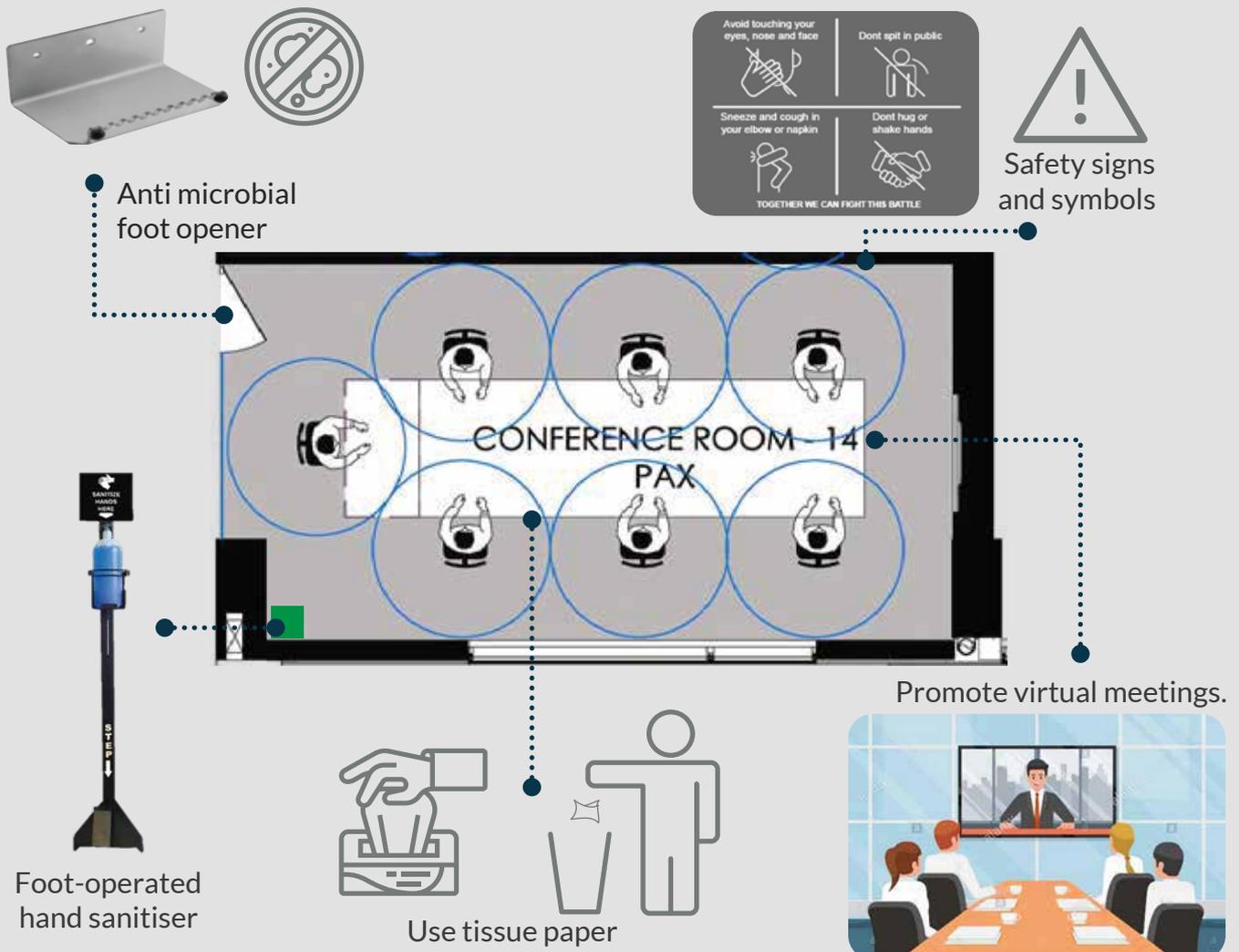


## LONG-TERM – COMPULSORY HIGH FRONT AND SIDE SCREEN



# CONFERENCE & MEETING

- Seating occupancy to be reduced by 50% of the total occupancy
- Promote virtual meetings – video conferencing facilities with proper audio-video equipment
- Recurring disinfecting services – disinfecting high touch points (switches, doors etc.) regularly
- Changing high-touch contact points like doors to automatic/touchless
  - Doors: utilizing automatic doors activated by sensors or doors with mechanical opening mechanisms operated by foot pedals where budget is a constraint
- Installing occupancy sensor where budget is not a constraint
- Setting up sanitisation stations – hand sanitisers, wipes at the entrance
- Ensuring PPE supplies – hand sanitiser, wipes for any manual operation (opening storages etc.)
- Avoid making use of hard copies
- Putting up hygiene signage wherever possible
- Avoid close-space meetings of more than 5 people by leveraging flexible furniture with movable screens to create temporary boundaries in the open
- Introducing standing meeting spaces instead of enclosed meeting rooms where possible



# CABINS

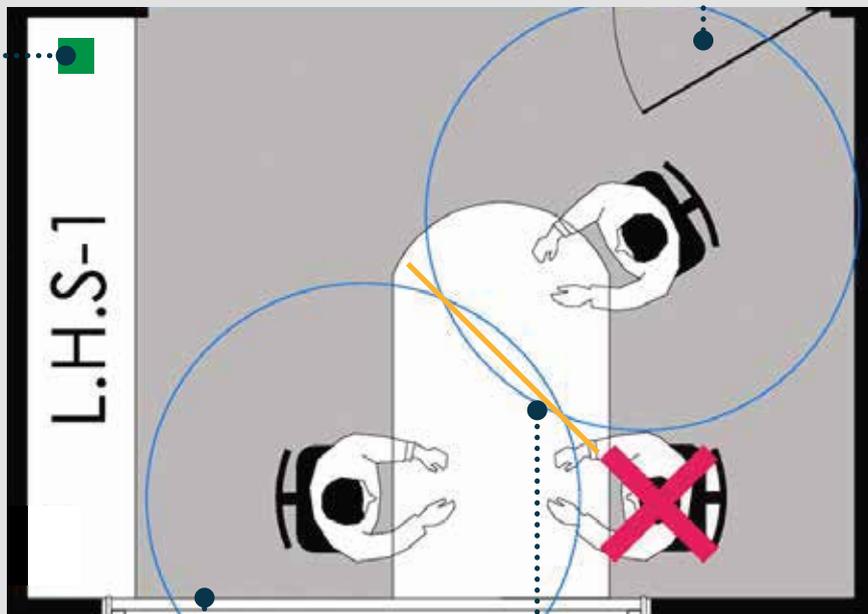
