



## RB14-043

### APPLICATION OF BARRIER-FREE REQUIREMENTS TO LIVE-WORK UNITS

**Reference:** Div B, 3.8.1.1.(1)(a), 3.8.1.2.(1) and (2), 3.8.2.1.(1), (2), (4) and (5), 3.8.2.3.(1) to (3), 3.8.3.3.(5) and (6), 3.8.3.13.(1) and 3.8.4.1.(1)

**Div B, Clause 3.8.1.1.(1)(a)** “Application”

**Div B, Sentence 3.8.1.2.(1) and (2)** “Entrances”

**Div B, Sentence 3.8.2.1.(1), (2), (4) and (5)** “Areas Requiring a Barrier Free Path of Travel”

**Div B, Sentence 3.8.2.3.(1) to (3)** “Washrooms Required to be Barrier Free”

**Div B, Sentence 3.8.3.3.(5) and (6)** “Doorways and Doors”

**Div B, Sentence 3.8.3.13.(1)** “Showers”

**Div B, Sentence 3.8.4.1.(1)** “Application”

#### Questions / Commentary / Relevant Facts / Decisions:

Live-work units combine features of a Group C occupancy and a Group D or E occupancy into a single dwelling unit. The code is generally clear on how to apply the barrier-free requirements to live-work units - most of the barrier-free requirements are applied as they would be for any other building. However, the requirements for the application of barrier-free requirements for Group C occupancies are different than the requirements for Group D or E occupancies. There are also different requirements for barrier-free entrances, barrier-free path of travel, barrier-free washrooms and barrier-free showers depending on whether those facilities are found in a Group C, D or E occupancy. With respect to these aspects of the barrier-free design of live-work units, the code does not explain whether to apply the Group C requirements, the Group D and E requirements or a combination of the two. This regulations bulletin provides an interpretation of what the requirements are.

#### Question #1

“When do the barrier-free requirements of Section 3.8 apply to a building containing live-work units?”

#### Regulation Bulletin General Policy Statement

Unless stated otherwise, the Code references in this Regulations Bulletin are to Division B of the Alberta Building Code 2014 (ABC 2014). Regulation Bulletins do not overrule the ABC 2014 nor constitute a relaxation of the Code. They serve to clarify the Code in areas where the latter is ambiguous or does not cover a specific topic. Regulation Bulletins are City of Calgary clarifications for staff use to enable consistency in the application of the Code. Regulation Bulletins should always be read in the context of the appropriate requirements of the Code.

## **Commentary #1 - Application of barrier-free design requirements to buildings with live-work units**

The Land Use Bylaw allows live-work units in certain land use districts. Live-work units are different than “home occupations,” and the Land Use Bylaw should be consulted to understand the differences. Currently, the land use districts that allow live-work units primarily allow the construction of triplexes, town houses, row houses and multi-residential apartment buildings. Live-work units are not allowed in single family houses, semi-detached houses or duplexes.

At the same time, Clause 3.8.1.1.(1)(a) lists the types of housing that are not required to comply with Section 3.8 and Sentence 3.8.4.1.(1) implies that Section 3.8 always applies to adaptable dwelling units.

### **Conclusion #1**

Section 3.8. does not apply to the following types of buildings containing live-work units:

- Single family houses
- Semi-detached houses
- Duplexes
- Triplexes
- Town houses
- Row houses
- Boarding houses

Section 3.8. applies to the following types of buildings containing live-work units:

- Any of the above building types, if used in “social programmes”
- Buildings containing adaptable dwelling units
- Any other building type not mentioned above that contains live-work units (rental or condominium apartment buildings and other types of live-work buildings)

### **Question #2**

“In evaluating 3.8.1.1.(1)(a), what constitutes a town house or row house?”

