

# **COVID-19 IMPACT ON STUDENT HOUSING**

ARCHITECTS + INTERIOR DESIGNERS RESPONDING TO THE CHALLENGE

# DESIGNING SPACES TO PROMOTE RESPONSIBLE SOCIAL DISTANCING

#### PROBLEM:

Common areas, lobbies, corridors, elevators, lounges, dining and bedroom suites are the most contagious because that is where people congregate.

#### SOLUTION:

- Meet, interact and communicate outdoors whenever appropriate or possible
- Indoors, maintain 6 feet of separation between people including beds to reduce droplet transmission
- Reduce communal spaces where healthy and infectious residents mix
- Reduce multi-user bathrooms
- Limit bed counts to under 6
- Consider decentralized housing types with direct access to the outdoors
- Carefully assess movement through the spaces and how people and material deliveries will be managed
- Introduce ways to compartmentalize spaces utilizing discreet screens and doors transparent sheds or pods that allow small group gatherings but maintain separation from others
- Entry/Egress technology including biometric scanning and other hands free technology
- Increased use of surveillance systems



# **TEMPORARY ALTERNATE HOUSING OPTIONS**

#### PROBLEM:

How to quickly isolate a student or staff person with symptoms from other residents.

#### SOLUTION:

- Plan a small number of single bedrooms with a bathroom throughout the facility called "Safe Rooms" that offer a temporary safe haven for a potentially contagious resident
- Colleges and Universities may need to reintroduce infirmaries to reassure students and parents that care is readily available on campus 24/7

#### RE-IMAGINE MATERIAL AND HARDWARE CHOICES AND TREATMENT OF SURFACES

#### PROBLEM:

Contaminated surfaces can transmit the virus.

#### SOLUTION:

- Avoid non-porous surfaces including cardboard, plastics and composites which have been shown to be surfaces where the virus lives the longest
- Design and specify easy to clean alternative materials including fibers, cotton, stone, stainless steel and leather representing less stable environment for the virus to live
- Germ resistant flooring and environmentally friendly products
- Install voice or motion activated appliances and surfaces
- Sanitizing stations, including floor mats at points of entry

### ENHANCED HVAC SYSTEMS AND AIR QUALITY

#### PROBLEM:

Smaller particles from COVID-19! (Droplets remain in the environment beyond 6 feet and longer).

#### SOLUTION:

- Increase natural and mechanical ventilation to dilute contaminated indoor air, utilize operable windows, increase the use of exhaust fans and HVAC systems to direct air outdoors
- Implement germicidal ultra-violet air disinfection units on all filters
- Increase humidification
- Configure ductwork supply and exhaust air to isolate residential units

## DESIGNING FOR STUDENTS AND STAFF AND NOT JUST FOR THE VIRUS | THE POWER OF MESSAGING

#### **PROBLEM:**

How to alter natural student behavior in a residence hall without creating fear.

#### SOLUTION:

- Employ environmental graphics that anticipate natural student behavior and create messaging that alters the behavioral response and instills trust
- Utilize way-finding systems to guide inhabitants
- Educate the residents on the use of COVID19 preventative components and technology
- Introduce augmented video of spaces to help educate the end-users
- Publicly display university safety guidelines both in the public realm and the building interior