- Limiting visitors – reduce visitor seating capacity by 50%
- Provision for video conferencing facilities with proper audio-v ideo equipment
- Recurring disinfecting services – disinfecting high touch points (switches, doors etc.) regularly
- Changing high-touch contact points like doors to automatic/touchless
  - Doors: utilizing automatic doors activated by sensors or doors with mechanical opening mechanisms operated by foot pedals where budget is a constraint
- Installing occupancy sensor where budget is not a constraint
- Ensuring PPE supplies – hand sanitiser, wipes for any manual operation (opening storages etc.)
- Adding sneeze guard to the desktop



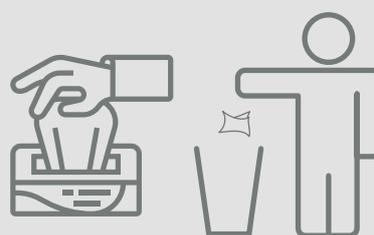
Hand sanitizer



Anti microbial foot opener



Promote virtual meetings.



Use tissue paper

Free standing Sneeze Guard



# COLLABORATION SPACES FOR INTERACTIONS

- Maintaining 6' ring rule while collaborating
- Providing free-standing screens around existing seating
- Providing side screens dividers between two adjacent hot-desking seats
- Setting up sanitisation stations – hand sanitisers, wipes
- Putting up hygiene signage wherever possible
- Adding vinyl floor signage to define unidirectional movement pattern

