RE-OPENING OFFICES
Guidelines for safer workplaces during COVID-19 in Bangladesh

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‘People expect to return to a different workplace. Workers want a physical environment with more space, less desk sharing including social distancing plus increased cleaning protocols, and increased support for mobile and virtual work.’ --- Findings from a survey conducted by Gensler, a global design and architecture firm, during COVID-19 pandemic

Bangladesh, like many countries of the world, has decided to re-open workplaces to continue the economic activities amidst the outbreak of Coronavirus (COVID-19) pandemic. However, we cannot go back to the “normal” until there is some vaccine and widespread testing becomes available; we need a plan for reopening offices considering this transitional stage. In this context, the Institute of Architects Bangladesh (IAB) has taken an initiative to prepare a guideline for arrangement of safer workplaces to be adopted by organizations while re-opening the offices in Bangladesh as precautions against COVID-19. This document intends to translate the available knowledge and experiences to provide suggestions and tools that will enable businesses to operate safely during the pandemic situation. The contents are summarized from national and international literature and guidelines that are applicable in the local context. A team of design professionals, HVAC experts and academicians has prepared, reviewed and edited the document on behalf of IAB.

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COVID-19 Transmission: The virus COVID-19 is transmitted primarily through respiratory droplets or contact with contaminated surfaces. It appears to spread both through large-droplet transmission, such as from sneezes, and through the airborne transmission of smaller, aerosolized droplets, such as those that spray out of the mouths of talkers. In the indoor environments of offices, long meetings as well as working together naturally include lots of one to one or team discussions that increases possibilities of transmission.

Airflow Awareness: International survey has indicated that odds of transmission of COVID-19 in a closed indoor space are several orders of magnitude higher than in open-air environments. Every noncontact activity, such as, talking, eating, working out becomes significantly safer when they are done in open air. Therefore, ensuring airflow is an important consideration for office re-opening.

Social Distancing: Maintaining a minimum distance of 2 meters between two individuals, wearing a mask, standing away from any vertical surface or handrail and not talking to each other unless necessary in the working environment.

COVID Kit: A kit to be provided to every staff member which includes a mask, a sponge wipe for cleaning their own desk etc. and a hook to operate various types of doors (to avoid physical touch to door handles). This may or may not include a personal bottle of sanitizer that everyone must carry.

Disinfectant: A solution prepared by diluting disinfectant (sodium hypochlorite or any available alternative) with water at concentrations of 0.05%, 0.1% and 0.5% depending on cleaning and prevention needs against COVID-19.

Sanitizing: Applying sanitizer (gel or liquid form), which contains 70-95% of alcohol, with mop/cloth/tissue paper on door handles, switches, table surfaces/armrest of chairs etc.

Sanitation Station: Location or a space where the key elements of the sanitizing process like sanitizer, tissue papers and dustbin with lid are placed for everyone to use. Suggested locations for these stations are Entry & Exit Gate, Office Space, Lift Area, Reception & Dining Area.

Sanitation In Charge: A team member assigned the whole and sole responsibility to make sure that all the cleaning and sanitization process are followed appropriately by the staff members/visitors. He will be responsible to make sure all the materials required for cleaning and sanitizing are always available in the office.

Security Cum Hygiene Station: The desk placed before the main door of the office premise where all the general sanitizing processes will be done and all the incoming-outgoing documents, couriers and parcels will be collected/discharged making sure the entry of unnecessary visitors do not enter the office premise.
Parcel Desk: The desk placed before the main gate of the office premise, along with the security cum hygiene station, where all the couriers/parcels will be kept by the delivery person. This is to make sure the entry of unnecessary visitors is restricted inside the office premise.

Front Desk Manager: A team member responsible for usual activities, which happens at the front desk. For example, receiving phone calls, attending visitors, to keep the record of attendance of all team members, to note down body temperature of team members twice in a day (morning and evening), managing outgoing documents, stationeries, first aid kit and maintaining sanitation stock and supplies etc.

Risk Assessment: WHO suggests assessing risks in workplaces considering the environment, the task, the threat, if any, and resources available, such as personal protective equipment. Accordingly, there can be three types of Exposure Risks in offices.

