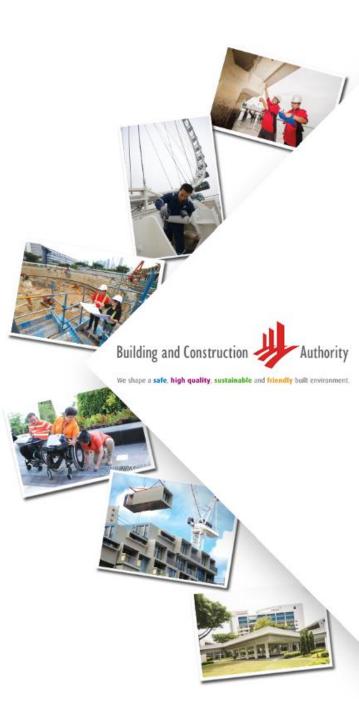
COVID-Safe Worksite and Tech-enabled tools



Multiple layers of Defence at Worksite

Builder (Main Contractor)

Put in place strict Safe Management Measures (SMM) at site

Monitor health status of workers and inform BCA thru daily submission All workers and personnel to adopt TraceTogether and use SafeEntry

Safe Management Officer (SMO) and Safe Distancing Officer(SDO) – Appointed by Builder

Requirements similar to Site Safety officer which has the relevant skillset Ensures that required SMM are fully implemented

BCA (Project Application process) + (Audit & Inspection Team)

Proessing of project applications for restart

Random Audit Inspections to check that SMM is properly implemented on site

CONFIDENTIAL – NOT TO BE CIRCULATED WITHOUT BCA'S PERMISSION



BEFORE WORKS START

1) Implement a System of Safe Management Measures at Worksites

Requirement	What companies must show when requested
 Builder To establish and implement a system on Safe Management Measures to provide a safe working environment and minimise risks of further outbreaks. To appoint of Safe Management Officers (SMOs) and Safe Distancing Officers (SDO) Duties of SMO To conduct inspections and checks to ensure compliance at all times, and to report to the Builder 	 List, duties and detailed tasks of SMOs. Show records of inspections, checks, and corrective actions.
 and document any non-compliance found during the inspections. Builder has implemented a detailed monitoring plan to ensure compliance with Safe Management Measures and to ensure issues (e.g. remedy of non-compliance, risk mitigation) are resolved in a timely manner. 	
SDO to assist SMO in ensuring the SMM are complied with and to help in carrying out necessary corrective actions. SDO to notify SMO and Builder if non-compliances to SMM are detected.	

Building and Construction Authority

BEFORE WORKS START

1) Implement a System of Safe Management Measures at Worksites

Requirement	What companies must show when requested
Builder to appoint Safe Management Officers ("SMO") and Safe Distancing Officers ("SDO") based	
on the following requirements:	
Total no. of workers $\leq 10 - 1$ SMO	
Total no. of workers > 10 but \leq 50 – 1 SMO and 1 SDO	
Total no. of workers > 50 – at least 1 SMO, and 1 SDO for every 50 workers	
For illustration,	
For a site with a total of 50 workers, 1 SMO and 1 SDO are required.	
For a site with a total of 100 workers, 1 SMO and 2 SDOs are required.	
SMO to assist in the implementation and coordination of the system of Safe Management Measures	
at the workplace.	
SMO/SDO are required to be on site for the full duration of when works are being carried out. They	
can hold this SMO/SDO role in addition to 1 other role (e.g. Workplace Safety Health Officer	
("WSHO")/Project Manager/Site Engineer/Safety Supervisor/Coordinator/Senior Foreman) but must	
be able to exercise the duties expected i.e. to ensure that SMM are properly implemented and	
adhered to.	
Workers include Builder's (Main Contractor) and Subcontractors' workers working on site, and	
workers working as office assistants.	



2. CONTROLLING SITE ENTRY/EXIT

Requirement

What companies must show when requested

Support contact tracing requirements

- Workplace access is limited to only essential employees and authorised visitors.
- Builder to ensure that all personnel entering or leaving the worksite have their ID cards (including NRIC, Workpass or driver's licence) scanned using SafeEntry (NRIC version).
- Builder to have a system to register and track all personnel entering/leaving site in addition to utilising SafeEntry (NRIC version). Information on the record of all personnel's health (including temperature, last swab date/results) who have been allowed entry to site, should be sent daily to BCA for our record.