## HUDDLE TYPE-I

Maintaining 6' ring rule while collaborating



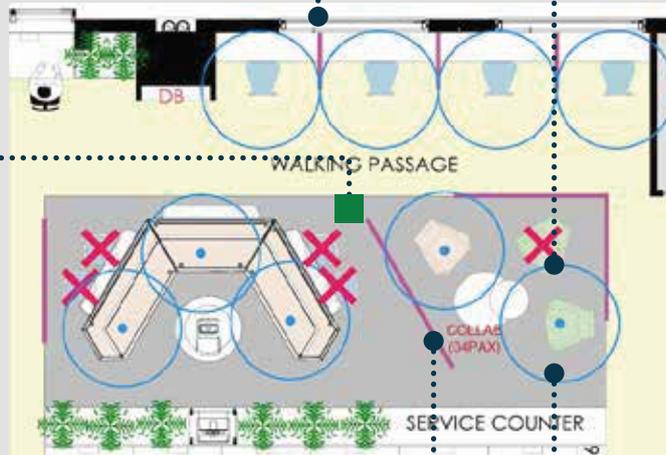
Side screens dividers



Acoustic panel screen



Foot-operated  
Hand sanitiser



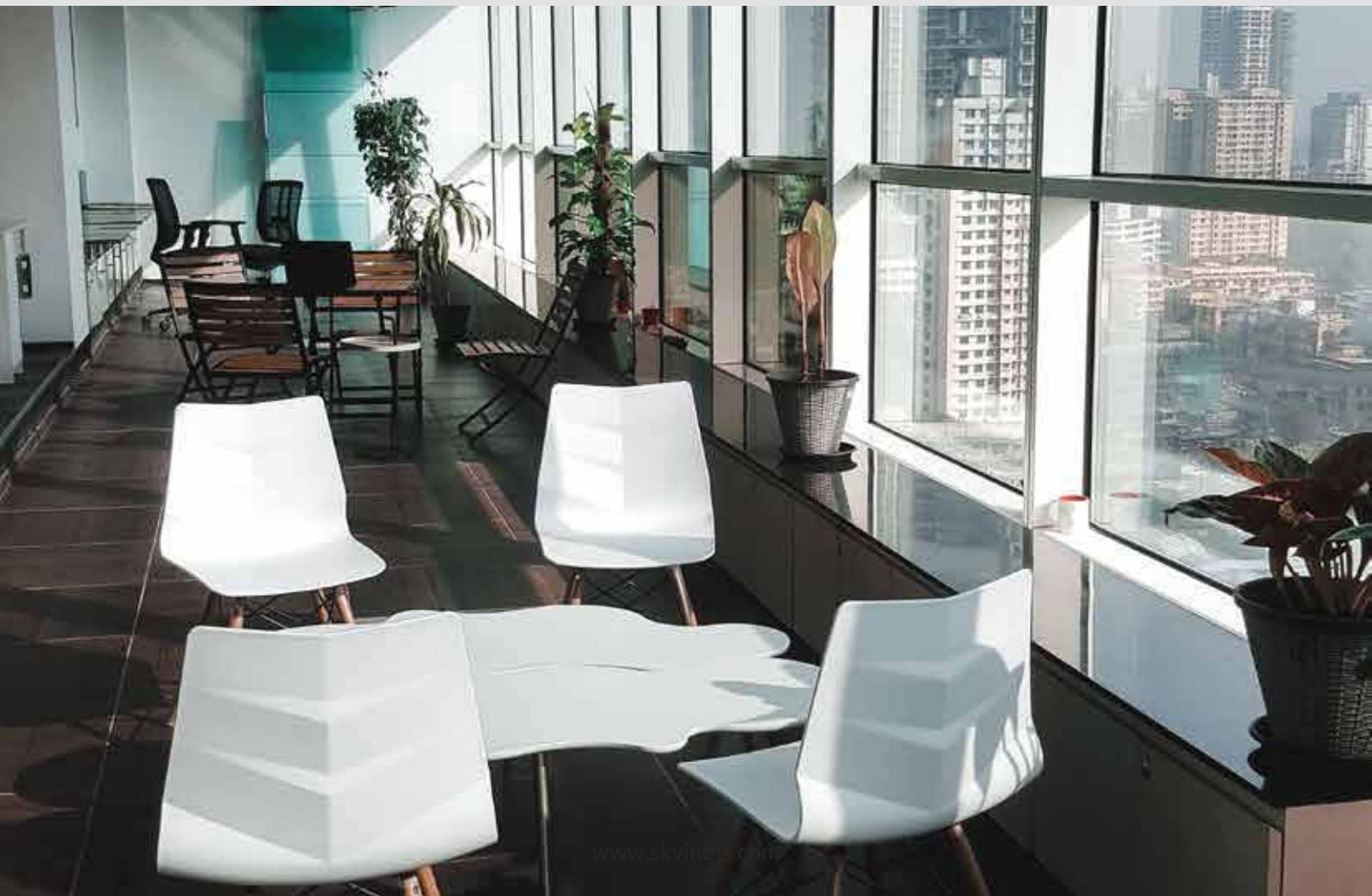
Cardboard roll screen  
around existing lounge  
chairs