  Low exposure RISK – jobs or work tasks without frequent, close contact with the general public and other co-workers, visitors, clients or customers, or contractors, and that do not require contact with people known to be or suspected of being infected with COVID-19.

  Medium exposure RISK – jobs or work tasks with close, frequent contact with the general public, or other co-workers, visitors, clients or customers, or contractors, but that do not require contact with people known to be or suspected of being infected with COVID-19.

  High exposure RISK – jobs or work tasks with high potential for close contact with people who are known or suspected of having COVID-19, as well as contact with objects and surfaces possibly contaminated with the virus.

NB: This guideline published by IAB mainly describes the prevention measures for regular offices with low risks; however medium risk and high-risk offices may follow WHO guidelines for advance protection in terms of cleaning, disinfecting, social distancing, hand hygiene, PPE and ventilation. (Reference: https://www.who.int/publications-detail/considerations-for-public-health-and-social-measures-in-the-workplace-in-the-context-of-covid-19)
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Countries across the globe have implemented a range of public health restrictions on work and travel in response to COVID-19 pandemic. Different countries are adjusting (i.e. loosen or reinstate) these measures depending on the local conditions determined by epidemiologists. Some countries already have begun to gradually re-open workplaces to continue economic activities as transmission intensity declines. In Bangladesh, after two months of general holiday since the outbreak of coronavirus in March 2020, government has planned to re-open the workplaces with limited scope to run the economy. Some extra precautions seem necessary while reopening offices for business since the epidemic situation has not been fully controlled. In this situation, concentration of people and improper use of electric and mechanical systems in the buildings have potentials to infect people if proper safety measures are not in place. Therefore, directives and capacity to promote and enable standard COVID-19 prevention with measure such as physical distancing, hand washing, respiratory etiquette and thermal control, as well as monitoring these measures will be essential for safe operation and management of offices.

The Institute of Architects Bangladesh (IAB) is concerned about how to prevent and control spread of the virus in workplaces and to ensure physical and psychological well-being of workforce in a safe working environment. Hence, IAB has taken an initiative to prepare a guideline for arrangement of safer workplaces to be adopted by organizations while re-opening the offices in Bangladesh as precautions against COVID-19. These rules and strategies are compiled from available sources from other countries, organizations and agencies responsible for prevention and control of COVID-19 in low risk situations. The guidelines are carefully assessed for their applicability in Bangladesh and are meant for employers, workers and their representatives, labour unions and business associations, local public health and labour authorities working in non-healthcare and low risk workplaces.

The guideline discusses measures to follow in offices for the following six categories:

1. Considerations while Re-opening after Long Closure
2. Workplace Hygiene and Health
4. Principles of Office Space Usage
5. Disinfecting and Cleaning
6. Ventilation and Air conditioning
Conducting the following assessments may become beneficial before re-opening offices for operation.

- **Office space and people:**
  Do all the employees know the floor layouts and who works where?

- **Office vs. building management responsibilities:**
  What are the areas of responsibilities in management of offices and common areas in a multi-users building among the owners and management authorities?

- **Strategic risk assessment:**
  What are the different types of risks in the office?

- **Screening measures:**
  What screening measures are available at the entrance of the building?

- **Using common areas:**
  What are the rules, regulations and practices suggested for high-intensity used common areas like lobby, stair, lifts, parking areas, customer care areas etc.?

- **HVAC systems:**
  What is the status and operating mode of HVAC system?
  Are there any new measures taken for the central system?
  Are there alternatives for natural ventilations?

- **Cleaning supports:**
  What cleaning supports are available and what is the frequency?
Utmost efforts must be made to encourage and practice hygiene in workplace to ensure safe and healthy working environment for all.

**Screening Measures**
- All persons, staff and visitors, irrespective of their status, must go through compulsory temperature screening while entering the office. Thermal scanner or an appropriate instrument should be available at the entrance wherein the body temperature can be checked and recorded.
- Anyone with fever and cough will be politely refused from entering for everyone’s safety.
- All parcel, courier or food delivery persons should be stopped at the entrance. The items should be collected by the concerned individual from the entrance.

