

# Managing COVID-19 in the working environment

Sean Webber

Engineering & Property Manager for Savills

# 70 Mark Lane

70 Mark Lane achieved practical completion in December 2014.

The building offers 170,000 sq. ft of high quality office space over 15 floors, with floor plates ranging from 14,000 sq. ft to 5,000 sq. ft, and four retail units on the ground floor. The scheme boasts nearly 10,000 sq. ft of dramatic winter garden terrace space on the uppermost six floors, created by a spectacular over-sailing opening glass roof

70 Mark Lane is just a step away from Fenchurch Street Station, a very short walk from Lloyd's and prominently positioned in the City's insurance district.

The building is managed by Savills on behalf of Knight Frank Investment management(KFIM).







# Contents

- Introduction
- Reception Management
- Vertical Transportation
- East & West Staircase
- Fresh Air
- Toilets & Drainage
- Cleaning & Hygiene
- Communication

# Welcome to 70 Mark Lane

- As you arrive at 70 Mark Lane, you are greeted by a PPE disposal bin and a battery-operated sanitizer station. We have also installed a welcome mat informing you, you are in a socially distanced safe zone.
- When looking at a queuing system for the 3 reception desks we decided against stanchions, this makes the reception feel crowded, we brainstormed and opted to go with floor mats eliminating the risk of tripping & the touch contact you could have from a stanchion.



MILLER

ZURICH

RECEPTION

KEEP 2 METRE

KEEP 2 METRE

KEEP 2 METRE

KEEP 2 METRE

PLEASE RESPECT

2 METRE SAFE AREA

2 METRE SAFE AREA

SOCIAL DISTANCING

please wash your hands

please use soap





We have also installed a 16mm Perspex cough screen that carries the length of the reception desk, this has been glued and can be removed at ease and stored for reuse when no longer required.

# Vertical Transportation

- The existing lifts at 70 Mark Lane (allowing full occupancy) working in a full building and operating a mix of up peak traffic can handle 6.5% of the building population in a 5-minute period. This equates to 102 people transported safely every 5 minutes.
- Up to 549 people can occupy the building with no impact to lift service even when the cars are limited to four people. With the lifts limited to four passengers up to 488 people can occupy without particular need to ration their access to lifts.
- A higher population can be accommodated which will take longer to fill and empty the building at either end of the day. At these higher numbers occupiers actively manage the demand for lift services by rationing access to the lobbies, avoiding overcrowding.
- Rationed lift use applies in the down direction as the main lobby is controlled by building management. The occupiers are advised to utilise the staircase for short journeys within the building.
- The lifts have been modified to assign no more than four passengers to a lift. This is readily achievable on the Compass system and Otis have carried out this under instruction. This now means that the lift system will no longer accept any more calls once four calls have already been accepted by the group controller.





# Additional measures

- We have Install hand sanitization stations in all lift lobbies .
- We Increase the cleaning regime on surfaces in lifts, lift landings.
- We advise passengers to ensure they wash their hands thoroughly following the use of lifts and escalators.
- We encourage the use of stairs for short travel to floors and especially short inter-floor travel.
- We have alternated the east and West staircases alternating the staircase direction throughout the day to assist with peak flows.
- We provide additional security marshalls for peak times to make sure no more than 4 occupiers can enter at lift at any one time.
- We advise face coverings are to be worn in the lifts and lobby areas.
- We have instructed electrotactic fogging in all landlord areas.

# The East & West Staircase

- The east staircase will be used by occupiers who wish to enter the building and use the stairs rather than the lifts.
- The east staircase is located at the rear of the premises and access can be obtained by walking through the reception barriers and into the goods lift corridor.
- The west staircase will be used as an exit staircase for occupiers wishing to exit the building via the stairs instead of the lifts, the staircase leads to The Mark Lane side of the of the building.
- The West Staircase fire exit will be opened and manned during the lunch hour 12-1pm to allow a smooth exit and to avoiding congestion in the main reception. This exit will also be manned from 4pm-6pm to manage occupiers departing for the evening.



# Fresh Air

At 70 Mark Lane we have an occupation density of 1 person per 8 sq m so we are very lucky that we can practice social distancing even at a maximum capacity as this is the case we provide 12l/s per person plus 10% based on the 1 person per 8 sq m.

- We keep air moving through our building, the supply and extract systems act as a natural diluter for any contaminants within. The supply air adding fresh, uncontaminated air and the extract removing the stale dirty air.
- We keep the mechanical ventilation systems (AHU's) operating, we increase the run times to 24/7 and 'fresh' air content to 100% .
- We have turned our thermal wheels off so we have no recirculated air.
- We have reviewed our system operation on all plant to check it is properly balanced, taking into account any changes in occupancy or space utilisation, this shows we are achieving uniform air distribution throughout areas supplied.

