

# COVID CONSORTIUM



A knowledge share of current industry best practices and due diligence around workplace design and construction requirements adapting to changes in code and regulatory amendments in the post COVID-19 world.

# OUR MISSION

Boston’s Real Estate COVID Consortium’s mission is to conduct a knowledge share of current industry best practices and due diligence around workplace design and construction requirements adapting to changes in codes and regulatory amendments in the post-COVID-19 world. Its members include professional multiple disciplines of real estate industry, including architecture and interior design, audio visual integrator, code consultants, commercial real estate brokerage, commissioning agents, environmental engineers, general contractors, furniture dealers, MEP/FP engineers and owner’s project managers.

# WE ARE HERE FOR YOU

Since March 10th, when Governor Charlie Baker made the difficult decision to shut down large portions of Massachusetts, we have all been bombarded with a steady stream of COVID-19 impacts to the real estate industry, best practice guidelines and prognostications. Our mission is to curate this information and distill it down to the best of the best to help simplify & streamline your return to work planning process.

# WE WANT TO HEAR FROM YOU

We aim to be a trusted resource for our valued Boston real estate community. If you have any questions or ideas for content, please don’t hesitate to reach out to Denise Pied ([denise.pied@stvinc.com](mailto:denise.pied@stvinc.com)).

Please note, that although our current focus is limited to standard office space, we plan to cover special considerations for Life Science/Pharma, Healthcare & Academic markets in future publications.

# ISSUE 06 RETURN TO WORK TOOLKIT: Short Term Design Strategies for Workplace Re-Entry

As we navigate the phased re-entry process in the wake of COVID-19, landlords and tenants are evaluating how to make workplace adjustments that will adhere to government guidelines and enable employees to feel as comfortable and safe as possible. Yet, given that the long-term design implications of a post-COVID world are unknown and evolving, understandably there is a hesitancy to make significant and costly changes to the work environments we vacated just a few weeks ago.

To that end, most companies who are opening up their workplaces are seeking short term, flexible and budget-friendly solutions to prepare for employee re-entry. This week’s publication offers insight on temporary furniture solutions and graphic enhancements, as well as guidance regarding the inherent code implications related to these changes.

Future issues will take a deeper dive to spotlight relevant and timely topics including:

- Technology Considerations
- Long Term Real Estate Strategies
- Coronavirus Legal Advisory Topics

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Cover Artwork courtesy of SGA and Anthony Delanoix

FURNITURE

As we look at furniture solutions to support a return to workplace, there are some immediate design implications driving the potential strategies, including safety, density, cleanliness, and user-control. The impact of COVID-19 to the workplace and workforce has been and will continue to be a fluid situation for the foreseeable future, but one of the things we know for certain is that it is not a one size fits all approach.

While not meant to be prescriptive, we offer ideation and design considerations related to managing furniture solutions to address the short-term needs for site readiness while not losing site of long-term performance.

- Short-term:** Practical with maximum impact and value.
- Long-term:** Strategic with high performance and longevity.

SCREENS

There has been a lot of information circulating about screens, but are screens the right solution? Yes and No.

When considering the use of territory screens to aid in mitigating risk of virus spread, it is not a stand-alone application. Taking a layered approach as shown below will address the recent [Guidelines](#) indicating physical partitions must separate workstations where 6’ distancing is not achievable.

There is still much to learn about the efficacy of screens, but what we do know is there is not one solution, rather, it is a layering of solutions.



PPE

Use of face masks and attention to personal hygiene are fundamental.



DE-DENSIFY

A staggered occupancy plan based upon distancing requirements.



RE-ORIENT

When staggering capacity becomes a potential challenge, look to re-orient individual spaces to address areas where distancing and face-to-face are an issue.



ADD TERRITORY

Addition of screens to accommodate personal territory in physical distancing.

How long is it believed that the virus will stay on each type of surface?

A. Viral viability varies among setting and surfaces, but impact on transmission is unclear			
		Viability/ survival duration of virus	Mode of transmission
Air		Droplets can hang in the air for 0.5-3 hrs as aerosol <sup>1,2</sup>	Thought to be the "receiving" primary mode of transmission
Surfaces	Cardboard	Approximately 24 hrs on cardboard <sup>3</sup>	Hypothesized to be a mode of transmission <sup>4</sup> ; however, studies show low concentration of virus <sup>5</sup>
	Paper	4-5 days on paper <sup>6</sup>	
	Glass	Up to 4 days <sup>7</sup>	
	Metals	Up to 48 hrs on stainless steel <sup>8</sup> and for up to 4 hrs on copper <sup>9</sup>	
	Wood	Up to 4 days <sup>10</sup>	
	Plastic	6-9 days <sup>11</sup>	
Polypropylene (incl. packaging textiles) <sup>12</sup>	Ceramics	Up to 9 days <sup>13</sup>	Hypothesized to be a mode of transmission <sup>4</sup> ; however, studies show low concentration of virus <sup>5</sup>
	Stone	2-12 days <sup>14</sup>	

How long can Respiratory Particles linger?

As seen in a recent study from Aalto University

[View the study here:](#)



Thank You to this week’s lead contributor,  
**Amy Lalezari**

Partner, Director of Client Solutions | Environments at Work  
[amyl@environmentsatwork.com](mailto:amyl@environmentsatwork.com)

Let’s break down some of the screen options.