### **Commentary #2 – Interpretation of “town house” and “row house”**

The words town house and row house are used in Clause 3.8.1.1.(1)(a) but are not defined in the code. Some residential developments incorporate dwelling units that are marketed as town houses or row houses into a larger development that may include a podium and towers. Even though the town houses and row houses are attached to a larger complex of dwelling units, they are not substantially different from town houses and row houses that stand alone.

### **Conclusion #2**

A town house or row house is interpreted to be a series of dwelling units or live-work units, completely separated by a party wall, arranged so that there is no unit above or below another unit, and such that the only access to each unit is from the exterior. If a part of a building meets this interpretation of town house or row house, the barrier-free requirements do not apply to that part of the building, in accordance with Clause 3.8.1.1.(1)(a). See attached Sketch #1.

### **Question #3**

“How should the requirements for barrier-free entrances be applied to live-work units, and in those

requirements, what is meant by pedestrian entrances?”

### **Commentary #3 – Barrier-free entrances and interpretation of “pedestrian entrances”**

The code is not clear on how to apply requirements for barrier-free entrances to buildings with live-work units. For example, the term pedestrian entrances is used in Sentence 3.8.1.2.(1) but is not defined in the code. It is not clear what constitutes a pedestrian entrance in the context of barrier-free entrances. Furthermore, Sentence 3.8.1.2.(2) would seem to apply to the “work” portion of a live-work unit but it is unclear to what extent it should be applied to the “live” portion.

### **Conclusion #3**

Barrier-free entrances are required for 50 per cent of the pedestrian entrances to a building containing live-work units, except barrier-free entrances are not required for:

- Live-work units that have an exterior entrance but can also be accessed from the interior.
- Each live-work unit that is completely separated from the remainder of the building so that there is no access to the remainder of the building.

A “pedestrian entrance” is a common entrance into a building. If a live-work unit can be accessed directly from the exterior and also from an interior corridor, the exterior entrance is not considered a “pedestrian entrance” and is not required to be considered when determining which entrances are required to be barrier-free. Entrances leading to an interior corridor are considered pedestrian entrances and are required to be considered in determining which entrances are required to be barrier-free. See attached Sketch #2.

Note that in accordance with 3.8.1.2.(1), the “primary entrance” to the building must also be barrier-free. If the building has entrances that lead to an interior corridor, judgement must be used to determine which of these is the “primary entrance.”

Since live-work suites are not directly addressed by 3.8.1.2.(2), this requirement does not apply to live-work suites that are completely separated from the rest of the building. No barrier-free entrance is required for these types of live-work suites. See attached Sketch #3.

### **Question #4**

“How should the requirements for barrier-free path of travel be applied to live-work units?”

### **Commentary #4 – Barrier-free path of travel**

In general, Sentence 3.8.2.1.(1) requires a barrier-free path of travel throughout all normally occupied floor areas, and this includes live-work units. However, there are a number of exceptions to this that are found in Sentences 3.8.2.1.(2), (4) and (5).

### **Conclusion #4**

In a building containing live-work units, a barrier-free path of travel must be provided:

- From all barrier-free entrances to all normally occupied floor areas, including those in the “work” part of each unit (any part of the unit normally occupied by workers or clients).

Except: A barrier-free path of travel is not required to be provided to:

- Mezzanines not served by an elevator/platform lift.
- Floor levels in the “live” part of units (any part of the unit not normally occupied by workers or clients) that are not at the same level as the entry to the unit.

- Any “live” areas that are not required by other provisions of 3.8 to be barrier-free.
- Basements and second storeys not more than 600 sq m in area in a building not more than two storeys in building height.
- Basements, second storeys and third storeys in a building, containing only live-work units and/or suites of residential occupancy, that does not have an elevator/platform lift, is not more than three storeys in building height and is not more than 600 sq m in building area.

## Question #5

“How should the requirements for barrier-free washrooms be applied to live-work units?”

