



July, 2020

Design of Common Areas for Infection Control

As we look forward to a post Covid-19 (Coronavirus) future, it's reasonable to expect that many concerns regarding virus transmission and risk mitigation in shared spaces will become a permanent part of our day-to-day reality. In relation to the condominium industry, these changes will most strongly impact the lobbies, corridors, and other shared spaces that residents and employees must come in contact with to go about their daily lives.

As such, Full Circle Architects is prepared to help our condominium clients begin to understand and create a multi-point, customized plan for modifying and renovating existing common areas to meet these needs. Below are brief examples of some of the design elements which can be modified to improve the safety of your existing common areas.

Modern Considerations for Infection Control

1. Improve Air Quality

In a normal condominium ventilation system only about 25% of the air being supplied is fresh air. The remaining 75% of the air is recycled air taken from the space, filtered, and then recirculated back. This creates the opportunity for airborne pathogens to remain in the space for extended periods of time.

Passive Strategies: Increase natural ventilation in higher traffic areas to change the ratio of fresh air to recycled air.

Active Strategies: Install Germicidal Ultraviolet units (GUV's) in the air recycling system to more effectively sterilize air.

Future Strategies: GUV light fixtures (for general use) are being developed at this time. When available, wall and ceiling mounted devices will be used in vestibules and other areas with no ventilation system.

2. Reduce Surface Contamination

The Covid-19 pandemic has made many of us painfully aware of how many common elements of a building we touch in the short trip between our living spaces and the street; door knobs, elevator buttons, furniture, etc. This can be mitigated both through improving the cleanliness of these surfaces while also reducing the number of surfaces required to move through a space.

Passive Strategies: Incorporate voice-interfaces, motion sensors, and timers into elevators, doors, and lights to reduce the need to touch buttons and handles. Utilize antimicrobial door hardware, paint, fabrics, and other materials which are already popular in the healthcare field which can kill most viruses and bacteria in as little as 2 hours.

Active Strategies: When antimicrobial surfaces aren't an option, choosing materials which are easy to clean and less likely to harbor bacteria allow cleaning staff to more effectively sterilize spaces regularly.

3. Screen Incoming Guests & Employees

By more effectively screening those coming into the building, security staff can ensure a safer environment for residents.

Active Strategies: The use of Infrared Screening Systems (IFSS) can be used to detect individuals with a raised body temperature in a quick and unobtrusive way. This technology was first used in 2003 during the SARS outbreak and has since become commonplace in the transportation industry during the current Covid-19 epidemic.

4. Rethink Interior Design

Condominium amenities cease to be beneficial to residents if their layout puts residents too close or requires them to interact with common surfaces without being able to ensure that they are clean.

Passive Strategies: Redesign the layout of lobby, meeting spaces, exercise, or rooftop terraces to allow for proper physical distancing between residents when using the same facilities.

Active Strategies: Incorporate disposable cleaning wipe dispensers, hand sanitizing stations, and signage to remind residents of safety protocols in an aesthetically pleasing way. This gives residents autonomy over cleaning common building elements before and after they use them, empowering them to use shared elements without anxiety.

ACTION PLAN

If you are currently remodeling your common areas, it is the perfect time to incorporate these Infection Control Strategies. If remodeling is not planned for a few years, we recommend incorporating these Infection Control Strategies in your Reserve Study.

Feel free to contact Full Circle Architects for assistance in creating safer and healthier environments within your buildings.

Sincerely,

Daniel Baigelman

Daniel Baigelman, AIA
Full Circle Architects, LLC

Contact: Daniel Baigelman (Dan@FullCircleArchitects.com)

