

RETAIL ELEMENTS NON-MARKET HOUSING PROJECTS DESIGN GUIDELINES

REAL ESTATE, ENVIRONMENT AND FACILITIES MANAGEMENT

Facility Planning and Development

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1. INTRODUCTION

These Design Guidelines (the "Guidelines") provide a design specification guideline for commercial retail space in non-market housing developments in which the City of Vancouver is the landowner (ground lessor) and subleases back the commercial retail space for the term of the ground lease less a day to a Non-Market Housing Society or the Provincial Rental Housing Corporation. These Guidelines are intended not only to incorporate the elements necessary for retail success into the initial and developed designs, but also to have them incorporated into specifications and contract documents for each project.

The City pays a prepaid rent for the subleased space equivalent to the construction costs of the commercial retail space in the non-market housing developments. These Guidelines combined with input from the City's Real Estate, Environment and Facilities Management staff on a project-by-project basis, provide the necessary framework to allow for the design and specification requirements for the commercial retail space (the "CRU's).

The viability of the commercial retail space in the ground floor of mixed use projects depends on several factors; and success in the initial leasing as well as the continuing operations by the City's tenants will be directly related to the degree to which these requirements are met.

Retail space is sensitive to:

- Configuration
- Exposure to pedestrian and vehicular traffic
- Opportunities for signage
- Ease of fixturing and merchandising

Retail spaces also require appropriate mechanical & electrical services to support their functions, and in some cases the imposed structural capacity of the suspended floors will be critical.

The purpose of these Guidelines is to ensure that the design of the Non-Market Housing Projects will incorporate from their initial concept stages these critical functional requirements required by the City of Vancouver, to ensure that the finished CRU's will suit the needs of commercial retail tenants over the life of the building. These guidelines are supplementary requirements to the Facilities Standards Manual (FSM) and are to be read in conjunction with the FSM and other city-wide guidelines and requirements.

The lease documents, which the City of Vancouver will use in making offers to tenants and for entering into leases, will make commitments to certain levels of finish and provisions of services which will be



incorporated into the spaces which tenants will take possession of. The estimates for the fit-out costs of the CRU's will have taken into account the level of base building work described. If this level is not met in the 'built' project, the tenants may be able to claim extra costs from the City or in extreme situations cancel their commitment to lease the space.

The Guidelines may include an attached Appendix A, as applicable, to reflect additional information to be included in the guidelines for each individual project. The project team (Project architects, mechanical and electrical design consultants etc.) will be required prepare architectural plans, floor layouts and specifications in accordance with the Guidelines and to the satisfaction of the City of Vancouver project manager(s). As necessary during the design process the project team will meet with City of Vancouver staff to review the plans and specifications to ensure that they are in accordance with the Guidelines.

2. DISCLAIMERS

Some items that have been noted throughout this document are Operator preferences and the selection should be confirmed with the City of Vancouver regarding their appropriateness for each Facility.

Any specific products named in this document are not to be taken as the City of Vancouver's endorsement of that product, but rather as an example of a standard of quality that has proven successful in the past. Any other products that meet this level of quality will be considered for use, but their use is not to proceed without prior discussion and acceptance by the City of Vancouver.

3. CONFIGURATION

3.1 WIDTH AND DEPTH OF CRU'S

Commercial retail spaces need to be capable of demising into spaces ranging from $50m^2$ to $300m^2$ with the majority of the spaces in the 90-150m² range.

For the optimum 90m² space the depth will be 15m and the width 6m, this being the preferred proportion for merchandising and accommodating most tenants' fixturing plans. Ideally structure will fall on the 6m modules ie: 12m grid. See attached sketch of "Preferred Store Proportions".

The larger stores can have a greater depth – up to 25m. Generally, in the City of Vancouver, the lot depth does not allow for much more than this when loading, garbage, parking ramps, etc have been accommodated.



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3.2 CLEAR HEIGHT

Clear ceiling heights (floor to suspended ceiling grid) will need to be 3.6m minimum for the smaller range of stores – up to 150m², and 4m for the larger stores. This is the minimum clear ceiling height, higher is desirable. There should be a floor-to-floor structural minimum of 4.5m to allow for adequate accommodation of mechanical, ducting, piping, electrical conduits and light fixture clearances.

