REOPENING RETAIL: AN ARCHITECTURAL FLIPBOOK

ARCHITECTURAL STRATEGIES FOR ADAPTING RETAIL ENVIRONMENTS TO PHYSICAL DISTANCING PROTOCOLS

Worldwide, the novel coronavirus is greatly impacting the built environment. Historically, times of public health crisis have propelled architecture and urban design in innovative new directions, toward building healthier and more just cities. In fact, the very first building codes, established in Amsterdam and New York in the early 20th century, were in response to tuberculosis outbreaks within shipyard workers' tenement housing. These codes permanently introduced the principles of daylighting, building ventilation, and regulated building occupancies into urban development. Today, we find ourselves in a similar period of necessary design innovation.

Much of modern architecture can be read as a response to public health concerns. The aesthetics of modernism were partly responses to the 1918 Spanish Flu pandemic wherein the notion of hygienic architecture became universally desirable. Hallmarks of modernism such as open plan spaces, clean surfaces, window walls and passive ventilation strategies that we take for granted today are all partly responses to past public health concerns. These principles provided hygienic conditions for living and working on an unprecedented scale. In light of another major public health crisis, how will architecture and urban design respond? And what aspects of our universal adaptation to living with Covid-19 will persist long after a presumptive vaccine? Through the lens of developing adaptive architectural design standards and recommendations to accommodate physical distancing measures in Canadian retail environments, this work explores a near future "main street" where the public life that retail establishments support is recast to protect public health while bolstering consumer confidence and reinforcing community.

In most cities, the spaces that had to close at various times during this pandemic were also those that helped to produce urban public life. Shops, bars, restaurants, parks, pools, gyms, and playgrounds are home to our social lives; they are containers for community and bookmark our daily routines, while providing a welcome contrast to the confines of domestic life. Re-envisioning how we can again use these spaces safely has become a universal design priority.

Some industries are better suited for adapting to a pandemic than others. Restaurants and gyms have struggled, but for the city itself, there might be a silver lining. As patios expand into our streets, they become livelier and more walkable. In some ways, many of these adjustments are overdue. We needed pedestrian streets long before the pandemic for their ability to promote healthy urban lifestyles. For architects, there is a real opportunity to take a leadership role, and consider how public life can still be excellent, even when a two-metre radius is maintained.

This flipbook presents drawings of five common retail typologies situated along a "Main Street." These are a restaurant, bar, small grocer, fashion boutique, and fitness studio. Architectural modifications can be turned on and off by the reader, allowing an exploratory and interactive approach to imagining retail adaptions that respond to Covid-19. We encourage you to combine different options to generate your own ideas on how retail spaces can evolve in response to Covid-19 and future pandemics.

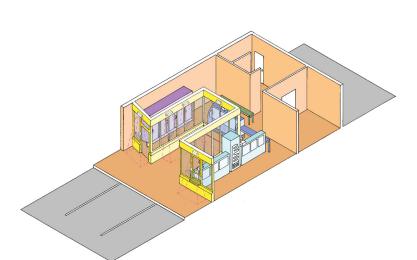


Curb-side pick-up in combination with curb-side fitting rooms can provide patrons with new ways of shopping; Roofs and other surfaces can easily transform into markets and fitting rooms.

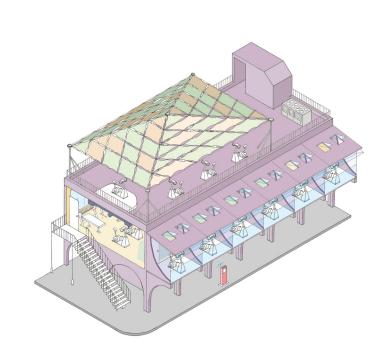
Restaurants can utilize the safety of the outdoors

with spread-out dining areas while providing barriers

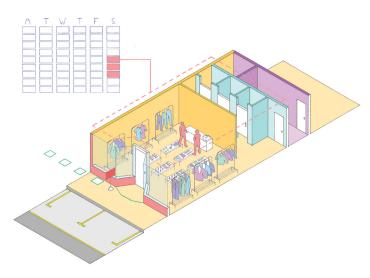
between tables inside.



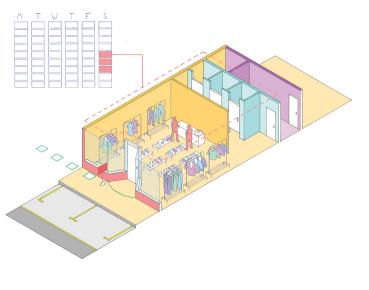
With a lengthened facade, many more products can be seen from the safety of the outdoors.



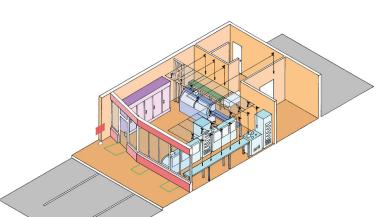
Many surfaces can be modified for physically distanced fitness sessions, such as a new structure that shades the roof, or work-out pods built onto existing facades.



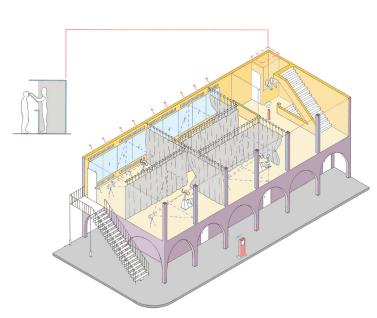
Scheduled reservations can increase safety and elevate the shopping experience into a personalized event for individuals or groups.



