

Guidelines

Industrial Spaces Guidelines

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1 BACKGROUND AND CONTEXT

The purpose of these guidelines is to support, intensify and preserve the long-term resilience of the City of Vancouver's 'M'- and 'I'-zoned employment lands by ensuring that industrial space located in these zoned areas are adequately designed for current and future functional needs. The guidelines apply to all new developments, renovations and alterations of existing industrial buildings in these zones.

The development criteria supports the Industrial Lands Policies (1995) and upholds the City's commitment to protect the industrial land supply as laid out in the Regional Context Statement Official Development Plan (2013) and the Employment Lands and Economy Review (2020).

2 DEVELOPMENT CRITERIA OF INDUSTRIAL SPACES

Generally, industrial spaces should be designed with contiguous open floorplans located at or as close to base surface as possible, with less-intensive industrial floor area stacked above grade, when applicable. All industrial spaces should:

- Support safe and functional industrial operations,
- Be easily adaptable to changing operational requirements,
- Be optimized for efficiency, and
- Provide for healthy work environments.

2.1 Floor-to-Floor Height

Higher industrial floor-to-floor heights ensure versatility, accommodate specialized mechanical equipment and provide sufficient overhead clearance for efficient operations. They also improve natural light penetration, reducing demand on electricity and provide for occupant wellbeing.

Minimum floor-to-floor heights are as follows:

- A minimum 6.1 m (20 ft.) at ground level is advised and is required in some zones.
- A minimum 5.2 m (17 ft.) above ground level is advised.
- Where a mezzanine is proposed, a minimum 6.1 m (20 ft.), with a minimum 3.0 m (10 ft.) provided above and below the mezzanines, is generally recommended. Additional overall height for spaces with mezzanines is strongly encouraged.
- When partial levels of industrial and office uses are proposed, the floor-to-floor height should follow the minimum floor-to-floor height requirement of the industrial uses.

2.2 Vertical Stacking and Mezzanines

To promote intensification in industrial employment areas, the 'M' and 'I' district schedules allow for stacking of industrial and other compatible uses. The design considerations below and those shown in Figure 1 apply to stacked uses in a building with industrial spaces.

- Industrial spaces above the ground level should be designed to the same general functional standards as industrial space at ground level.
- Without compromising the functionality of industrial spaces, design strategies to mitigate the impacts of industrial operations on general office occupants, such as vibration, noise and fumes should be explored.

Well-designed mezzanines that enhance the functionality of an industrial space without requiring significant increases in building footprints are encouraged. Design criteria for mezzanines are outlined below and in the diagram below.

- The total floor area of the mezzanine should not exceed 40% of the total floor area of the associated industrial use.
- Mezzanines should be contiguous with the adjacent industrial spaces which they serve.
- In most cases mezzanines should be located away from street-facing facades. If site considerations or specific functional requirements limit mezzanine placement to these locations, design strategies should be explored to mitigate their visual impact on the adjacent public realm.

Diagram: Example of a typical section scenario



Refer to the Vancouver Building By-law (VBBL) for additional requirements not covered in these guidelines related to vertical stacking of industrial uses and mezzanines.

2.3 Circulation, Loading Spaces and Waste Management

The planning of industrial spaces should prioritize efficient and functional on-site circulation, loading spaces and waste management areas, with the following design criteria:

- All industrial floor area, including mezzanines, should have direct and uncomplicated access to loading spaces and waste management areas.
- Industrial spaces above ground level should have access to a freight elevator designed to current industry standards. Buildings with industrial spaces stacked with other uses should include a devoted freight elevator in addition to passenger elevators.
- Shared corridors with industrial spaces providing access to loading and waste management areas, or from subdivided spaces to the freight elevator, should have a width of no less than 2.1 m (7 ft.).

- Individual industrial spaces should have at least one door with a minimum width of 2.4 m (8 ft.) and a minimum height of 2.4 m (8 ft.) providing access to shared corridors or directly to the loading and waste management areas.
- Loading and waste management areas should be located to mitigate potential visual or acoustic impacts to the adjacent public realm or neighbouring developments.

2.4 Lighting

Exterior building and landscape lighting should be provided in accordance with the following design criteria:

- Lighting of recessed loading, parking, and waste management areas should sufficiently enable safe year-round functionality, and mitigate real or perceived security issues at these locations.
- Architectural and landscape lighting facing the street should be provided to contribute to the overall visual appeal and perception of safety of the public realm. Particular attention should be given to locations of potential conflict between vehicles and pedestrians.
- Despite the above, exterior lighting should not unnecessarily contribute to light pollution, and should be designed to mitigate glare for adjacent building occupants, pedestrians and vehicles.

Industrial buildings should be designed to mitigate over-reliance on electrical lighting in interior spaces by way of the following design strategies:

- Strategically designing glazing systems to maximize natural light penetration into industrial spaces.
- Using light shelves or other strategies to extend natural light into deeper industrial spaces.