**Option 1:** Desktop units with simple adhesive application range from short-term cardboard or plastic to longer-term fabric solutions.



Image: Haworth, Corrugated Plastic

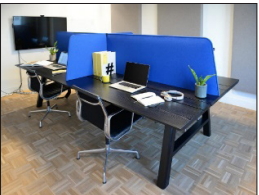


Image: BuzziSpace, Fabric



Image: Envwork, Cardboard

**Option 2:** Panel Stack Kits with applications ranging from magnetic fabric to longer-term glass units.

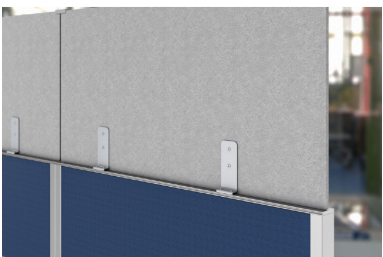


Image: Envwork, Magnetic Mount



Image: AIS



Screens shown are provided by Global Furniture Group and are only on display in their Boston showroom.

DIVIDERS

Crowd control is an important consideration in achieving safe distancing requirements. Look to products that complement your circulation path strategy with flexible solutions that are scalable within your facility - having the ability to reconfigure and relocate as needed during your re-entry plan.

- Clear mobile glass dividers provide transparent boundary and can also function as a writable surface for future use once your immediate need has been achieved.
- Retractable dividers are an option as you consider re-opening your common areas (such as cafeterias and other amenity zones) to guide traffic or demise space within larger areas.
- Mobile whiteboard dividers add a layer of boundary and flexibility between individual and group spaces as well as perform as a visual aid – some even offering a pop of color or graphic.
- Acoustic Dividers are a versatile option in that they create boundaries and aid in addressing acoustic challenges.



Image: Screenflex, Glass Screen

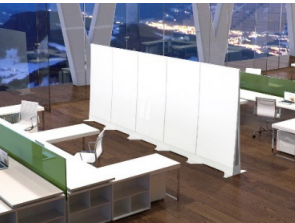


Image: Clarus, Glassboards



Image: Buzzispace, Acoustic Divider

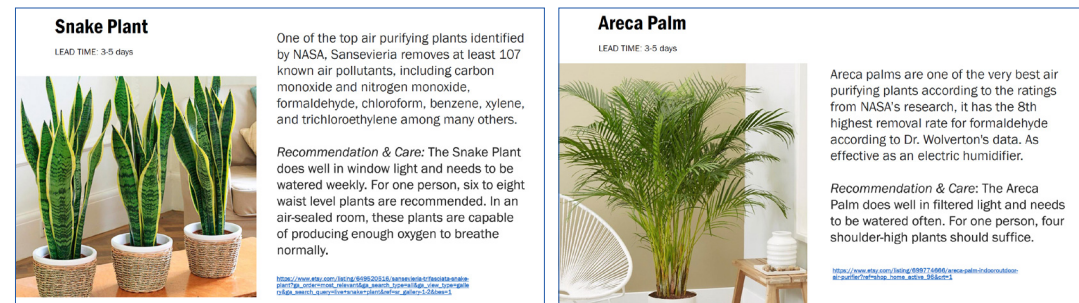
## PLANTS

With the many studies related to the benefits of **Biophilia**, plants have been making their way more and more into the workplace to a support well-being and a connection to nature.

With applications ranging from freestanding planters to storage toppers, it is the plants that act as a boundary to assist with distancing while enhancing the work environment.

*“Humans possess an innate tendency to seek connections with nature and other forms of life.” - Edward O. Wilson*

A couple of our favorite plant species that work well in low sunlight:



## STORAGE

De-cluttering your workstation will be an important step as it relates to a “clean desk policy” for ease of supporting enhanced cleaning protocols.

Storage units such as lockers can provide needed access to essential materials while providing another layer of personal boundary within individual and common spaces.



Image: Haworth

## MATERIALS

Providing the right materials is key to supporting areas where higher level cleaning and disinfecting protocols have been established. Think Durability!

Some cleanability and performance considerations when specifying materials for new furniture:

## Surfaces.

- Non-porous materials in high-touch countertops to provide a smooth finish.
- High-pressure laminate on work surfaces with seamless edge details.
- Limit horizontal breaks on vertical surfaces to address areas that may collect debris.
- Mindful materials on seat back and frame due to this being a high-touch area.

Forget Fabric? Not so fast.

Let's clarify some of the terminology related to the use of fabric as a performance product.

### Bleach Cleanable

A fabric that is bleach cleanable can be spot cleaned with a combination of household bleach and water, without weakening the fabric's fibers or changing the appearance of fibers. When used properly, bleach has the ability to kill both micro-organisms and viruses, including COVID-19.

## Antimicrobial

A fabric or surface that is antimicrobial has the ability to kill or inhibit the growth of micro-organisms. Antimicrobial fabrics and finishes do not offer protection against viruses, as viruses are not micro-organisms. Although there are benefits in the use of antimicrobial agents for bacteria and durability, the Environmental Protection Agency (EPA) has not claimed that antimicrobial product treatments are effective in preventing the spread of the COVID-19 virus. Additionally, the Centers for Disease Control and Prevention (CDC) has stated that proper cleaning and hand washing are the best ways to prevent infection.