3.3 STRUCTURAL COLUMNS

The layout and location of structural columns in the CRU space are to be approved at the design stage by Real Estate staff with a preference for circular concrete columns where possible.

4. DEMISING WALLS AND SERVICE CORRIDOR

Shall be gypsum wallboard finish to applicable City of Vancouver Building By-law requirements for the intended occupancies. Stud framing and GWB will be to the underside of the 2nd floor soffit, using a deflection channel detail, taped and sanded with security mesh on one side, if required. When applied, security mesh to be flattened expanded metal mesh ¼ inch No. 20 standard plain steel. Consult with Real Estate Services on the requirement for security mesh. Fire stopping of all joints and penetrations shall be to applicable standards.

Service Corridor Walls and Doors accessing the CRU - Wall Guards and Corner Guards, Handrails, Wall Protection, Door Edge and Door Frame Protection.

Provide wall and corner guards sufficient to withstand expected impact loads. Protect doors, door edges and door frames in the CRU and service corridor areas from damage such as impact caused by the regular movement of good and service deliveries e.g. Sheet wall protection, kick plates and corner guards.

5. FLOORS

Smooth trowelled concrete floor slab, designed to allow for a floor loading of 7.2KPA (150lbs/sq.ft) and ready to receive tenant's floor finishes/concrete sealer.



6. STOREFRONTS

Storefront framing and glazing should be a minimum height of 2.7m from finished floor and preferably 3.0m. Glazing mullions should fit into the 6m module for ideal store widths (ie: 1.5m allowing for 6m, 7.5m, 9m – widths). 90cm doors and a sidelight can be accommodated into the 1.5m spacing for single doors or a double door can be accommodated to a 3m spacing with either double or single sidelight. The storefront design should include the provision of the louvre systems described in the mechanical section of the guidelines. Individual commercial grade mail slots for each tenant are to be provided. A metal mail collection container (anodized aluminium finish) should be provided for the mail to limit the opportunity for vandalism/arson. Please refer to the attached "Storefront Options".

The storefront section of the specifications should include provision for a local address and unit number. The address and unit numbers to be determined in consultation with the City's address coordinator prior to building permit issuance.

Glazing on storefront and doors to be covered in 7 mil thickness anti-scratch, anti-graffiti protective film (3M Anti-Graffiti film or equivalent). Storefront glass is recommended to be laminated or tempered glass, with shatter resistant film on the inside.

Individual mail slots for each tenant are to be provided as part of base building. Generally, the mailbox should be located in a secure common area of the building which is protected from weather. Access will be required. A metal mail collection container (anodized aluminum finish and vandalism resistant) may also be an option subject to Canada Post requirements and Real Estate Services acceptance of design.

7. TENANT SIGNAGE

The building design should incorporate an area approximately 1.2m in height above the storefront to accommodate tenant signage independent of any allowance for a canopy/weather protection.

Sign criteria should be prepared for each project specifying the maximum and minimum heights for letters and the raceway proposed to attach the signs to the building. All signage to conform to City of Vancouver Sign By-Law.

Signage framing should be in the form of a grid, bar, or perforated metal element to which the letters are attached in order to avoid multiple penetrations of the building envelope and subsequent patching when tenants and signs change.

Provide a conduit with pull string for sign power to each sign and for each CRU bay location. Consider additional conduit with pull string, to accommodate data cable to CRU signs. The conduit shall be terminated in a junction box affixed to the soffit of the slab above the interior of the unit and connected



to a weatherproof junction box at the exterior of the envelope in an inconspicuous manner in the signage area. Refer to Electrical Systems below for more information.

Banner signage, perpendicular to the storefront is to be encouraged whenever possible.

Where awnings or canopies are provided, material selection shall be considered such that it is resistant to vandalism and breakage from falling objects, such as Plexiglass, and designed in a manner for ease of maintenance and cleaning. Canopy and awning gutters/drains often become plugged by leaves/ fallen debris – installation of leaf guard system to be considered.

8. PARKING

Retail parking spaces should be located so as to be the first spaces visible in the parking area and should be capable of being reached directly by tenants without needing to enter residential service areas.

The base building parkade/loading area design shall provide routing for installation of retail tenant installed HVAC or refrigeration systems (e.g. compressors) in parkade/loading areas, including routing of refrigerant piping and electrical conduit for future installation. Consultation with Real Estate Services required during design phase of project.