**Maintaining Workplace Hygiene**
- Hand wash stations with adequate supply of liquid soaps should be there near the entrance.
- All visitors and employees must wash/sanitize hand before proceeding to their workplaces or elsewhere in the premises.
- Hand sanitizers should be made available at all other accessible and necessary locations.
- Special attention will be needed in the customer care areas by ensuring sanitizers at entry and exit points.
- Procedure of disinfection should be displayed at prominent places. Easily readable and attractive display will encourage better hygiene.
- Caution office users about highly inflammable sanitizers. People should be advised not to light a match, lighter or any other fire near the inflammable sanitizers.
- Discourage people to spit in public. Encourage them to spit, cough or sneeze into tissues while completely covering their nose and mouth; and then dispose the tissue in a closable bin.
- Everyone should make sure to cover mouth with hands while sneezing. They should place their head in the folded arm while sneezing and sanitize themselves thoroughly before going back to their seat.
Personal Protection Equipment (PPE) in Workplace

- Wearing a face covering is an essential precaution to prevent transmission of COVID-19. Employers should encourage using appropriate masks and support office users in using face coverings (masks) safely.
- General workplaces should not encourage the precautionary use of PPE like face shield to protect against the virus outside clinical settings or when responding to a suspected or confirmed case of COVID-19.
- Appropriate PPE, such as, face covers, masks, goggles, gloves, coats / aprons, shoes as well as appropriate disinfecting gadgets, such as, sprayer, brush, etc. should be made available at the premises where necessary.

Emergency Support

- All offices should establish a Corona Virus Protection Cell with at least two senior personnel from the organization.
- The Cell will keep in record of the following information of employees while opening after closure
  - Emergency contact information
  - Any symptoms or confirmed case of the individual in the last 14 days
  - Any symptoms or confirmed case in the household in the last 14 days
  - Travel history in the last 14 days
- They will ensure visitors’ information is maintained in the register at the Security desk.
- If any office users develop any symptoms, specially breathing problem, they are to inform the Corona Virus Protection Cell. The potentially infected person should be taken to the temporary isolation room in the office to follow the preparedness plan or call the hotline. After preliminary health care, s/he will be sent to the nearest quarantine facility or home immediately and later to government health facilities for further testing.
3. GENERAL PRINCIPLES OF HUMAN RESOURCE MANAGEMENT

- Office managers should carefully strategize their human resource management to avoid unnecessary physical presence in the office and use of resources during the emergency situation.
- Working methods and procedures may be revised to avoid crowding and maintain social distances while working in offices.
- Remember: Work from home, whenever feasible, is ALWAYS the best option.

Management of Work Force

- Employers should carefully consider who is absolutely needed in the office premise; whether work-from-home can supplement some of those needs.
- Employees with higher risks (elderly, pregnant, sick, people with underlying health conditions, self-isolating, etc.) should be encouraged and supported to work remotely from their homes.
- Employers may also consider encouraging employees using public transport to work remotely, walk as much as possible, and also on measures to follow when using public transport to ensure social distancing and sanitization.
- Employers will need to also consider how they can manage their workforce to reduce contact between the workers. This may include rotation of employees to come to office on an alternate or weekly basis, work in shifts, to create smaller and contained teams to work together regularly.
- Efforts should be made to keep the activity time as short as possible.
- Rotation of job and location should be reduced.
- ERP attendance or Bio-metric fingers print roster should be temporarily discontinued. Alternative methods, for example, signing of the register, may be useful.
- Employers need to ensure that workers can observe the 2m social distancing requirement while working. If it is not possible, employers will need to take mitigating actions, such as ensuring there are adequate facilities for hand washing, providing additional screens, appropriate PPE, and other measures.
- Office schedule and individual’s work hours can be staggered to avoid commuting during the rush hour on public transport as well as to reduce the congregation of employees at common spaces such as entrances or exits.
- Providing equipment for people to work at home safely and effectively, for example, remote access to work systems.
Staff Working Practice