## Textile Treatments

There are new levels of treatment for maximum performance and cleanability for textiles. Offering improved abrasions, seam slippage, and extended fabric life for heavy use areas, [Alta](#) provides unparalleled repellency and performance for the workplace.

Additionally, the introduction of a moisture barrier is also important when applying performance fabrics or treatments to aid in your durability efforts.

# SIGNAGE + GRAPHICS

## Thoughts on short-term signage in the era of COVID-19

The need to communicate “new normal practices” visually was quickly addressed. We have already become accustomed to temporary measures put in place which indicate where to stand, what direction to walk, how to wash hands properly and that PPE must be worn. Nothing short of amazing how quickly we were able to adapt and take visual direction. However, we should not be resining ourselves to these as permanent solutions for message communication in the branded environments we are so passionate about. Blue painters’ tape and mass-produced decals not meant for commercial grade carpet should not be accepted as the final fix. As designers and visual communicators, we have an opportunity to do something that is more thoughtful and welcoming as people re-enter these spaces. We have a duty to provide messaging that works into the visual language already set forth with the space and that most importantly communicates clearly.

Messaging, and the communication of that message is the most important factor in this era of COVID-19. Organizational management and leadership teams are, and will remain the most critical means of change management. As we transition between phases of reopening and evolving best practices, signage is there to support this message set forth by organizational leaders. Signage alone is not meant to be the primary means of delivery and as such should be simple, direct and thoughtfully placed reinforcements of the new plan of action or changes in practice.

## Opportunities for more permanent solutions:

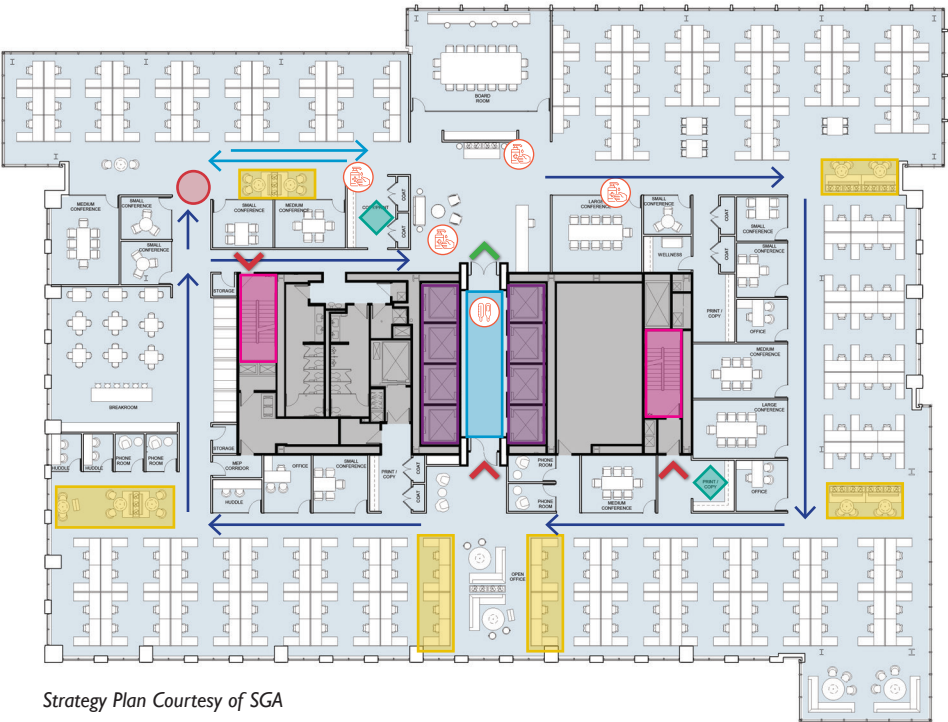
- **Digital Signage** - An underutilized resource for communicating updates and frequently changing information and messages, an advantage over static signage. Ask, where is the “central message center” in an office, building, campus and is there an opportunity to have a digital message screen? These can be easily cleaned, remotely updated, stay on brand, and convey an ever-changing narrative in regards to safety and change management.
- **Material Selection** - Be sure that proper materials are being used for the right surface and application. For example, 3M IJ40c, adheres well to commercial carpet and hard surfaces and when removed does not leave residue behind. This can also be laminated with a 3M slip resistant heavy-duty laminate intended for floors. Contact a qualified vendor or consultant to ensure proper materials are being used for the correct application.
- **Branding** –Working with professional experiential designers will allow COVID-19 related signage and messaging to stay on brand, align with organizational culture or integrate with the visual language already set forth within an existing space. Subtle queues such as color and font can be incredibly effective at maintaining the look and feel of your space while still getting your message across.
- **Built-in Reminders** –As new space comes about in the post-covid world, and new social practices become routine, what will it look like to have social distancing, circulation and wayfinding queues built right into the space? Examples of this include striping or color changes in carpeting every 6ft, traffic flow patterns in the flooring, directional accent lighting and digital message screens. All are possibilities that may work as subtle reminders and opportunities to incorporate messaging at key locations as these practices become normal.