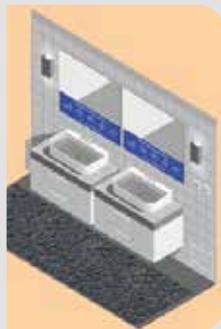


Acoustic Panel screen around  
existing lounge chairs

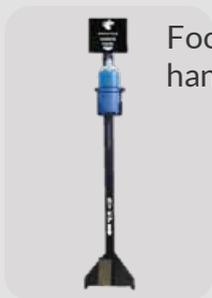
# COMMON AREA – CAFETERIA

- Seating capacity to be reduced by 50% (staggered seating – maintaining 6' distance)
- Recurring disinfecting services – disinfecting high touch points (switches, doors etc.) regularly
- Changing high-touch contact points to automatic/touchless:
  - Doors: utilizing automatic doors activated by sensors or doors with mechanical opening mechanisms operated by foot pedals where budget is a constraint
  - Sensor operated fixtures & accessories – taps, flushing system, urinals, soap dispenser, hand dryer etc.
- Setting up sanitisation stations – hand sanitisers, wipes at the entrance
- Ensuring PPE supplies – masks, hand sanitiser, wipes, gloves, tissue, spray disinfectant
- Providing sneeze guards between two adjacent seats and around the serving counter
- Putting up hygiene signage wherever possible
- Adding vinyl floor signage to define uni-directional movement pattern
- Adding vinyl floor & wall signage in adherence to social distancing norms (6' distance)
- Consider switching to recyclable single-use dishware temporarily
- Identifying & putting 6' marker at congestion points – tea/coffee, water dispenser, sink, dustbin, refrigerator etc.