• All employees shall work from their desks and avoid going to others', as far as possible during working hours at the office.
• Everyone must strictly adhere to the social distance of a minimum 2 meter while working.
• Office users can use phone, intercom, online networks to interact and discuss between colleagues even within the office wherever possible.
• Gatherings should be avoided or minimized.
• Meetings in person are to be avoided; instead, conference calls using online platforms can be used.
• Wearing of masks by both (between the staff and/or visitor) during one to one interaction should be a must.
• Efforts should be made to avoid possible means of transmission during meetings, for example, avoid sharing pens, documents, and other objects.
• Use and carrying of hard copy files can be discouraged wherever possible and soft copy correspondences, approvals, and other procedures can be encouraged.
• Approving officers can seek a soft copy of additional/supporting documents for approval. Approval in hard copies can be endorsed after the advisory is lifted to avoid major contamination risks.
• Restrict the use of a personal mailbox by any team member until further notice. The incoming official documents or parcels should be received at the Security Desk and kept on the parcel desk after sanitization. The concerned person will collect the item to his/her work station only after sanitizing at the Parcel Desk.
• Staff should put off shoes near the entrance and keep separate sandals for inside use.
• Site visits by clients, visitors, and contractors should be minimized. All sites should have display encouraging safety measures and social distancing.
• In-person workshops, seminars, conferences, or similar activities should not be organized under any circumstances until the advisory is lifted or further notification issued by the government.
• Introduce measures to keep a distance of at least 1 meter between people and avoid direct physical contact with other persons (i.e. hugging, touching, shaking hands), strict control over external access, and queue management (marking on the floor, barriers).
4. GENERAL PRINCIPLES FOR OFFICE SPACE USAGE

- COVID-19 protocols require the greater physical separation in workplaces via spatial and physical means to ensure that people are separated by at least one meter in all directions.
- The most effective procedures to decrease transmission of the virus lies in dividing the office into zones or areas where different types of activities can take place, for example, spaces for circulation, receiving visitors, work, meeting, maintaining personal hygiene, dining and relaxing. In the absence of such separations, different measures can be taken to spaces for different activities.
- A comprehensive strategy of space use will be essential to reduce the sort of interactions that can lead to more infections as the main facilitator of spreading infection is common airspace.
- Efforts should be made to reduce the density of people in the building (no more than 1 person per every 10 square meters), physical spacing at least one metre apart for common spaces, such as entrances/exits, lifts, pantries/canteens, stairs, where congregation or queuing of employees or visitors/clients might occur.
- The public-facing service functions to be clustered preferably in the ground-floor areas to isolate interactions with the public. This will ensure segregation between employees and visitors for health reasons.
- More entry points to the workplace can be introduced to reduce congestion.
- There can be restrictions on access to different parts of the office building or site.
- Workstations may be staggered or arranged in a manner so that people sit back-to-back or side-to-side for working rather than face-to-face whenever possible.
- If only it becomes impossible to move workstations further apart, the use of screens to separate people from each other or sneeze guards should be introduced.
- The spaces freed up by remote working can be used for the ones who need to work physically in the office.
- Circulation in the office should be planned to have one-way corridors to minimize cross-traffic.
- Personal items and clothing should be encouraged to be stored in personal storage spaces, for example, lockers during shifts.
- Use of locker rooms, changing areas and other facility areas needs to be regulated to reduce concurrent usage.
- Floor mats or carpets should be removed from the office space. If not possible, PVC mat or other washable protective materials should be used to cover the carpet or floor mat.
- Window curtains in the office space should be cleaned regularly with detergents or disinfectant solutions.
- Adequate daylight should be allowed inside the office spaces.
- Use verbal announcements, signage, and visual cues to promote social distancing.
- In multi-tenant sites, for example, shared working spaces, owners and all tenants should coordinate and work collaboratively to ensure safety.
Reception / Front Desk
• A circle of diameter of about 0.3 meters shall be marked using floor marking tape to locate the position of the visitor from the reception desk to ensure social distance. Following other visitors should also wait in queue keeping necessary distance; if possible, circles may be marked in the lobby to ensure a distance of 5 feet or 1.5 meters away from each other.
• Only one office staff will operate from the front desk at any given point in time.
• During rush time, entry of staff and visitors to be reduced and slowed down to maintain social distance by creating rows using flexible cords/barriers.
• Employees and visitors of different categories may be segregated from the entrance leading to specific service points with the help of appropriate signage.