### Commentary #5 – Barrier-free washrooms

The code does not normally require barrier-free washrooms to be installed in dwelling units, but does require barrier-free washrooms to be installed in Group D and E occupancies. In a blended occupancy like live-work units, it is not clear in the code whether barrier-free washrooms are required in each unit, or if it is acceptable to provide public washrooms elsewhere in the building. If public washrooms are used, it is not clear how many washrooms are required.

Sentence 3.8.2.3.(2) states that washrooms in a suite of residential occupancy do not have to be barrier-free. Sentence 3.8.2.3.(3) requires a barrier-free washroom on the entrance storey, but Clause 3.8.2.3.(3)(a) states that this is not required where a barrier-free path of travel is provided to barrier-free washrooms elsewhere in the building. The intent is that barrier-free washrooms be made available to anyone who needs to use them.

Furthermore, the National Plumbing Code 2015, 2.2.2.5.(1) requires elongated type water closets and open front water closet seats in a washroom for “public use.” The National Plumbing Code is not clear on how this should be applied to live-work units.

### Conclusion #5

In a building containing live/work units, a barrier-free washroom must be provided:

- In any washroom located in a barrier-free path of travel.
- On the entrance storey (one barrier-free water closet only, building owner/property manager must make it accessible to all occupants who need to use it).

Except: A barrier-free washroom is not required to be provided:

- If the washroom is not located in a barrier-free path of travel.
- In the “live” part of the unit.
- If the washroom is in the “work” part of the suite, and there is a barrier-free path of travel to a barrier-free washroom elsewhere in the building (must be accessible to all occupants who need to use it).
- On the entrance storey if there is a barrier-free path of travel to a barrier-free washroom elsewhere in the building (must be accessible to all occupants who need to use it).

A barrier-free washroom is permitted to be a “public washroom” designed in accordance with 3.8.3.8 to 3.8.3.11, or a “universal toilet room” designed in accordance with 3.8.3.12.

The National Plumbing Code requirements for elongated-type water closets and open front water closet seats do not apply to washrooms inside a live-work unit, but would apply to washrooms provided in common areas of the building. Also, if a washroom is provided in the work part of the unit, and there is unrestricted public access, the elongated type water closets and open front water closet seat would be required.

See attached Sketch #4

### **Question #6**

“How should the requirements for power door operators be applied to live-work units?”

### **Commentary #6 – Power door operators**

The code does not normally require power door operators to be installed in buildings containing dwelling units, but does require them to be installed in larger buildings with Group D and E occupancies. In a blended occupancy like live-work units, it is not clear in the code whether power door operators are required for each unit, at the building’s barrier-free pedestrian entrances, or not at all.

### **Conclusion #6**

- Power door operators are not required to be provided in buildings with live-work units, unless other occupancies are present that would require them.

Where a building of Group D or E major occupancy exceeds 500 sq m, a power door operator is required by 3.8.3.3.(5). However, since live-work suites are not directly addressed by 3.8.3.3.(5), this requirement does not apply to buildings containing live/work suites, unless other occupancies are present that would require them. See attached Sketch #3.

### **Question #7**

“How should the requirements for barrier-free showers be applied to live-work units?”