Thank You to this week’s guest contributor,  
**William Galligan**

Founder | Wayfinder Collaborative

[wgalligan@wayfindercollaborative.com](mailto:wgalligan@wayfindercollaborative.com)



Strategy Plan Courtesy of SGA

## Strategic Planning:

Working with a design team to create and implement a thoughtful strategic plan, like the one seen to the left, is an important first step when considering how your organization should return to work. This is meant to be used as a plan of action; identifying key areas such as, but not limited to:

- Paths of Travel
- Single use stairs (one-way vs two-way)
- Entrance vs Exit points
- Potential Congestion Points
- Welcome Areas
- Hygiene + Sanitizer Stations



Sign Location Plan Courtesy of SGA

## Signage Location Plan:

Once the strategy is decided, the next step is to work with the design team to identify sign types and locations. An example Signage Location Plan shown to the left allows you to identify thoughtful locations of signs and sign types so as to not inundate the space with too many signs and messages. We want to provide clear direction and messaging to mitigate confusion and congestion.

See Appendix for further detail on sign types, messaging and design.

CODE REQUIREMENTS

Points of Consideration with Access Control and New Wayfinding Signage

Many tenants are installing new card readers to allow touchless and secured entry into their work spaces as part of their office re-opening plans. Be aware that this door hardware could be creating an egress code violation. Any alterations to the means of egress requires the owner or authorized agent to first submit an application to the building official and obtain the required permit (IBC 2015 Edition 105.1). There are two main types of door hardware used with card readers - electromagnetic hardware and electrified hardware.

If the card reader is part of an electromagnetic locking system, the building code will require additional hardware on the door to ensure it is readily available in the event of an emergency. The electromagnet used as part of these access control systems can hold a door closed even if the handle is used from the egress side unless it receives a signal to release. This hardware consists of a motion sensor and "Push to Exit" button located within 5' of the door or a panic bar with a built-in switch in accordance with UL294 designed to cut power to the magnet. Additionally, programming of the door hardware is needed to make sure that it unlocks on loss of power and activation of the building's fire alarm or automatic sprinkler system (IBC 2015 Edition 1010.1.9.8 and 1010.1.9.9).

As an alternative to electromagnetic door locking hardware, electrified hardware can be used and tied to a card reader to prevent ingress. The main difference between electrified hardware and electromagnetic hardware is that the mechanical door latching mechanism with electrified hardware can always be used from the egress side without the need for additional hardware and programming.

Hopefully it goes without saying, but locking devices such as deadbolts or pad locks should never be added to doors without checking if they are part of the required means of egress from a building.

Another point of caution with implementing COVID 19 workplace safety requirements is to keep the means of egress system in mind when designing any one-way signage in the office. Exit access corridors in office occupancies are typically designed for egress in both directions. Many tenants are installing one-way directional indicators and training staff on revised movement routes through the building. As part of employee training when they return to work, it should be a point of emphasis that in case of an emergency, travel in both directions is still available and that the directional indicators only apply for normal day to day use. Furthermore, landlords and tenants should be aware that exit signage is not permitted to be modified or covered if previously installed and approved.

Complying with the MA Safety Standards for Office Occupancies  
Identifying your 25% occupancy limit.

The State of Massachusetts Safety Standards for Office Occupancies permitted business and other organizations to reopen starting March 25th, 2020 provided, that among many other standards, they maintain a headcount of 25% of their maximum occupancy (Note that cities and towns may have more restrictive dates and thresholds). The State defined Maximum Occupancy as follows:

Businesses and other organizations shall limit occupancy within their office space to no more than

- 25 percent of (a) the maximum occupancy level specified in any certificate of occupancy or similar permit or as provided for under the state building code; or (b) the business or organization's typical occupancy as of March 1, 2020
- Any business or other organization that has been operating as a "COVID-19 Essential Service" as of May 18, 2020 shall have until July 1, 2020 to comply with these occupancy limitations

Businesses and other organizations may exceed this maximum occupancy level based on a demonstrated need for relief based on public health or public safety considerations or where strict compliance may interfere with the continued delivery of critical services

The State's reference to an occupancy level identified on a certificate of occupancy or determined per the state building code has led many tenants to ask the question of where they can go to find out this information.



Thank You to this week's lead contributor,  
**Chris Lynch**  
Principal | Code Red Consultants  
[chrisl@crclfir.com](mailto:chrisl@crclfir.com)

Certificates of Occupancy

Most cities and towns do not issue certificates of occupancies with a listed maximum occupancy count. A certificate of occupancy will generally reference a permit number and that permit may have a set of design drawings that were submitted which identified a maximum occupant load. For example, the certificate of occupancy form issued by Boston does not contain a field for maximum occupancy count for an office occupancy (Sample provided in Figure 1).

Depending on the age of your space since the time of last renovation, navigating to a copy of those documents could prove to be a challenge. If you are fortunate enough to find a set of the permit drawings submitted, see if there is a code analysis with occupant load calculations within the drawing set. They are typically on a code sheet or general notes sheet and would be in a format similar to what is shown in Figure 2.

Calculating the Maximum Occupant Load per the Building Code

The Massachusetts State Building (780 Code of Massachusetts Regulations (CMR)) 9th Edition, is the current version of the State Building Code and is based on the 2015 Edition of the International Building Code (IBC). Within Section 1004 of the IBC, there are occupant load factors for egress based on the use of a given space. For business areas, it prescribes an occupant load factor of 100 square feet per occupant based on the gross area of the space (1). The gross area is comprised of all area measured from the inside face of the exterior walls, excluding vent shafts and courts. Note that the origins and purpose of this calculated occupant load is to size the means of egress. For this reason, the calculated occupant load used with this methodology typically far exceeds what the actual planned occupancy is for a space based on a proposed furniture layout.