Posters and Signage



Foot-operated hand sanitiser



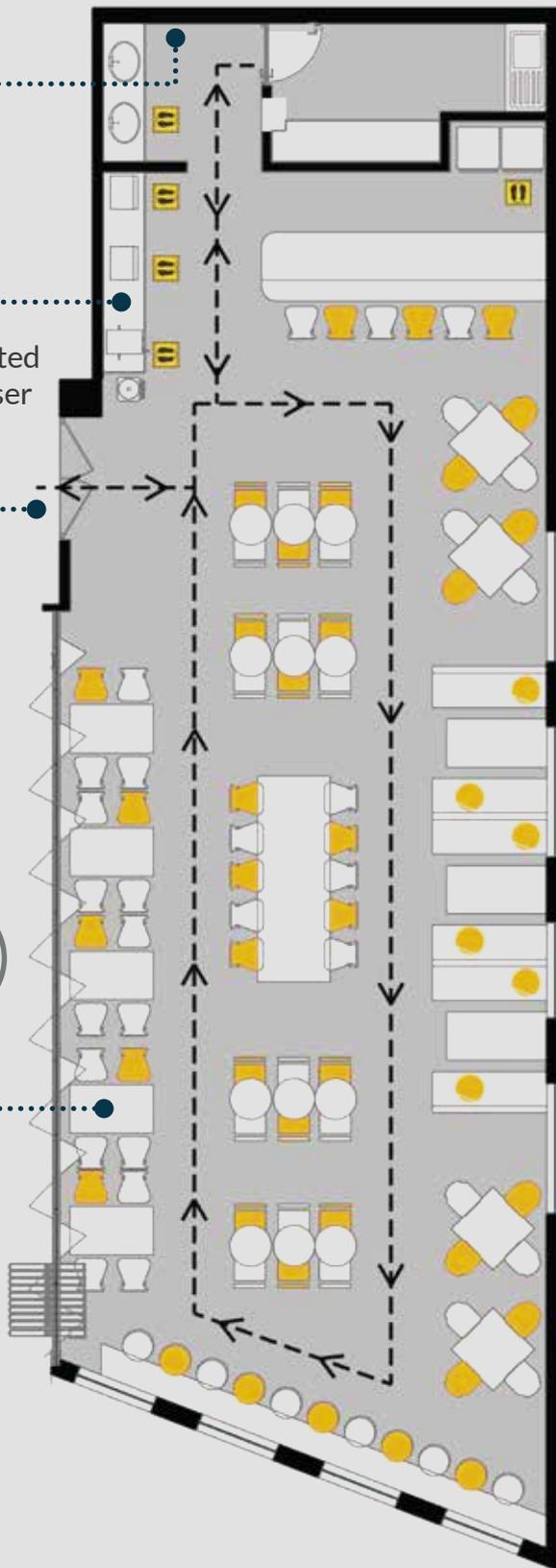
Shoe sole disinfectant



Anti microbial foot opener



Acrylic sneeze-guard on tables



Occupancy sensor to be added. Seating occupancy to be reduced by 50% of the total occupancy.

Sensor operated fixtures



COMMON AREA - CAFE | POST COVID

# COMMON AREA – WASHROOMS

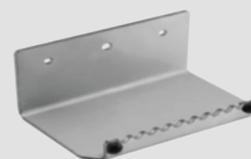
- Recurring disinfecting services – disinfecting high touch points (switches, doors etc.) regularly
- Changing high-touch contact points to automatic/touchless:
  - Doors: utilizing automatic doors activated by sensors or doors with mechanical opening mechanisms operated by foot pedals where budget is a constraint
  - Sensor operated fixtures – taps, flushing system, urinals etc.
  - Soap dispenser
  - Hand dryer
- Putting up hygiene signage wherever possible
- Adding vinyl floor & wall signage
- Wider & higher urinal partition
- Making use of antimicrobial surfaces – WC counter etc.



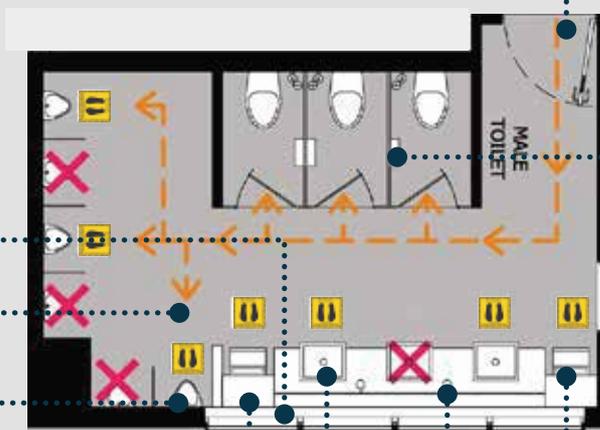
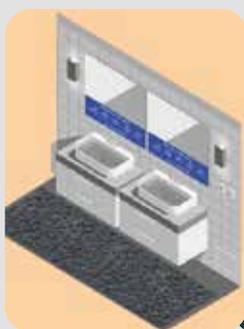
Automatic operated WC



Use tissue paper



Anti microbial foot opener



Anti microbial upholstery



# COMMON AREAS – REPROGRAPHICS

- Maintaining 6' distance
- Setting up sanitisation stations – hand sanitisers, wipes
- Ensuring PPE supplies – hand sanitiser, wipes for any manual operation (operating printers, opening storages etc.)
- Putting up hygiene signage wherever possible
- Adding vinyl floor signage to define uni-directional movement pattern