### **Commentary #7 – Barrier-free showers**

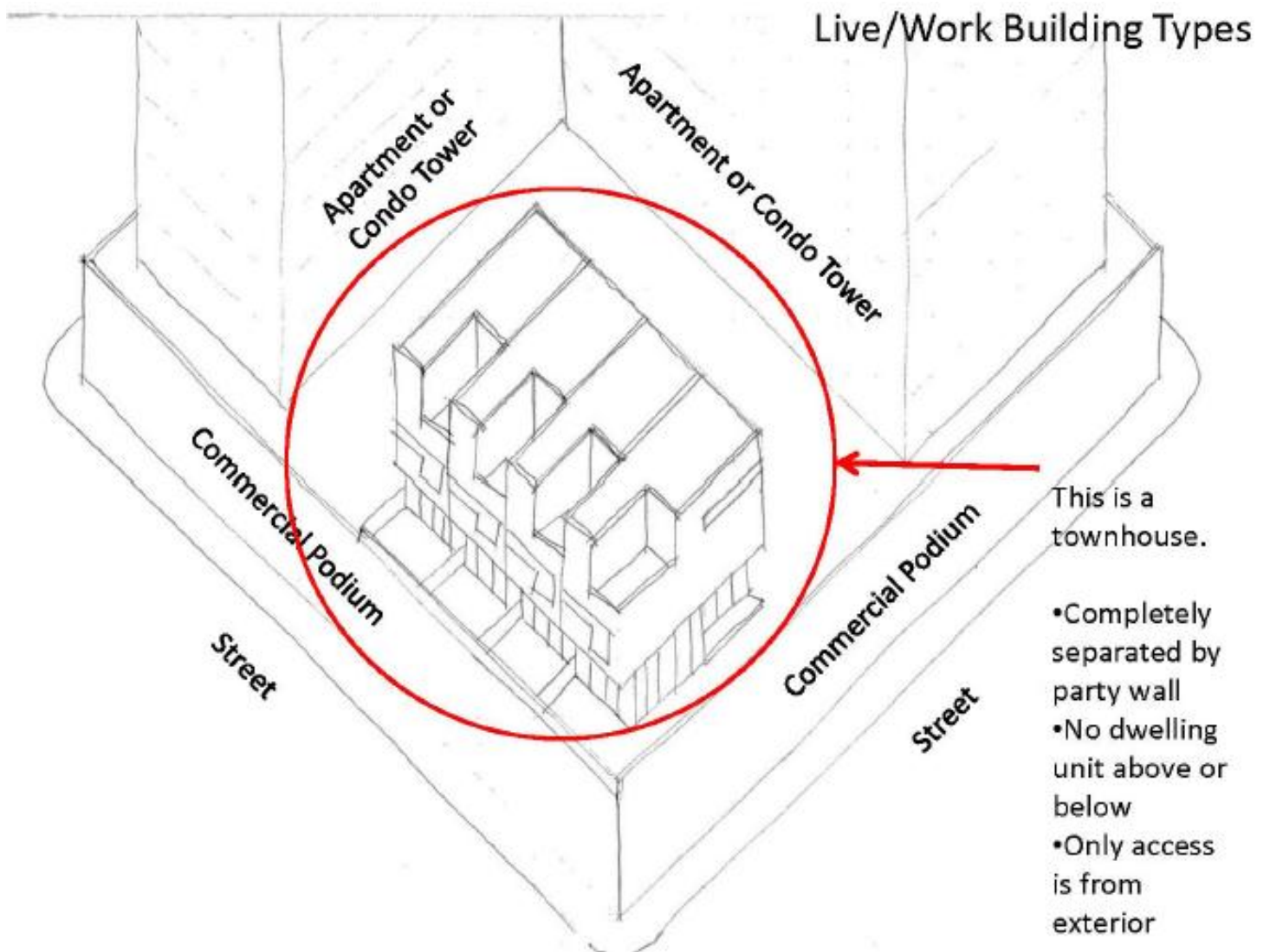
The code does not normally require barrier-free showers to be installed in residential occupancies, but does require them to be installed where showers are installed in Group D and E occupancies. In a blended occupancy like live-work units, it is not clear in the code whether barrier-free showers are required for each unit.