Personnel includes all employees and authorised visitors

 All personnel, including employees, workers, suppliers and contractors, at the worksite to download and activate the TraceTogether app and have their handphones with them at all times.

Health checks and protocols

- Regular temperature screening and check for respiratory symptoms for all employees and workers at least twice daily, and visitors where relevant.
- Builders and subcontractors to ensure only healthy workers are allowed on site.

- Show list of workers who have downloaded TT
- Show records of staff and visitors' for at least 28 days

3. Segregation of teams to reduce physical interaction and ensure safe distancing at worksite

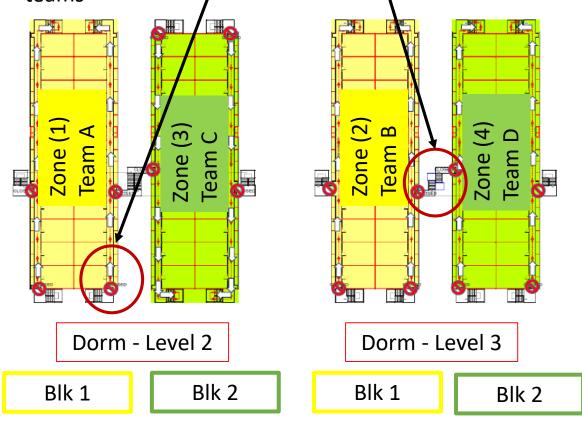
Requirement	What companies must show when requested
 Requirements for workers to be cohorted Workers working on the same project are to be cohorted together within a dedicated accommodation. Dedicated Accommodation refers to: 	List of all employees in an Excel spreadsheet with the following details:
 On-site CTQ - this is preferred as it reduces the need for transportation of workers to site Off-site dedicated dormitories 	Full name with NRIC/FIN Work arrangements ("not working",
 Requirements on segregated teams Segregated teams are required if workers are working on different activities. 	<i>"telecommuting", "onsite</i> (Team number - shift I)"
 Builder to segregate workers at the worksite into teams (undertaking the same activity^[1]), with each team restricted to working within a single zone. Builder must ensure each team of workers to work within the designated zone and away from workers of other teams. Zones must be separated from each other by at least 2m within the same floor or level, or by floor level. 	or "offsite (Team number- Shift II)")

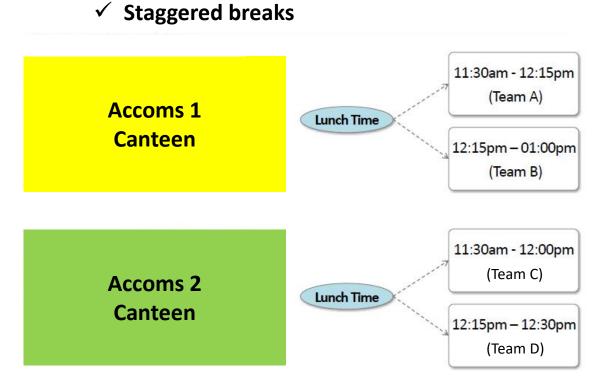
^[1] Activity is defined as work by a <u>same team of workers</u> to complete a component or part of building or to create space to facilitate the construction of underground structures. Workers of the same activity must be staying at dedicated accommodation and are defined as one team.



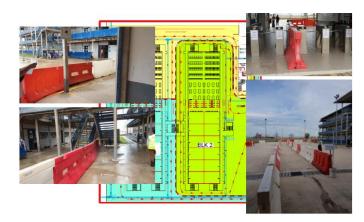
Ex: Segregation of teams at dorm and at site entrances and access routes to site

- $\checkmark\,$ Teams are separated by accommodation block
- Restricted access between blocks and floors
- To also illustrate separated access routes for different teams





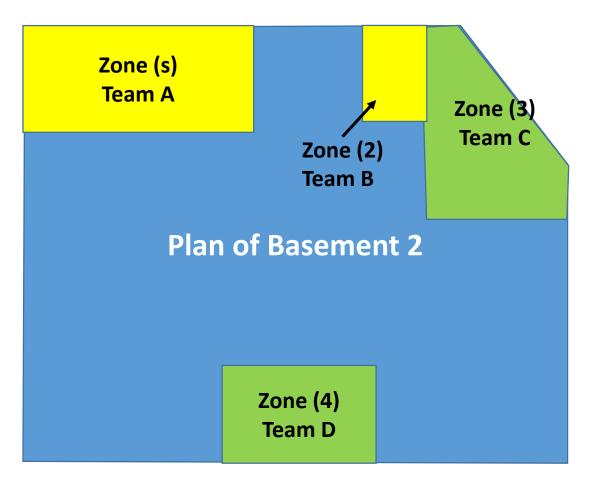
Entry/Exit
 points(separated
 by barricades) and
 access to their
 work zones