Tenants can often refer to their lease as the starting point for identifying what area to apply the occupant load factor to. The following image shows a simple office floor plan.

Occupant Load as of March 1, 2020

It is most likely that the typical headcount in the office prior to COVID-19 will produce the lowest occupant load of the methods referenced. In fact, it is common for an actual program occupant load of an office occupancy based on modern day furniture layouts to be substantially less than the calculated occupant load for egress from the building code. If we use the sample floor plan shown below, with an aggregate square footage of 7,000 SF, we would get a calculated occupant load of 70 people. Based on the furniture plan shown, the actual day to day occupant load would be approximately 35 occupants. Office tenants should be aware that if they employ multiple methods for determining their maximum count, they could easily see swings of 50% in the permissible population.

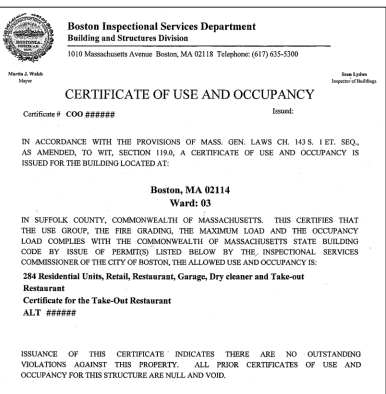


Figure 1: Sample Certificate of Occupancy

OCCUPANT LOAD SUMMARY TABLE - LEVEL 04			
FUNCTION OF SPACE	AREA (SF)	OCCUPANT LOAD FACTOR	OCCUPANT LOAD
CONFERENCE C	1,452 SF	15 SF	96
LOUNGE	874 SF	15 SF	59
LABORATORY	24,199 SF	100 SF	242
OFFICE	23,895 SF	100 SF	239
STORAGE/MEP	926 SF	300 SF	4
	51,345 SF		642

EXIT CAPACITY SUMMARY TABLE - LEVEL 04					
EXIT #	DOOR WIDTH (INCHES)	DOOR CAPACITY (PERSONS)	STAIR WIDTH (INCHES)	STAIR CAPACITY (PERSONS)	ACTUAL USE (PERSONS)
EXIT A	34	226	44	220	214
STAIR B	34	226	44	220	214
STAIR C	34	226	44	220	214
				660	642

Figure 2: Sample Occupant Load + Exit Capacity Calculation on Code Sheet

TABLE 1004.1.2 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT	
FUNCTION OF SPACE	OCCUPANT LOAD FACTOR <sup>1</sup>
Accessory storage areas, mechanical equipment room	300 gross
Agricultural building	300 gross
Aircraft hangars	500 gross
Airport terminal	
Baggage claim	20 gross
Baggage handling	300 gross
Concourse	100 gross
Waiting areas	15 gross
Assembly	
Gaming floors (keno, slots, etc.)	11 gross
Exhibit gallery and museum	30 net
Assembly with fixed seats	See Section 1004.4
Assembly without fixed seats	
Concentrated (chairs only—not fixed)	7 net
Standing space	5 net
Unconcentrated (tables and chairs)	15 net
Bowling centers, allow 5 persons for each lane including 15 feet of runway, and for additional areas	7 net
Business areas	100 gross

Figure 3: Table 1004.1.1 2015 International Building Code

(1) It should be noted that conference areas are typically calculated at 15 SF per occupant with tables and chairs seating arrangement. It is assumed that to maintain required social distancing, such seating layouts will not be employed as part of the re-opening of offices.

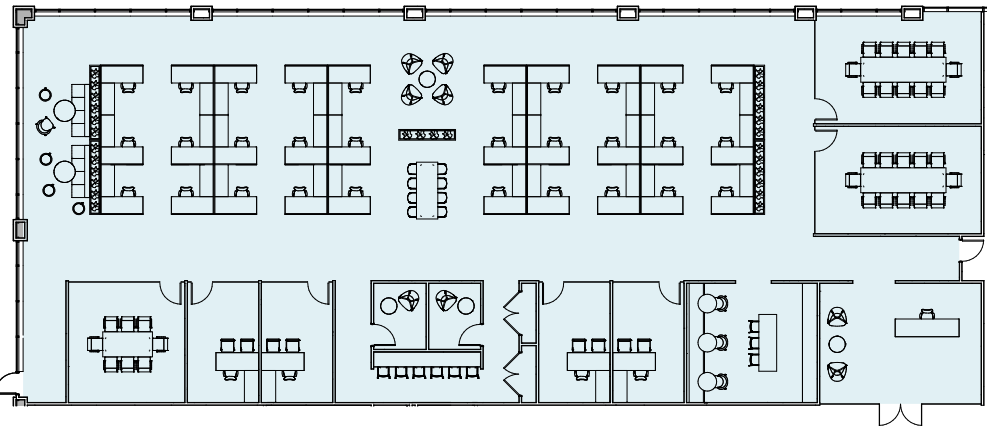
What if you have multiple numbers?

The State’s Office Workplace Safety Standard did not explicitly state that offices’ are to utilize the most restrictive population count of the various methods identified. What is an office tenant to do if their population on March 1, 2020 was significantly less than what is listed on their Certificate of Occupancy or through the use of the calculated method in the Building Code?