### **Conclusion #7**

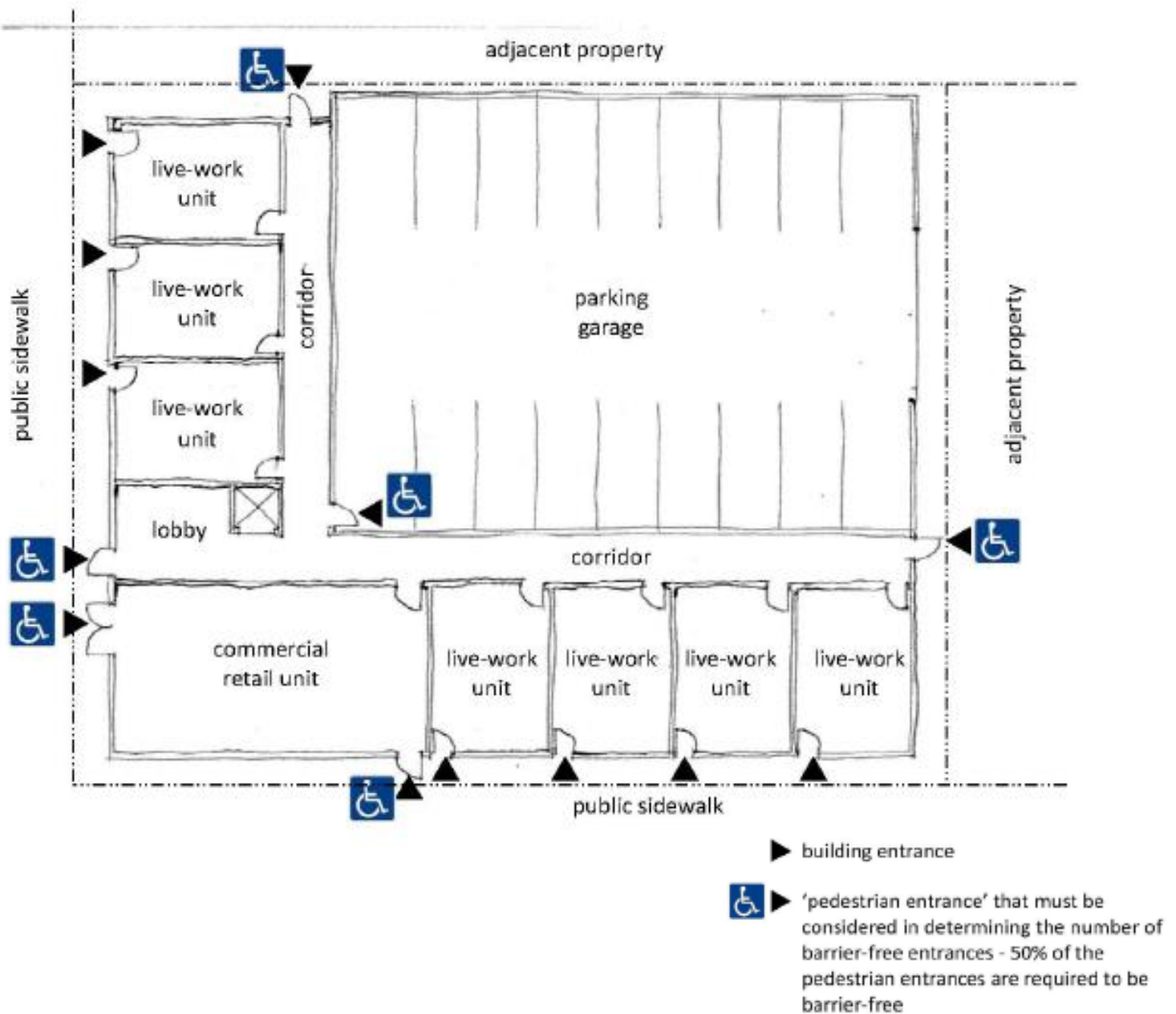
In a building containing live-work units, a barrier free shower must be provided where the shower is integral to the use of the “work” part of the units. Showers intended for residents are not required to be barrier-free, unless otherwise required by the Alberta Building Code.