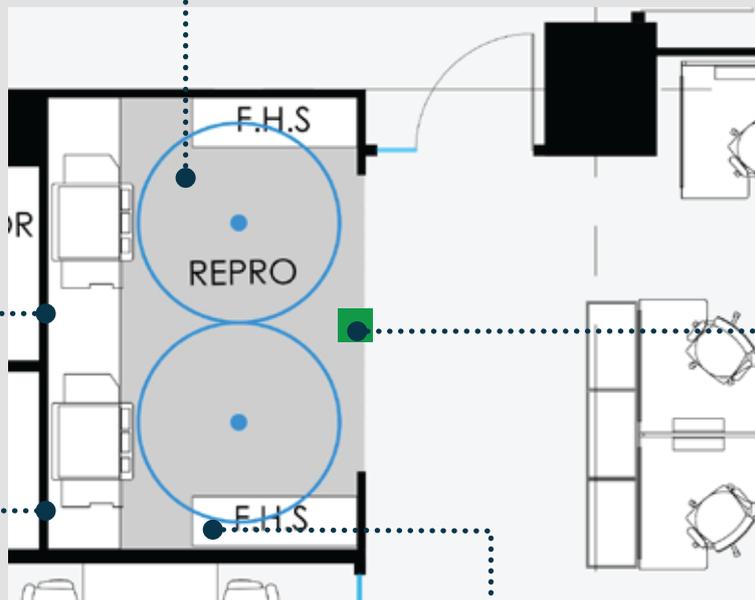


Poster & signage



Foot-step signage

Foot-operated hand sanitiser



Use Tissue paper

Maintaining 6' distance



## CLEAN YOUR DUCTS

Easier it is for the air to flow through your air ducts, the easier it is for your system to deliver air to your office or living spaces. Any blockage that is created by your duct will cause air flow problems and will mean higher energy cost over time.



## FRESH / RETURN AIR PURIFICATION UNIT

Energy efficient fresh air/return air purification unit, Positive or negative pressurization, Environment and user friendly, and Sustainable for fresh air intake and exhaust air treatment.



## REPLACE DIRTY FILTERS

After 40 days of lockdown, the filters of the air conditioners would not be in a usable condition.

Replace Old filters with new higher efficiency, cost effective, robust and washable filters with better filtration capabilities for longer life.

Instead of replacing non woven pre filters we suggest :

- Eco green filters
- Self charging filters
- Nano fibre filters



## 1. ECO GREEN FILTERS

REDUCE – Allergens and dust in your environment

REUSE - 5 year media saves the environment

RECYCLE – 100% recyclable materials

First reusable, Washable, MERV 8 pleated filter and 100% Recyclable Lifetime anodized aluminium frame and 5 year warranty on V-Clean filter core  
Proprietary asymmetrical “V- clean ” filter core technology is made from completely recyclable material  
Antimicrobial V-Clean filter core

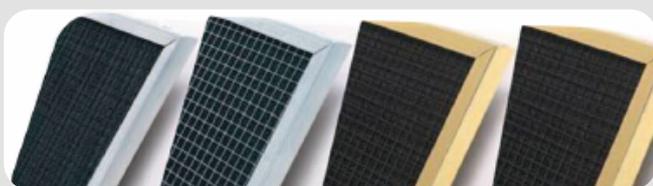


## 2. SELF CHARGING FILTERS

Self charging static air filter utilizes a patented configuration of alternate polarity, self – charging layers of polypropylene filtration media, to attract particles as 0.1 micron. Simply wash your filter with house – hold detergent and water every 30-60 days.

Advantages :

Lifetime Warranty, Anti-Microbial Media Core, Durable Aluminum Frame, and Five Layers of Filtration Media