In cases such as these, it is recommended that business proceed with great caution before assuming they can utilize the larger of the two numbers based on the language in the 25% occupancy count section of the State’s Workplace Safety Standards. These Standards also require that 6’ social distancing be maintained at workstations and in conference and gathering areas unless partitions that are taller than the occupants are provided. Once the 25% occupancy limit data is combined with a projected seating layout designed to meet the social distancing requirements, office tenants should be able to gain a comfort level as to the true headcount they can safely manage in their space.

Installing Partitions as part of your office re-opening? Do not forget about the sprinklers

As part of the State’s Office Workplace Safety Standard, the use of partitions between work stations can be used where 6’ of distance cannot be maintained provided the dividers are taller than the occupants. Before installing these partitions, be aware that these dividers could be obstructions to your automatic sprinkler system. The general rule is that partitions would need to be at least 18” below the sprinkler deflector to avoid being considered an obstruction (NFPA 13 8.6.5.3.1). Sprinkler obstructions can create significant life safety issues, as they could prevent water from reaching a fire, allowing it to grow to a size that could overwhelm the system’s ability to control it. If you need to install a partition within 18” of a sprinkler, an engineer should be consulted to review additional obstruction rules within NFPA 13 or look to potentially install an additional sprinkler head.



References:

- 2012 NFPA 101, the Life Safety Code
- International Building Code, 2015 Edition
- 780 CMR, Massachusetts State Building Code, 9th Edition
- NFPA 13, Standard for the Installation of Sprinkler Systems, 2013 Edition

CONCLUSION

Long Term Design Strategies

While we have more questions than answers about the ultimate future of the workplace, we’re confident the office is here to stay. Although many anticipate the rise of remote work, the benefits of in-person collaboration and face-to-face interactions remain paramount. COVID-19 is a disruptor, without which the familiar and recent ways of working would still be in effect.

The office has always been responsive – responsive to everything from changes in technology to the cost of real estate to generational impacts. In a post-COVID-19 world, looking back through the lens of that experience, we will have an opportunity re-evaluate our old ways of thinking to help shape the office of the future.

There will be many considerations, including:

- How might your workplace standards and RSF/per person needs be adjusted going forward?
- Do you anticipate an increase in remote work/distributed workforce?
- What sort of behaviors, collaboration, and productivity opportunities can your physical office space offer that remote work cannot?
- How can remote work be supported through technology and furniture/space adjustments?
- Will access to remote talent outside of your geography diversify your real estate portfolio?
- Is a satellite office right for you?
- What are the costs associated with long term adjustments to the physical space?
- How can your unique business, brand, and culture be supported both physically and virtually?
- What is the future of social and amenity spaces?
- What technology can I leverage to inform my real estate strategy?

In future issues, we will address many of these long-term considerations and provide additional insights and guidance on how organizations may adapt and evolve.

Thank you to this week’s additional guest contributors:



**Gable Clarke**  
Partner, Director of Interior Design | SGA  
[gclarke@sga-arch.com](mailto:gclarke@sga-arch.com)



**Matthew Maggiacomo**  
Environmental Graphic Designer | SGA  
[mmaggiacomo@sga-arch.com](mailto:mmaggiacomo@sga-arch.com)

MEET THE TEAM  
HEAR FROM THE INDUSTRY EXPERTS

STV|DPM has brought together a multidiscipline industry team (Project Management, Construction, Commercial Real Estate Brokerage, Commissioning, Code Review, Design, Environmental Engineering, Technology & Furniture) to conduct a knowledge share of current industry best practices and due diligence around workplace design and construction requirements adapting to changes in codes and regulatory amendments in the post-COVID-19 world. We strongly believe innovative project strategies & checklists around these disciplines could assist our active clients and other Real Estate leaders in assessing new in office & remote work requirements as they bring their employees back to work and going forward. The ultimate goal is to develop a "Toolkit" of best practices resources that could be rolled out as part of ongoing & new project work.



Owner's Project Manager  
**Denise Pied**

Vice President, Project Executive | STV|DPM

Denise is a co-founder of the Boston Real Estate COVID Consortium. Denise leads STV|DPM's Corporate Market sector. Denise has over 20 years of experience leading project teams & advising clients' real estate project delivery strategies.

[denise.pied@stvinc.com](mailto:denise.pied@stvinc.com)



Owner's Project Manager  
**Sandra Gucciardi**

Director of Business Development | STV|DPM

Sandra is a co-founder of the Boston Real Estate COVID Consortium. At STV|DPM, Sandra is responsible for client strategy and development initiatives, and assists with the strategic direction to develop new business and product offerings.

[sandra.gucciardi@stvinc.com](mailto:sandra.gucciardi@stvinc.com)



Owner's Project Manager  
**Eva Hamori**

Senior Project Planner | STV|DPM

Eva Hamori is an industry leader in the management of complex client relocation projects. With her experience as a certified Change Management Advisor, she is able to create and implement change strategies which maximize adoption and minimize resistance.

[eva.hamori@stvinc.com](mailto:eva.hamori@stvinc.com)

WE WANT TO  
HEAR FROM YOU

If you have any questions for the consortium or ideas for content, please contact  
**Denise Pied** at [denise.pied@stvinc.com](mailto:denise.pied@stvinc.com)



Architect  
**Gable Clarke**

Partner, Director of Interior Design | SGA

As a Partner and Director of Interior Design at SGA, Gable oversees corporate interiors projects of all scales. She is responsible for design oversight, client relations, business development, mentoring and firm leadership.