Marco Civitarese - Chief Building Official

# Sketch #1



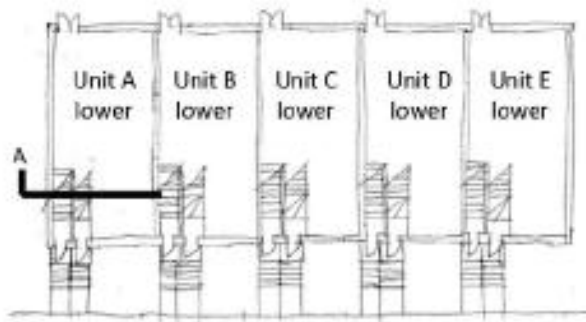
## Sketch #2



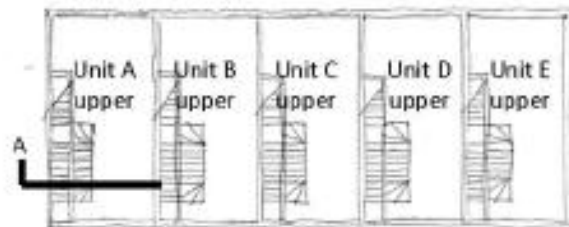
**Mixed use apartment building containing live-work units main floor plan**

### Sketch #3

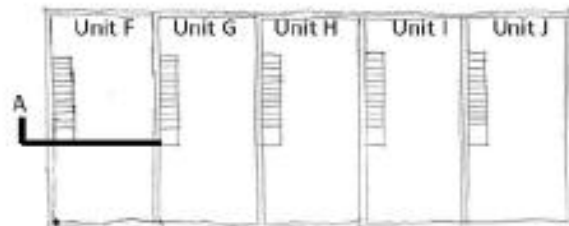
Building containing live-work units (not considered a town house or row house)