Waiting Area
• Density of visitors in waiting areas should be strictly controlled, by different management strategies such as making prior appointments through phone calls and emails.
• Least number of visitors may be allowed to use the waiting area at a time. Maximum number to be set depending on the size of the room. Crowds should be discouraged at any time.
• Seating arrangements for visitors in waiting areas should avoid face to face positions within close proximity.
• Seats should be placed at a distance of 5 feet or 1.5 meters.
• Employees should not wait or seat in chairs in the waiting area; they are to avoid the area other than for circulation/movement.
• Only two (2) people at a time should be allowed to use any table for a quick discussion. They should be standing diagonally opposite each other maintaining a distance of 5 feet or 1.5 meters throughout the discussion.
• The clients can be directly guided to the office rooms to avoid formation of crowd.

Individual Cubicles / Rooms
• Single person should use individual cubicles/rooms to ensure separation between co-workers and block the vocal spray from coughs, sneezes, and loud phone conversations.
• If necessary, two (2) members of the same units may be allowed to use the cubicle/room by maintaining a distance of 2 meters while working. They should wear a mask all the time.
• Opaque or transparent partitions may be added up to seated eye level (1.25m) between two persons in the same cubicle.
• All the extra chairs should be removed from the cubicles.
Customer Care Area

- Customer Care Area is one of the most vulnerable spaces of an office due to its nature to attend customers. First principle should be to reduce density of people in the space by adopting different management techniques.
- Relevant recommendations suggested for the waiting and open office areas can be followed for the customer care areas as well.
- Workstations and shared equipment must be cleaned after usage by different users where use of hot desks and spaces cannot be avoided, for example, in call centers or training facilities.
- Physical space (distance) between employees and customers should adhere to required social distance.
- Remove/rearrange furniture to reduce density as well as to ensure desired social distance among all, including staff and visitors.
- Physical barriers such as partitions can be applied to ensure segregation among people without obstructing air flow and ventilation.
- Usage of signs, tape marks, or other visual cues such as decals or coloured tape on the floor, placed one meter apart, to indicate where to stand when physical barriers are not possible can be applied as necessary.
- Efforts should be made to minimize elements and equipment which require touch.
- The electronic payment reader should be moved away from the cashier. No-touch payment terminals should be encouraged for making transactions.
- Electronic audio system for visitors and customer care staff should be established.
Meeting/Conference Spaces

- Meeting rooms can be used alternatively for staff sitting with proper physical distances as physical meetings or conferences are discouraged in favour of online meeting.
- Meetings can be held outdoors or well-ventilated rooms whenever possible.
- If a physical meeting is essential, only small groups can be allowed maintaining social distance and hygiene. Seats can be arranged in such a way so that participants wearing masks are at least 1.5 meters apart, if there is space.
- Suggested sitting capacity in meeting rooms during meetings:
  a. Small meeting rooms: 2 persons or ⅓ ratio of the sitting capacity, whichever is lower.
  b. Large meeting rooms: 5 persons or ⅓ of the sitting capacity, whichever is lower.
  c. Conference room/Boardroom: 8 persons or ⅓ of the sitting capacity, whichever is lower.
- Maximum number of people in meeting rooms will be posted.
- Rest of the team members who need to attend the meeting will attend the meeting virtually using suitable software.
- Meeting room doors will be open for fresh air circulation unless being utilized for client meetings.
- No food allowed in any of the meeting rooms.
4. GENERAL PRINCIPLES FOR OFFICE SPACE USAGE (cont.)

**Open Office Area**
- Open office configurations need to limit/reduce population densities during the pandemic condition.
- Work stations need to be rearranged to supplement their efficacy in mobility, flexibility, communication, and artificial intelligence in case of team-based, self-employment and co-working workspaces.
- Seating arrangement should make sure each team member is sitting at least 2 meters away from each other.
- Desks and chairs can be spread out or arranged in a “chess” or zigzag pattern so that no two individuals are sitting directly across from each other.
- The computers in a continuous table should leave a gap between two persons, for example, ‘1 seat occupied - 2 seats vacant - 1 seat occupied’.
- In addition to min. 2 meters distance, the workstations can be shielded with space-dividing partitions providing a solid or glass or flexi-glass partitions up to 1.5m where none exists now.
- Each team member will write their own name on a paper and stick it on the back side of their chairs’ back rest. It has to be clearly visible and readable by everyone.
- No one will be allowed to change their work location without prior permission of the Sanitation-in-charge.
- If the workstation is shared by multiple users, all users must disinfect before and after working in there.
- It is mandatory for the team members not to touch anyone’s desk, keyboard, mouse, purse, bag, or stationery.
- No food should be allowed in any of the open offices.