## 3. NANO FIBER FILTER

Award winning Filter technology  
Awarded by Acrex 2020 under IAQ products

Low pressure drop : 3-5 mm

Efficiency : > 80%

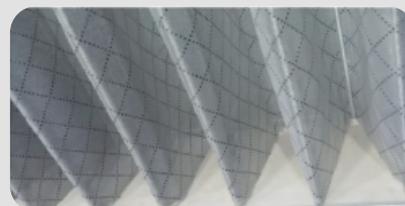
Easy cleaning

Efficient & Long life

Cost Effective

Washable, reusable, and Recyclable

Available for AHU & FCU



HVAC | POST COVID

# PHI & REME-STRONG RECOMMENDATIONS

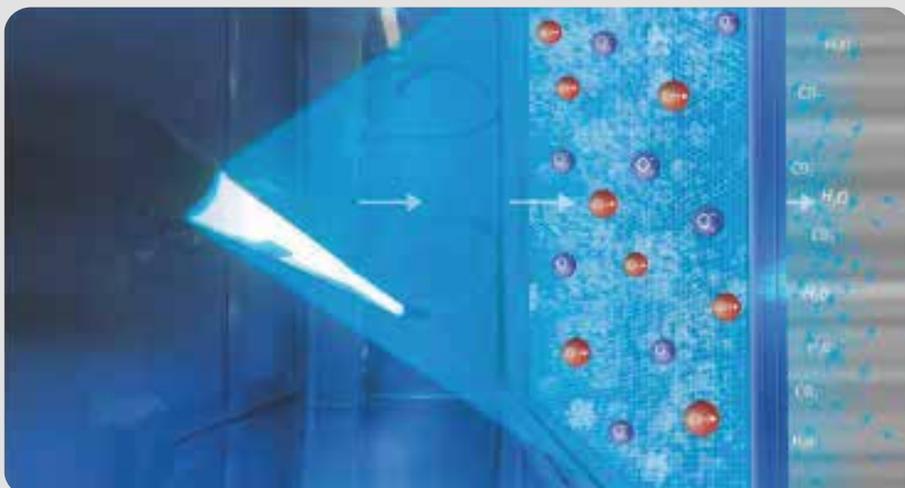
- U.S. and International Hospitals approval for the fight against infectious disease: 99% reduction of Staph (MRSA)
- U.S. Military approved for mold reduction in field hospitals.
- More than 10000 installations done in India
- Tested and approved by the Chinese government for protection against the deadly SARS virus.
- Major U.S. city school reports 20% reduction in absenteeism
- Cruise line use it as a safety measure against Norwalk virus outbreaks
- Approved by the USDA, FSIS, and FDA for use in food processing plants. Employed to reduce microbial contamination of food being processed.

## UVGI (ULTRAVIOLET GERMICIDAL RADIATION)

The Lightstick Plus UV utilize low mercury lamps that are good for the environment and provide high ambient temperature operation. 100% ozone free.

Features -

- Works in conjunction with your air filter 24/7 to disinfect cooling coils, drain pans, and duct surfaces.
- Fights mold and bacteria growth for optimal coil purification, 24V power module.
- Expanded range ballast operates over a range of 20V to 32V and offers 3000V surge protection.
- Direct Connect custom design allows lamp to be installed directly in A-coil delta plate for optimal UV exposure