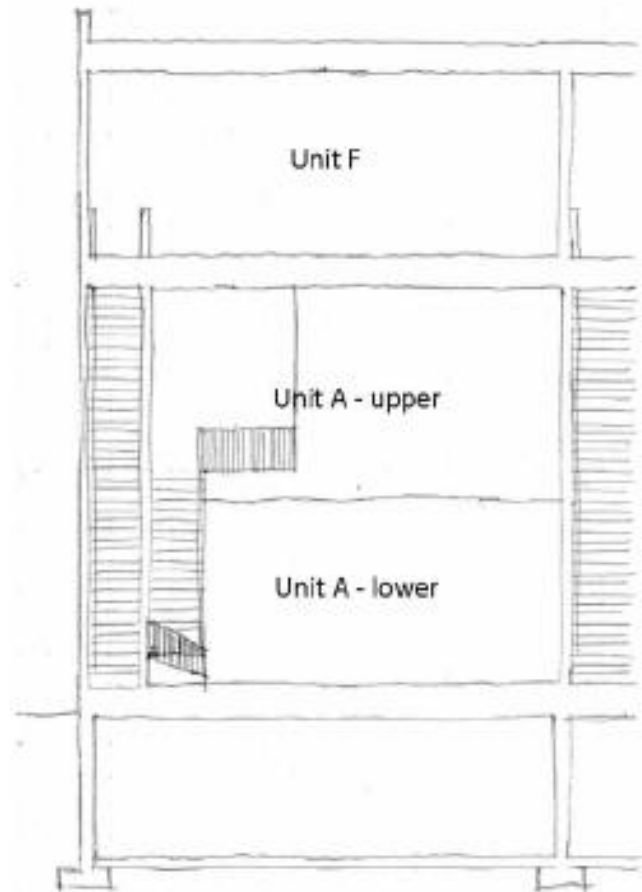
Main Floor Plan



Second Floor Plan



Third Floor Plan



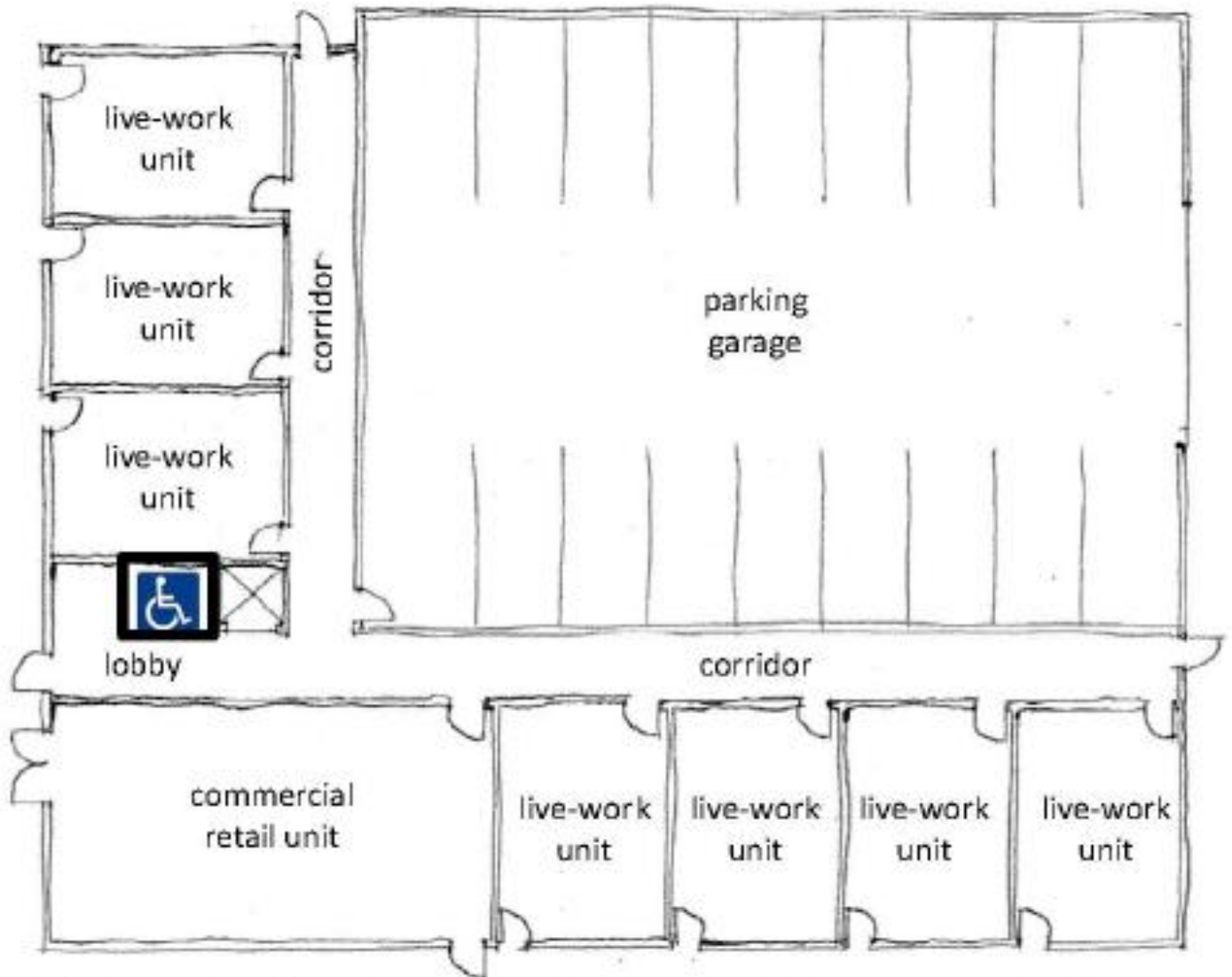
Section A

- Building is not a 'townhouse' or 'rowhouse' (has dwelling units above/below other dwelling units), but each unit is 'completely separated from the remainder of the building so that there is no access to the remainder of the building.'
- Barrier-free entrances/power door operators not required in this building, and barrier-free facilities are not required in each unit.



## Sketch #4

### Mixed use apartment building containing live-work units main floor plan



\* Minimum requirement - single barrier-free washroom on the entrance storey - could also be provided on another storey or inside each unit