Opportunities for locating retail tenants' compressors should be utilised where height greater than normal criteria for parking or loading results from the building configuration.

9. LOADING / GARBAGE

The garbage requirements for retail tenants will need to accommodate at least 3 containers, allowing for regular 'bagged' garbage, recycling of cardboard, paper etc.

Access to loading areas by tenants should be direct and where possible not requiring ramps.

Wherever possible, loading and garbage areas will be separate for residential and commercial areas, and there will be no exiting or access to one component from another.

Refer to the Facilities Standards Manual for additional details.

10. ELECTRICAL SYSTEMS

Base building electrical requirements for a typical CRU (commercial rental unit) would include the following:

1. A power feed to each CRU which will be independently metered.



- The building service shall comprise a 3 phase, 42 circuit panel complete with main breaker fed from base building electrical distribution. The amount of power provided should be 120/208V or 347/600V, 3 phase, 4 wire to provide 10 watts per square foot of usable power (for lighting, HVAC and mixed use) having regard to proposed retail uses.
- 3. The base building service shall provide exit signage at the exits and preliminary emergency lighting. Final exit signage and emergency lighting to be completed by tenant to suit final layout.
- 4. The base building service shall comprise preliminary fire alarm devices as required by applicable codes and by-laws. Additional devices and system verification shall be by tenant to suit final layout.
- 5. The base building service shall comprise of a 25mm telephone conduit from tenant space to main terminal board. Cabling will be by tenant to suite tenant communication requirements.
- 6. Provision should be made for Wi-Fi service to the CRU's.
- 7. The base building service shall comprise electrical connection to landlord installed HVAC equipment.
- 8. The base building service shall include exterior wall penetrations for tenant signage. The tenant is responsible for providing power requirements (size of penetration) and power cabling to tenant signage. Control of tenant signage and exterior lighting shall be in compliance with existing building exterior lighting control system. Conduit for signage should be sized for individual letter signs.
- 9. Conduit for tenant security systems shall be provided as part of the base building costs. Rough in for door contacts will be provide at the commercial entry doors and door leading to the service corridors.
- 10. Rough-in for automatic door opener power and controls at the commercial entry doors and door leading to the service corridors shall be provided. Conduits system and rough-ins should be concealed within storefront framing.
- 11. Depending on CRU use, security intercom systems may need to be installed at entry and/ or between each CRU and the exterior loading access door. A door opening switch for the exterior loading door is to be located within the loading bay area for convenience.
- 12. Two outdoor exterior grade duplex GFCI receptacles c/w heavy duty locking covers to be provided. Locate proximal to hose bibs. To facilitate power washing of sidewalks, canopies, and outside maintenance.
- 13. Tenant exterior and interior lighting fit-out shall consider LED type for energy efficient and low maintenance.
- 14. Access controls for the tenant space, elevator and parking, as needed and convenient access to garbage and recycling area; not elsewhere in the building.
- 15. Temporary lighting fixtures (fluorescent strip lighting) to be installed to illuminate the vacant retail space prior to installation of tenant improvements.



11. MECHANICAL SYSTEMS

11.1 FIRE PROTECTION

A sprinkler system is to be installed to conform to the City of Vancouver codes, and must include flow and tamper devices, fire alarm system disconnects, and back flow prevention as required. System must be pressure tested, fully operational, inspected and approved by local authorities. The base building will incorporate the design, supply and installation of the approved fire sprinkler system complete with piping mains and branch lines to shell spaces. Sprinkler upgrade to suit tenant layout and ceiling plan will be at the cost of tenant.

Wherever possible, CRU will be provided with individual fire zone.

11.2 PLUMBING

The base building service will comprise a 50mm domestic cold water supply line complete with water meter, remote water meter readout and shut off valve within each designated CRU. Final location of water meter to be confirmed by tenant.

A 75mm diameter plumbing vent will be provided in the base building from the roof through flashing to a location above the proposed tenant ceiling in the Premises.

A 100mm diameter sanitary drain line will be provided below grade roughed-in for future washroom in each designated CRU. Refer to architectural floor layout for washroom locations. Final washroom locations may be dependent on final tenant selection; please consult with Real Estate Services prior to making rough-ins.