[gclarke@sga-arch.com](mailto:gclarke@sga-arch.com)



Audio / Visual  
**Phil Muscatello**

SVP, Marketing + Business Dev. | Adtech Systems Inc.

Philip is an owner of Adtech Systems. He currently serves as VP of Business Development. Philip received his MBA from Boston College and his BA from Saint Joseph's University.

[philip.muscatello@adtechsystems.com](mailto:philip.muscatello@adtechsystems.com)



Commercial Brokerage  
**Adam Meixner**

Senior Partner | I28 CRE

Adam's focus is on the Office Leasing and Sales sector within the Central I28/95-Mass Pike submarket. Assisting with space acquisitions/dispositions, lease renegotiations/ extensions and strategic planning are among Adam's strongest assets when engaged as a Tenant Representative.

[adam@i28cre.com](mailto:adam@i28cre.com)



Code  
**Chris Lynch**

Principal | Code Red Consultants

Chris is a founding principal at Code Red Consultants and is a practicing fire protection engineer and code consultant. He excels at leading project teams and working with clients to ensure that new and existing buildings are safe and code compliant.

[chrisl@crcfire.com](mailto:chrisl@crcfire.com)



Construction  
**George McCarron**

Project Executive | Lee Kennedy

George has over 40 years of experience in the construction industry. As a Project Executive with Lee Kennedy, his ability to grasp the needs of the client and communicate with design teams make him an invaluable resource and asset.

[gmccarron@leekennedy.com](mailto:gmccarron@leekennedy.com)



Commissioning Agent  
**Steve Rizzo**

President | Synergy Consultants

Being involved in the design and construction industry for 45+ years, Steve's expertise is in Building Commissioning and operations for HVAC, Plumbing and Electrical Systems. He specializes in complex medical facilities ranging from Gene Therapy development Labs to Patient Care Facilities.

[srizzo@synergyconsultants.net](mailto:srizzo@synergyconsultants.net)



Design Engineers  
**Michael Camoscio**

Associate, Senior Engineer | STV Incorporated

Michael manages multi-discipline projects for several public agencies. Mike leads the mechanical group in STV's Boston office and most recently advised the Convention Center Authority during setup for Boston Hope.

[michael.camoscio@stvinc.com](mailto:michael.camoscio@stvinc.com)



Environmental  
**Stephan White**

President | PES Associates

Stephan White is the founder and President of PES Associates, a national engineering and environmental firm with headquarters in Hingham, MA. Throughout his career, he has gained extensive experience in environmental consulting, property due diligence and industrial hygiene.

[swhite@pesassociates.com](mailto:swhite@pesassociates.com)



Furniture  
**Amy Lalezari**

Partner, Director of Client Solutions | Environments at Work

Amy has over twenty years of workplace consulting experience. She is passionate about people, well-being, and performance and is dialed into key business drivers, research, and trends impacting the workplace. Her background in design, facility planning, and contract furnishings gives her a unique perspective within the commercial real estate community.

[amyl@environmentsatwork.com](mailto:amyl@environmentsatwork.com)



Furniture  
**Tim King**

*Project Executive | COP / DIRT*

Tim King is a construction expert focusing on pre-fabricated, offsite modular construction for Interiors work. With a concentration on the healthcare market, Tim brings pre-fab benefits of speed, flexibility and higher functionality to all market segments.

[tim.king@cop-inc.com](mailto:tim.king@cop-inc.com)



MEP Engineers  
**Mike Quigley**

*COO | WB Engineers*

Michael has 18+ years of experience in the industry, leading projects and people. His natural talent for being able to motivate a team to do great work and address complex scenarios is why he is leading WB's COVID-19 remobilization efforts.

[mquigley@wbengineering.com](mailto:mquigley@wbengineering.com)



MEP Engineers  
**Ray Doyle**

*Managing Principal, Life Sciences | WB Engineers*

Ray is the Managing Principal of WB Engineers + Consultants' office in Washington, DC, and a Practice Leader for Life Sciences. With over 25 years of experience, Ray helps clients find solutions to improve indoor air quality and reduce tenants' exposure to COVID-19.

[rdoyle@wbengineering.com](mailto:rdoyle@wbengineering.com)

**Note:** The resources provided in this guide should not be interpreted as legal advice. If you have any questions, please consult your legal counsel. Neither the Boston Real Estate COVID Consortium nor its individual members are responsible to anyone for the contents of this page and shall have no liability to anyone for the same. The views and opinions in this page are that of the author and not necessarily of the author's employer.