**Spaces for Personal Hygiene**
- A sanitizer dispenser shall be mounted at a convenient place near the washroom, along with tissue papers and a dustbin with a lid.
- The soap bar to be replaced with shower gel in the shower area. Shower can be used by the staff members to sanitize themselves in emergency situations.
- Administration staff should allocate toilets for males, females, visitors and support staff prior to re-opening the office. A list indicating the users should be displayed outside every toilet.
- Common public toilets spread infections easily; special attention will be needed to keep them clean and sanitized regularly.
- Emphasize on individual’s responsibility to sanitize the handle, basin spout, jet spray, flush button and toilet seat before use.
- Waiting in front of the toilets that obstruct anyone’s movement should be avoided. Everyone should maintain social distance while waiting.
Spaces for Dining

- Common cooking and serving of food, tea, coffee and snacks should be avoided.
- Canteen premises must be kept sanitized and dry at all times, if not possible to be kept shut for the period of advisory.
- There can be fewer dining tables or people can dine in batches to maintain proper distance and avoid over-crowding.
- During taking meals, one should avoid face-to-face contact or conversation and should shorten meal times.
- Diners can also take meals out and use personal cutlery to eat alone.
- They should wash hands before eating and, if eating in a canteen, keep the mask on until sitting down to eat.
- The housekeeping staff, while serving water, tea, coffee etc. in paper cups, should wear hand gloves on sanitized hands.
- Canteens should strengthen personal protection for their employees. In addition to regular protective equipment such as uniforms and hats, all cooks in the kitchen and waiters in the hall should wear masks and single-use gloves and should replace them regularly.

Circulation Spaces

- Lifts, escalators should be thoroughly and regularly cleaned and sanitized several times with ultraviolet irradiation or fire safe disinfectants every day.
- Using stairways should be encouraged instead of lifts.
- Employees can be encouraged to walk clockwise, creating one-way flow in passages and corridors as adopted by many hospitals during the current outbreak.
- Lifts should not be crowded and passengers should maintain social distance. One or two persons can use a lift at a time.
- Wear a mask before entering the lift. If someone sneezes in the lift while you have no masks on, cover your mouth and nose with your sleeves and measures like clothes changing and personal cleaning should be taken right after.
- All railings, handrails or other such assistive elements be cleaned and sanitized periodically.
- Hand sanitizers shall be kept in the lifts.

Space for Temporary Isolation

- Identify a room or area where someone who is feeling unwell or has symptoms can be safely isolated.
- A toilet shall be preferably attached to the isolation room.
- Isolation room should be naturally ventilated having an operable window.
- The room must be kept ready with furniture so that the person may take rest until shifted.
5. DISINFECTION AND CLEANING

• Enhanced cleaning and disinfection of objects and surfaces that are touched regularly, including all shared rooms, surfaces, floors, bathrooms, and changing room are essential to prevent spread of Covid-19 infection in workplaces.
• The disinfecting and cleaning of offices can be divided into three parts:
  
  Pre-preparation: The processes to be done by cleaning staff before commencing operation of offices.
  
  Housekeeping: Daily processes by cleaning staff for keeping the office clean and hygienic and other procedures to be followed on days on which the office operates.
  
  Sanitizing: Daily processes by users for their safety from infection.

Disinfection Areas

• All areas of the office including the following shall be disinfected completely using user friendly disinfectant mediums before re-opening and the procedure should be repeated at least once a week.
  
  - Entrance gate/door of the building/office, walkway, driveway, parking, and open areas.
  
  - Walls and floors of reception and waiting areas, customer care areas, office rooms, meeting rooms, circulation areas, verandah, washroom, toilet, and sink etc.
  
  - All other surfaces especially metallic, glass and other non-permeable surfaces and equipment.