Provide floor drain(s) when CRU is considering food primary occupancy for kitchen. It may be hard to provide the locations of floor drain(s) without the kitchen layout when the CRU space is intended for restaurant use. Consult with Real Estate Services.

Grease interceptor recess to be provided and located in the parkade, ready for installation of grease trap as part of future tenant improvements for CRU.

Tenant plumbing fixtures shall be low-flow type, refer to Facilities Standards Manual for additional information.

Rainwater leaders are to be provided on the warm side of exterior walls only. Furred out drywall enclosure for rainwater leaders will be under base building cost.



Exterior hose bib with locking panel cover accessible to the CRU storefront for pressure washing of sidewalk. If there are 2 or more CRU's, consider providing a 2nd lockable hose bibs. Refer to Facilities Standards Manual for additional information.

11.3 GAS SERVICE

A gas service with sufficient capacity for a connection unit is to be provided within the building services. Capped gas line to designated CRU or CRU's. Provision is to be made for separate metering for each CRU space identified as requiring gas service. Gas meter to be installed as part of the tenant improvements.

Where gas is provided there should be plans for proper venting for gas appliances.

11.4 HVAC

All mechanical equipment must be installed in an area that can easily and practically be serviced for ease of maintenance. HVAC units should be accessible (not in locked area controlled by third party) and with enough space around them for servicing; ensure proper slope of the drain lines.

Independent heating and cooling are required for each CRU. Split fan coil and heat pump units will be designed for a cooling capacity based on one (1) ton per 32.5m² of Leased Premises and installed at a location the Leased Premises designated by the Landlord. Dual stage thermostats will be supplied and coiled near the air supply with 15 m of coiled wire for installation at the landlord expense. Location of heat pump units to be advised by landlord. Extension refrigeration line kit shall be allowed to all split fan coil heat pump units.

Tenant washroom exhaust fan and ductwork will be supplied and installed at the expense of tenant. Wall louvre on storefront will be provided by landlord to allow for installation of CRU washroom exhaust connection, exhaust for a Type II kitchen hood to allow condensate venting, or a commercial kitchen exhaust system with an Ecology Unit (or ecologizer).

Tenant ventilation design shall meet and comply with the current edition of ASHRAE Standard 62. Any upgrade of tenant ventilation to meet ASHRAE Standard 62 will be at Landlord's expense. Ventilation air to tenant premises will be connected through wall louvres at storefront provided by landlord.

For restaurant or food service uses that require heavy duty kitchen exhaust hood (Type I Hood), the base building service will comprise a capped 450mm x 350mm NFPA 96 exhaust duct(s) for future tenant commercial kitchen exhaust connection, with a vertical shaft for roof top kitchen exhaust. A 2-hour fire rated enclosure for this exhaust duct through fire separation(s) will be



provided. Kitchen exhaust canopy, NFPA 96 exhaust ductwork and kitchen exhaust fan or Ecology unit will be supplied and installed under tenant improvement expenses.

Consult with Real Estate Services staff for number and location of CRU's requiring kitchen exhaust ducting for Type 1 hood. Tenant kitchen exhaust duct system design and location shall be reviewed and approved Real Estate Services as part of building design. If an alternative system is proposed due to issues of certification, its potential for certification must be verified, and must be approved by Real Estate Services staff at the concept stage, or else the 'default' NFPA system must be accommodated.

12. ELEVATOR

Elevator System from parkade to retail units may be required. Consult with Real Estate Services at design concept stage.

Design of elevator system, including interior and exterior finishes to be reviewed and approved by Real Estate, Environment and Facilities Management staff. Security access system will be required. An intercom may also be required for deliveries if main loading is in parkade.

Refer to the Facilities Standards Manual for additional information on elevator design requirements.

13. DESIGN OF WATER INGRESS PREVENTION

Water leaks into CRUs from the above residential units is a common problem in non-market housing projects. The residential floors above CRUs to be designed in a manner to minimize the risk of water damage from leaks from residential suites. Design features such as floor drains and waterproof membrane/flooring to be incorporated into design of residential suites above the CRUs.

Drip pan installation under the common residential internal drains to protect CRU space from water damage from above. Leaks from residential units a common problem. Consult with Real Estate Services.