**HVAC | POST COVID**

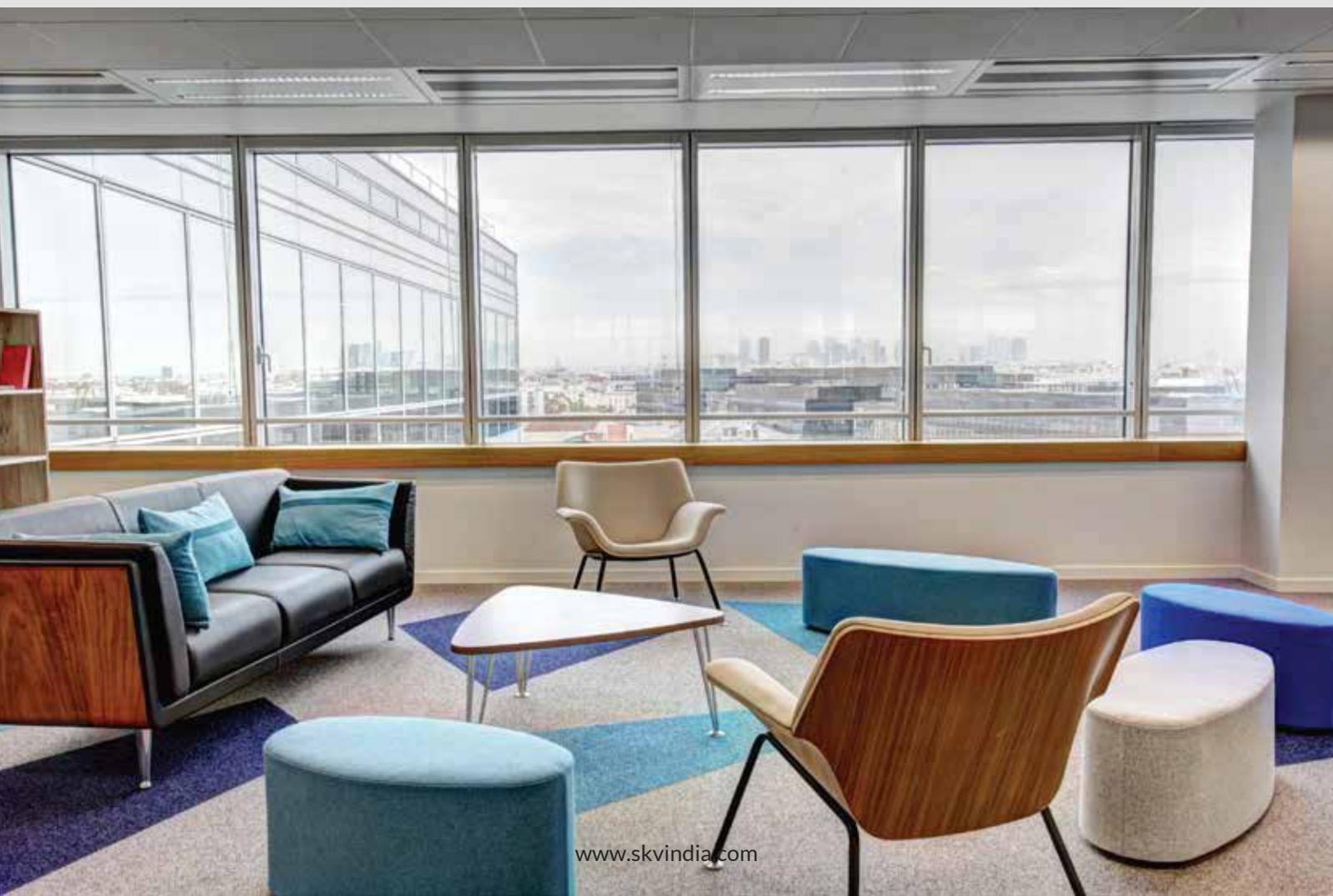
# FUTURE-READY WORKPLACE

## Long-term design considerations for projects in early stages of design or future projects:

- Considering building automation solutions – motion & occupancy sensors
- Considering automatic/ sensor-based/ touchless products – doors, toilet fixtures and accessories etc.
- Re-inventing office spaces – more focus on the need of multi-purpose rooms, modular spaces that can be modified to serve the purpose as and when required
- Implementing antimicrobial coatings, surfaces, fabrics and wallcoverings wherever possible
- Assessing the future use of remote working and associated impact on requirement of office spaces
- Considering smart office furniture
- Enhanced MEP services

## Short-term design considerations for executed and on-going projects:

- Setting up sanitisation stations all around the office – hand sanitisers, wipes
- Switching to automatic/sensor based/touchless services and products
- Posting hygiene signage – elevators, stairwells, restroom, parking
- Reviewing HVAC design
- Upgrading AV equipment to support video-conferencing facilities
- Re-evaluating surface materials and implementing antimicrobial coatings, surfaces, fabrics and wallcoverings wherever possible



# CONCLUSION

Navigating the workplace and our shared reality, once it's safe to do so, will be uncharted territory for everyone. Despite the magnitude of what we're currently experiencing, there is always inspiration to be found in human resilience and adaptability. We've seen many organizations and individuals step up, be nimble, and take necessary steps to protect employees across the workforce. Together, we can bounce back and build better and healthy work environments for us all.

**ME**

THANK YOU  
 THANK YOU

**STAY 6 FEET AWAY**

For more information please write to Rishabh at [Rishabh.Khare@skvindia.com](mailto:Rishabh.Khare@skvindia.com)

SKV India offers multiple packages including FitOut Leasing and Furniture Leasing.

For more information please write to [info@skvindia.com](mailto:info@skvindia.com)