• Sanitize frequently touched surfaces, for example, call buttons of lift, bathrooms, handles, office equipment multiple times a day.
• Sanitize all worktops and equipment before and after working there.
• All the furniture should be cleaned regularly with disinfectants.
• Floor mat or carpet should be removed from the office space. If not possible, PVC matt cover should be installed over the carpet or floor mat to cover them.
• If possible, remove any object/fabric/surface covering/furniture that may retain dust and are not easy to clean.
• UV Air Purifier should be installed at the air intake points of the room. It helps addressing the pathogens and microbial load that slip from air conditioner’s filter.
• Establish disinfection stations for employees upon arrival and for packages /deliveries.
5. DISINFECTION AND CLEANING (cont.)

Cleaning Protocols
- Implement robust cleaning procedures.
- Daily cleaning of the entire office.
- Deep cleaning on a weekly basis.
- Increase existing cleaning staffing levels/contract with a 3P Service (Good for People, Planet, and Profit) for increased requirements.
- Require employees to wipe-down before and after usage (e.g., common workstations & meeting rooms, horizontal surfaces and high touch areas).
- Educate workforce on proper hygiene and cleaning procedure.

Disposals
- Face masks shall be disposed-off in closed bins or covered garbage boxes, preferably in independent ones and disposed-off separately and treat as medical waste. Appropriate procedure shall be ensured for medical waste disposal as per standards.
- Seal used tissues or masks in a plastic bag before discarding immediately in a closed bin labelled “unsafe waste” or “hazardous waste” to prevent the virus from spreading.
• Creating adequate provision for natural ventilation in the workplace is the best possible option in preventing spread of COVID-19. Simply opening windows, if possible, is strongly recommended.
• The possibilities of transmission of COVID-19 increase with re-circulating indoor air by air conditioners (Window AC, Split AC and Central Air Conditioning System). Air of enclosed air-conditioned spaces can be contaminated and spread the virus from any bearer to other despite maintaining the recommended social distance and hygiene in such offices.
• Thus, use of air conditioners may be restricted whenever possible.
• Office spaces without provisions for natural ventilation and dependent on air conditioners may need to install high-end office climate control systems.
• Most air conditioning system may need adjustments; therefore, heating ventilation and air conditioning (HVAC) engineers or advisers can be consulted when necessary.
• Built-in air purification filters in air conditioners can purify the air from finest dust particles and bacteria in some extent with High-Efficiency Particulate Air (HEPA) filter. Most of the air conditioners generally used in Bangladesh do not have HEPA filter installed in them. Some specific buildings like, pharmaceutical industry, food processing zones, hospitals and operation theaters has to install HEPA filter by regulation. However, those filters need to be checked for MERV rating to catch the 0.3-micron particles.
• Alternatively, portable air purifier can be used if needed to reduce the risk of contamination.
• General guidelines for different types of air conditioning and ventilation systems in COVID-19 situation are discussed below.
  - Air conditioner should run in ‘Fan mode’ for 60 minutes, before and after the office time while the fresh air unit should run in full speed mode to ensure sufficient fresh air level inside office spaces.
  - Office space fresh air shall be 8.5L/S per person with sufficient ventilation as per the ASHRAE guidelines.
  - Indoor unit filters need to be cleaned or disinfected frequently depending on the density of the space users.
  - Any kind of combustible cleaning agent of chemical solution should be avoided to clean the air conditioner.
  - Room Temperature should be maintained over 25°C.
  - HEPA filter should be installed at air terminal/ supply grill.
  - Additional dust filter should be installed with the indoor unit during COVID-19 pandemic situation.
  - Windows and doors should be opened frequently to encourage ventilation, where possible.
Naturally Ventilated Office Spaces
- Windows should be kept open for adequate period of time for natural ventilation. Sufficient fresh air from the air intake points of the room should be ensured.
- Use of ceiling/wall-mounted or portable fans should be preferred and they should be cleaned properly with disinfectant.

Additional measures:
- Air Exhaust System with proper air filter can be installed.
- UV Air Purifier, if available, can be installed at the air intake points of the room for further protection from pathogens and microbial load that slip from filter.

Window Type Air-Conditioned Office Spaces
- The thermostat of the air conditioner should keep on or above 25°C.
- The dust filter of the Indoor Unit should be cleaned regularly with disinfectant.
- Fresh air intake shutter should remain open to allow fresh air inside.
- Use portable air purifier.