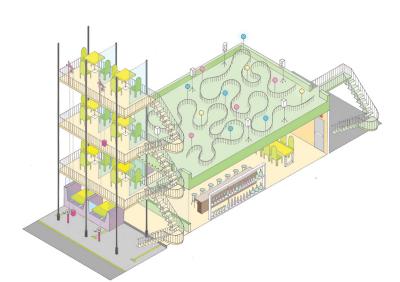




Simple ground notations can guide customers for protocols such as limited capacities; Simple barriers can be added to existing furnishings, separating staff from customers.



Livestream fitness classes can maintain customer relationships even when customers are unable to enter the studio; Screening booths for staff and customers can be located at main entrances.



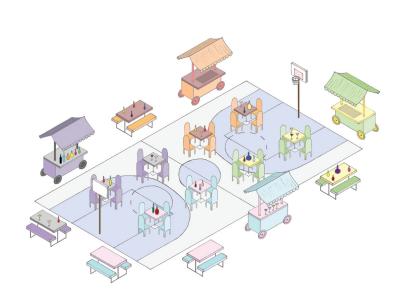
Laneway and building facades easily transform

into backdrops for outdoor markets; Fitting rooms

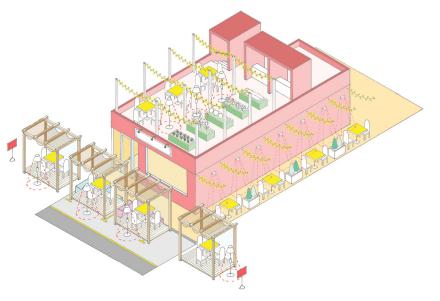
embedded in a shop's facade create a safe boundary

between customer and staff.

Roofs offer ample space for distanced outdoor gatherings; New structures for dining can be designed and inserted into existing parking spaces.



Food and drink businesses can temporarily transform open-air public spaces, allowing patrons to be social while maintaining their safety.

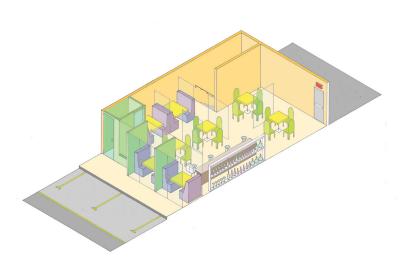


Streets, alleys, rooftops and more can be used to host patrons in the safety of the outdoors in warmer months.

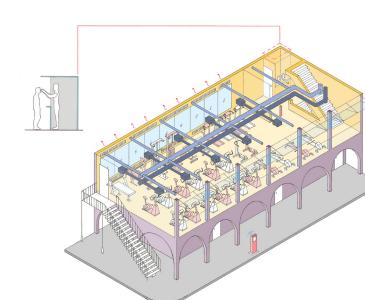
Screening booths for staff and customers can be

located at main entrances; Flexible facades can saturate

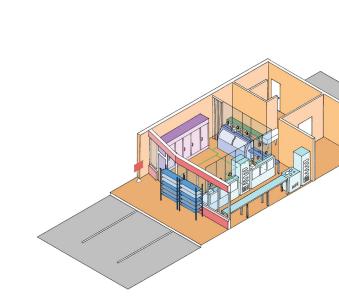
interior spaces with fresh air; Parking spaces can be transformed into inviting seating areas.



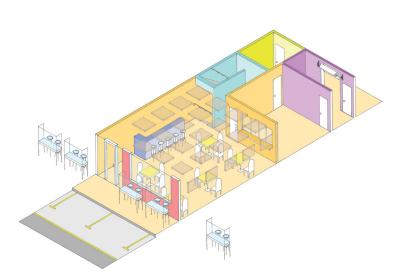
Transparent barriers between customers and staff can maintain sight lines and provide safe separation.



Exits separate from entrances can reduce bottlenecks in circulation; HVAC systems with HEPA filters can capture Covid-19 particles; Taping off every other workout machine can increase distance between customers.



Simple modifications, such as adding barriers to existing furnishings and moving shelves outdoors, can provide the separation needed to operate safely.



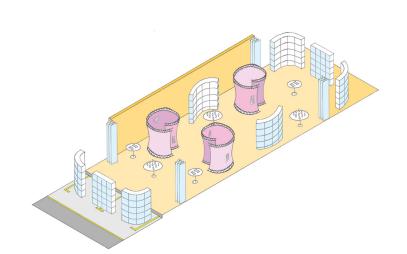
Novel and exciting exercise spaces can be made by

taking advantage of outdoor spaces such as roofs;

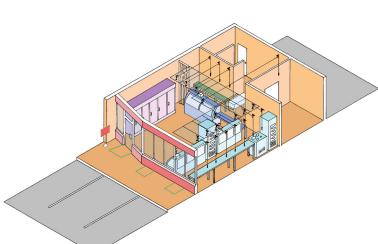
Solar chimneys in combination with operable windows

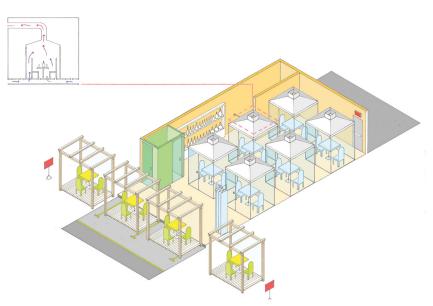
can produce ample cross-ventilation below.

Sidewalk dining provides the safety of the outdoors; Reduced seating spreads out patrons; Acoustic panels reduce noise and thus the need to speak loudly; Don & Doff rooms give staff space to suit up with PPE.



Whole typologies can be rethought, such as conceptualizing a fashion boutique as an open-air shopping landscape.





Outdoor and indoor pods can guide customers to distance themselves from one another.