# APPENDIX

- 1. Code Section Images
- 2. COVID-19 Temporary Signage Types



Electromagnetic Lock



Key Card Reader



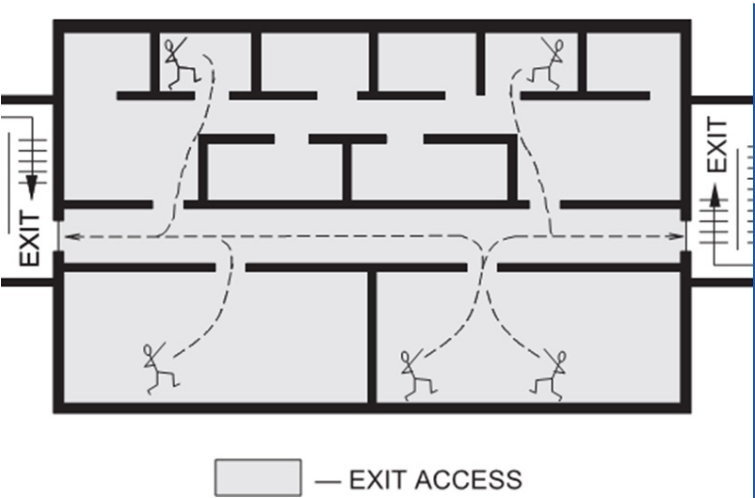
Electrified Hardware



Motion sensor and push to exit button provided on egress side of door with electromagnetic locking device



Egress door with push bar and pad lock




Egress Map + Doors


# SIGN TYPES AT A GLANCE

## Welcome.


We require all visitors and employees to follow current guidelines on physical distancing and good health practices.




Masks are required.




Please practice social distancing throughout the space.



Please use the stairs if you're able. Stairs will indicate direction of use.



Many hallways and corridors are one-way. Please follow the arrows.



In case of emergency, please follow permanent building procedures to safely exit.

**ST-A**

**ST-A | WELCOME SIGN**


Office Print Size: 11" x 17"  
Office Print Material: Paper

Production Print Size: As Noted  
Production Print Material: Print Mounted to 1/4" thick Poster Board


**Suggested Placement Location:**  
Entry Vestibules or Lobby Spaces

## Elevators.


Please follow social distancing guidelines when using the elevators.




Only 2 people at a time when using this elevator.



Please reserve elevator priority for those unable to use stairs.



Reminder, press elevator buttons with elbow to reduce the spread of germs.



In the event of an emergency, please follow permanent building procedures to safely exit.

**ST-E**

**ST-E | ELEVATOR USE SIGN**

Office Print Size: 11" x 17"  
Office Print Material: Paper

Production Print Size: 11" x 17"  
Production Print Material: Print Mounted to 1/4" thick Poster Board

**Suggested Placement Location:**  
All elevators

## Huddle Room 3.

This room is available for all employees.

Please follow social distancing and office cleaning guidelines when using H3.



Only 1 person at a time when using this room.



Please wear gloves or use sanitizing wipes to clean + disinfect surfaces you have touched. Including wipe container!



Hand sanitizer station is available for use before + after using this room.



In the event of an emergency, please follow permanent building procedures to safely exit.

**Huddle Room Sign**

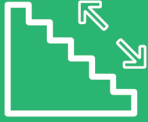
**ST-E | ELEVATOR USE SIGN**

Office Print Size: 11" x 17"  
Office Print Material: Paper

Production Print Size: 11" x 17"  
Production Print Material: Print Mounted to 1/4" thick Poster Board

**Suggested Placement Location:**  
H3

This staircase is two-way.



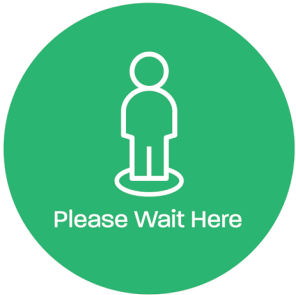
**ST-D.C - Both**

**ST-D | STAIRWAY ID SIGNS**

Office Print Size: 8.5" x 11"  
Office Print Material: Paper

Production Print Size: 8.5" x 11"  
Production Print Material: Vinyl

**Suggested Placement Location:**  
Stairway Entrances (on each floor)



Please Wait Here

**ST-F**

**ST-F | FLOOR MARKER**

Office Print Size: 8.5" x 11"  
Office Print Material: Paper

Production Print Size: 8" Diameter  
Production Print Material: Vinyl

**Suggested Placement Location:**  
Elevator Lobbies (on floor 6 ft apart in all directions)  
Inside Elevators (in opposite corners)  
Anywhere where queueing up is required.

## GENERAL SIGNS

### GENERAL SOCIAL DISTANCING SIGN


### GENERAL HAND SANITIZER SIGN

Office Print Size: 8.5" x 11"  
Office Print Material: Paper


Production Print Size: 8.5" x 11"  
Production Print Material: Vinyl

**Suggested Placement Location:**  
Where desired.

Please practice social distancing throughout the space.



Hand Sanitizer Station





**ST-G**

**ST-G | CIRCULATION ARROW**


Office Print Size: 8.5" x 11"  
Office Print Material: Paper

Production Print Size: 8.5" x 11"  
Production Print Material: Vinyl

**Suggested Placement Location:**  
In hallway + corridor walls or floor.  
On stairway walls or floor.

This can be the arrow in cut vinyl if desired.

This area is closed to create physical distancing.



**ST-J**

**ST-J | "CLOSED" SIGN**

Office Print Size: 8.5" x 11"  
Office Print Material: Paper

Production Print Size: 8.5" x 11"  
Production Print Material: Vinyl

**Suggested Placement Location:**  
Anywhere that will remain closed.

Please keep social distancing guidelines in mind when using the restrooms.



**ST-K**

**ST-K | RESTROOM SIGN**

Office Print Size: 8.5" x 11"  
Office Print Material: Paper

Production Print Size: 8.5" x 11"  
Production Print Material: Vinyl

**Suggested Placement Location:**  
On doors of restrooms throughout building.