Additional measures:
- Dust Filter should be installed with the indoor unit during COVID-19 pandemic situation.
- Additional high efficient filter can be installed on the dust filter of the indoor unit.
**Centrally Air-Conditioned Office Spaces**

- The thermostat of the air conditioner should keep on or above 25°C.
- The air flow speed should be set at Low speed mode whereas fresh air unit with High speed mode.
- Higher relative humidity should be maintained inside as dry air increases the chance of virus transmission.
- Air Exhaust System should be installed with proper air filter.
- The dust filter of the indoor unit should be cleaned regularly with disinfectant.

**Additional Measures:**
- HEPA filter should be installed with the air exhaust system.
- UV Ray Disinfection System can be installed at each indoor unit / circulating unit to avoid HEPA filters high pressure losses.
- Fresh Air Supply Unit should be installed in addition to the Air Conditioning System, if there is not sufficient fresh air inside the spaces.

**Others Maintenance Measures:**
- Air Conditioning System should be maintained in ‘Fan Mode’ every day for at least 30-60 minutes.
- In case of Water-Cooling System, all the pumps should run at least 30 minutes to disinfect every day.
- All kind of old and polluted water should be changed regularly to avoid chances of contamination.

**Split Type Air-Conditioned Office Spaces**

- It is advisable to avoid split type air conditioner or run as minimum as possible if high efficient filter is not possible to incorporate.
- The thermostat of the Air Conditioner should keep on or above 25°C.
- The dust filter of the Indoor Unit should be cleaned regularly with disinfectant.
- Use portable air purifier.

**Additional Measures:**
- Fresh Air Supply Unit should be installed separately beside the Air Conditioner System.
- Additional high efficient filter should be installed with the indoor unit during COVID-19 pandemic situation.
- Air Exhaust System should be installed with proper air filter.
Office Spaces with Large Gathering (e.g. Customer Care)
- Air ventilation should be ensured for the spaces with large gathering.
- Naturally ventilated or separate air conditioning system should be preferred.
- High temperature and high humidity reduce the transmission of COVID-19.
- Room temperature should be maintained over 25°C.
- Higher relative humidity should be maintained in the indoor environment as dry air increases the chance of virus transmission.
- Fresh air supply unit should be installed with the air conditioner.
- Additional high efficient filter should be installed with the indoor unit during COVID-19 pandemic situation.
- Portable or stand-alone air purifier should be installed.
- Condenser Drain Pipe should be cleaned regularly with disinfectant solution (1% Sodium Hydrochloride) or Ultra Violet (UV) ray.
- Air conditioner should run in ‘Fan Mode’ for 60 min, before and after the office time while the fresh air unit should run in full speed mode to ensure the sufficient fresh air level inside.

Air Sensitive Space (e.g. Server Room) of the Office
- Any kind of air sensitive space (e.g. server room) should be kept separated from the rest of the office.
- Staff working in the air-conditioned server room should wear protective equipment like facial mask, face shield and goggles.
- Portable air purifier should be used to disinfect sensitive air locked spaces.
Toilet Ventilation System:
- Exhaust fan including air filter should be installed in each and every toilet of the office. This shall stay in operation throughout the office hours.
- UV Air Purifier should be installed at the air intake point of the common toilets used by comparatively larger number of users.

Dining Space of the Office
- Air Conditioner should not be used in the dining area during this pandemic period.
- All windows should be kept open.
- UV Air Purifier can be installed at the air intake points, i.e. windows, of the room for further protection from pathogens and microbes.
- If the dining area is centrally air-conditioned it is recommended to
  - Install Fresh Air intake System should be installed with the Air Condition System.
  - Install High Quality Air Purifier if Air Conditioner do not have Exhaust System.

Food Preparation Space or Kitchen of the Office
- Kitchen Hood should be cleaned with disinfectants.
- Filter of the kitchen hood should be changed.
- Air Suction Fan or Exhaust Fan should be cleaned.
- Clean Air intake should be ensured in the Kitchen.


• AIA (2020, April 27) Presentation on ‘Reopening the Workplace: A Toolkit for Businesses’.


• Council of Architecture (2020, April). Standard Operating Procedure for Resumption of Institutes & Offices after Lock down. INDIA.