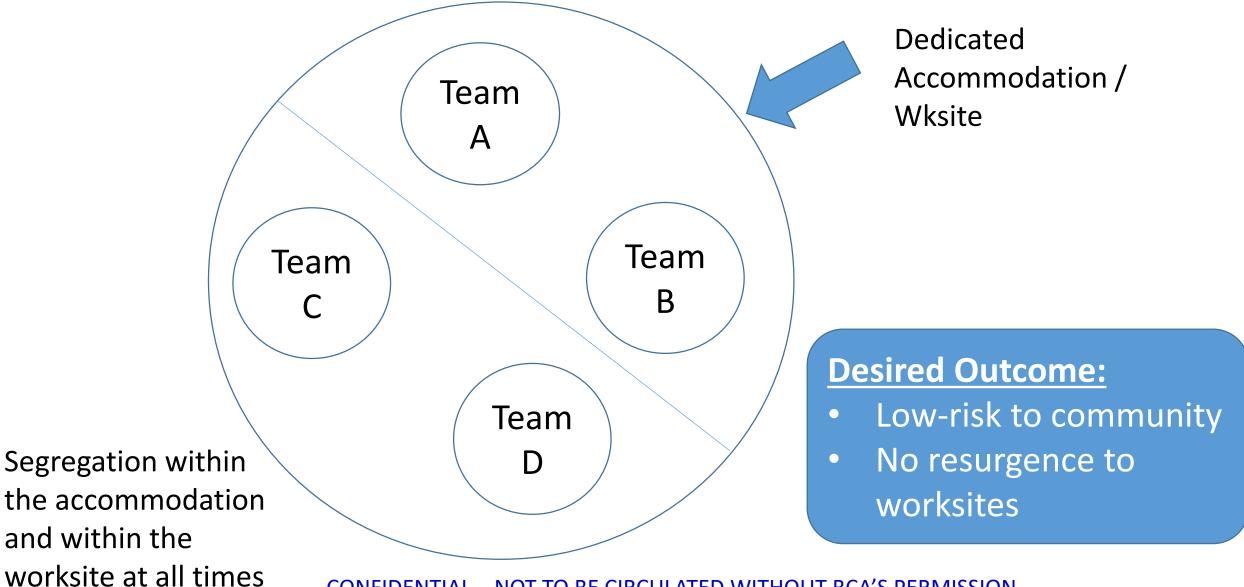
Ex: Segregation on site of teams by activity and by dorms

✓ Separation by work zones (example provided below)



Zone	Dorm	Activity
(1) A	Blk 1, Lvl 2	Formwork/ Falsework
(2) B	Blk 1, Lvl 3	Concrete casting
(3) C	Blk 2, Lvl 2	Strutting works
(4) D	Blk 2, Lvl 3	Bored pile hacking

The New Normal - Bubbles within a Bubble



CONFIDENTIAL – NOT TO BE CIRCULATED WITHOUT BCA'S PERMISSION

Requirements on segregated teams(cont'd)

- Builder to demarcate clearly zones within the site, and assign visual identifiers (e.g. coloured vest, T-shirt, armband, stickers on helmets etc.) to each team of workers, to allow individuals to distance themselves from other teams.
- Builder to provide **movement control plan** to ensure that facilities at the Construction Project Premise e.g. canteen, toilets, shared access points such as stairs, passenger hoists, are used in a manner such that the facilities will only be used by one Segregated Team at anytime.
- Builder to ensure no cross-deployment/interaction between workers in different shifts, teams or worksites, even outside work. This also applies to staff authorised to commute to site and non-office personnel e.g. staff residing on-site, authorised visitors etc.
- Builder to ensure that at any one time at a Construction site, Worker within a Segregated Team
 must be at least two (2) metre apart from any Worker of the same team.

Segregation at shared facilities

Builder to stagger working and break hours by work teams to reduce possible congregation of employees at all shared facilities².

- Rest areas in natural ventilation as much as possible for breaks
- Staggered times for entry and exit points for different teams.
- Stagger timings of lunch and other breaks for different teams.
- Stagger the use of shared facilities e.g. canteen, toilets to ensure no mixing across teams (i.e. segregated teams shall not be using same facilities at the same time).