What can you do?

- Consider operating your ventilation systems to obtain the maximum air change rates you can making sure this is relative to the space and occupancy levels.
- You could also run your air system 24/7 for the maximum benefit, you could choose to lower these rates (but not switch off) when there are fewer occupiers in the building or it is being used intermittently.
- A secondary option is to extend the current operation times of your ventilation system, so that it starts two hours earlier than normal, and finishes two hours later. At nights and weekends I would advise to not switch ventilation off, but run systems at lower speed. These options aim to provide the maximum amount of fresh air to your occupiers whilst removing any potential virus particles that have been transmitted within your building.
- Make sure your systems are set up correctly and utilise your engineering teams time.

**With any of these options you must also weigh up the benefit versus the additional costs, maintenance and environmental impact of your choice.**

# Toilet & Drainage systems

Although still not yet fully established, there are a number of simple measures you could take to control possible faecal-oral transmission of COVID 19 these will also prove more effective for other viruses too such as the norovirus.

These could include:

- Flushing toilets with the lid closed, thereby reducing droplet plumes being created. Therefore, minimising any faecal-oral transmission of virus particles.
- We have 10 air changes per hour extract (min) per cubicle .
- Keeping your toilet extract systems maintained and operational. Consider bypassing any controls on your extract system (if you can without affecting other systems) and operating them continuously during occupation of the building.
- Try to maintain negative air pressure in the toilets, this keeps smells as well as any generated contaminants out of adjacent areas such as toilet lobbys.
- Keep the sanitary plumbing systems well maintained and preserve water seals. For example, by stopping drain traps drying out and omitting bad odours.
- Actively promote good hygiene practises, especially hand washing using posters .



# Our Results- RPS Comments

- At 70 Mark lane Carbon dioxide levels were close to or within the ideal band of 600-800ppm. CO2 levels should be maintained below 1000ppm.
- Carbon monoxide levels were negligible, and significantly below the Health and Safety Executive's workplace exposure limit of 8.7ppm.
- NO2 levels were within the guideline limits specified by WHO guidelines for indoor air quality: selected pollutants 2010. NO2 levels were found to be  $< 38.25\mu\text{g}/\text{m}^3$  which is the lowest limit of detection.
- TVOC levels were consistently within the 200 - 800  $\mu\text{g}/\text{m}^3$  boundary stated within the WELL Building Standard v1.0.
- TVOCs were seen to be generally very stable showing that there were no adverse effects from any VOC emissions in these areas.
- The thermal wheels within all AHUs have been switched off to avoid the air recirculation within areas supplied by these AHUs. Only fresh air should be provided to floors at this time to reduce the likelihood of coronavirus transmission in the office spaces.

# Cleaning and hygiene

Effective cleaning and hygiene (along with social distancing) is another key theme to COVID-19 Secure. Reducing the potential for airborne transmission of the virus through good hygiene practices will again help maintain air quality, this could include:

- We encourage staff to adopt good hygiene practises at all times and back this up with poster and other campaigns at Mark Lane we have utilised our ECN Screens and shared information with occupier marketing teams and hold regular toolbox talks with our service partners.
- We have amended cleaning regimes to target the most effective interventions. More regularly sanitising touched surfaces such as handles, lift buttons etc. will be time better spent than vacuuming.
- We clean/sanitise desks regularly used and communal phones and equipment in “touchdown areas” or hot desks will all staff having antibacterial wipes on each desk.
- We make sure consumables, soap, hand sanitisers, toilet rolls, etc. readily available and accessible.
- We regularly remove waste and check areas such as washrooms and kitchens regularly.



# Communication/CSR

- Keep conversations up with your site teams and your occupiers.
- Keep everything centralised and accessible in case you fall ill.
- Keep on top of your crisis communication strategy, BCP and make sure all essential logbooks are up to date.
- Make sure all stat compliance is current.
- Keep communications personalised but too the point for example at the start of Feb 20 we issued each occupier with a clip on sanitizer.
- Keep showing your occupiers the latest building enhancements on the market such as the contactless security exit control.
- We have built a relationship with the Hackney Food Bank making sure any food that is surplus to requirements go's to them to assist others.
- We have donated sanitary products to a local women's refuge helping others in need.
- We have taken part in Charity events as a team as occupancy levels have been low such as Football Shirt Friday and Xmas Jumper day, we found both events were great for staff morale.

**TOUCH FREE**



**EXIT**



THANK YOU



Sean Webber



07966 739 658



[sean.webber@savillspm.co.uk](mailto:sean.webber@savillspm.co.uk)