²Shared facilities include entrances, exits, lobbies, canteens, toilets and pantries

What companies must show when requested

List of all employees in an Excel spreadsheet with the following details:

Full name with NRIC/FIN Work arrangements ("not working", "telecommuting", "onsite (Team number - shift I)" or "offsite (Team number-Shift II)") Building and Construction

DURING SITE OPERATION

4. Reduce physical interaction & ensure safe distancing at worksites

Requirement

Management and Admin staff Working in Site Office

• To segregate those working at site office(mgt and admin) from those that commute to the worksite. No direct interaction between them.

Site, Safety and Quality Supervisors

- All supervisors to conduct all inspections virtually, where possible.
- Site supervisor carrying out structural inspections shall ensure that the workers are kept away and as far as possible work in isolation. All comments, and follow-up actions shall be communicated to the contractor through email or WhatsApp.

<u>Short term workers (a few hours) who need to be at site e.g. Testers, specialist contractors, vector</u> <u>control, disinfection crew etc.</u>

 To carry out such visit site during off hours (i.e. at night/weekends or before work times) and leave site before the workers are on site.

Short-term works carried out by specialist contractors(1-2 days a week duration E.g. installation of civil-defence shelter doors, and waterproofing works etc where workers work on multiple sites All workers are to be housed in a dedicated dormitory of the company All workers are to only work in their designated zones as demarcated by the builder All workers are to be under the immediate supervision of a full-time SDO

show when requested Show signs and instructions that suppliers / contractors are required to implement safe distancing measures.

What companies must

CONFIDENTIAL (NOT TO BE CIRCULATED WITHOUT BCA'S CONSENT)



DURING SITE OPERATION

4. Reduce physical interaction & ensure safe distancing at worksites(cont'd)

Requirement4.

Delivery/Logistics

- Deliveries scheduled in a staggered manner and durations kept as short as possible
- Delivery personnel and plant operators to stay within their cabin and communicate with digital devices such as walkie-talkie. Meals to be taken within the vehicle. If the driver/operator needs to come out of the vehicle/cabin, they must wear a mask and keep a min. distance of 1m away from workers.

At communal shared facilities areas

- Builder will provide individually packed meals, with independent and personal tableware for workers.
- Use of PPE on site at all times, except during activities that require masks to be removed (e.g. mealtimes).

Ensure cleanliness of workplace premises

- Disinfection of high-use shared facilities and maintain records of disinfection.
- Adequate hand wash stations at exits of work areas.
- Easy availability of hand sanitisers and adequate washing facilities around the worksite.
- Discourage sharing of tools between workers/disinfect between users.

What companies must show when requested

•

CONFIDENTIAL (NOT TO BE CIRCULATED WITHOUT BCA'S CONSENT)

If disposable masks (e.g. N95, surgical masks) are used, show how many new masks each employee is issued with daily.



MANAGING SUSPECTED AND CONFIRMED CASES

Requirement	What companies must show when requested
• (MOM/MOH) Employers have required for each employee or worker to visit only one clinic for check-ups if unwell. Otherwise, employee or worker must inform the clinic of all recent doctor visits over past 14 days for any symptoms that may be related to COVID-19.	Show evacuation planShow follow-up plan
 For Suspected case SMOs have put in place an evacuation plan for suspected cases, as well as for all other onsite personnel. Builder to provide sick bay for timely segregation of suspected cases. 	
 For Confirmed case SMOs to put in place a follow-up plan in the event of a confirmed case. 	

Tech tools and how they can support industry in self-monitoring & A&I works

	Systems	Where to deployed	Aid Onsite monitoring	Time to deploy	Remarks
CONTOL AT	TraceTogether	Every FWs		Immediate	 Large site to be demarcated into different sites & assigned colour scheme Support MOH's contact tracing
SOURCE (Entry/ Exit, Geofencing)	SafeEntry (NIRC)	Every worksites/ demarcated zones within worksite		Immediate	
	Temp Taking	Every FWs	V	Immediate	 To ensure sick worker rest in dorm to recover
Health	MC Tracking	Every Employers	V		
Monitoring	DenitoringTele-MedicineEvery FWs√(eg: RMG, doctoranywhere.com)Immediate	 Minimise the need to travel out when sick 			
Ensure SDM	CCTV <i>AI - Image Analysis</i>	For huge sites (at major work areas and common areas)	V	CCTV – Immediate AI – later phase	Overall control to ensure no mingling (CCTV can be deployed first)