

7.0 SCREENING OF MECHANICAL AND ROOFTOP EQUIPMENT

This section outlines the requirements for the screening of ground-based and rooftop equipment. The primary goals of the guidelines are to provide for the full screening of equipment from public view and to ensure that screening methods contribute to the building design and streetscape.

Definitions

Mechanical equipment – Includes heating, ventilation, and air-conditioning units; compressors; pumps; and other similar powered mechanical equipment.

Non-mechanical equipment – Includes flues; vents; hoods; satellite dishes; communications equipment; elevator and stair penthouses; access ladders; and other similar non-powered equipment.

Roof well – An open pit sunk below a building's roof surface.

Parapet – The portion of an exterior building wall extended above the roofline.

Screening wall – An independent screen, separate from a building wall.

Standards

Site Plan Requirements:

- The locations and dimensions of all rooftop equipment must be shown on building elevation drawings.
- Proposed methods of screening should be provided. If independent or integrated screens are proposed, material and construction details should be provided.
- Sight line diagrams are required with building elevations. Diagrams should show multiple views to proposed rooftop mechanical equipment from a 1.7 m height at the curb of the opposite side of the road from the property. Additionally, sight lines from the front or rear face of any surrounding

residential properties should be provided. Views approaching the property along all public roads should be illustrated and take into account grade changes. For properties in low lying areas, screening options integrated into the roof design may be necessary.

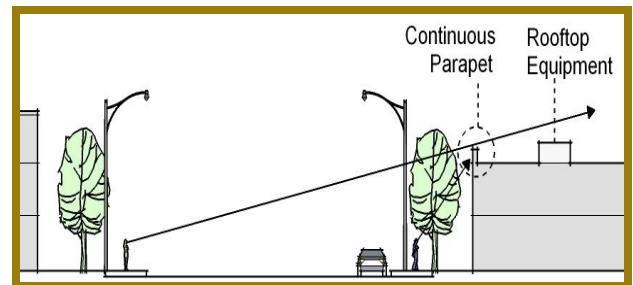


Figure 7.1: Locating this building's rooftop equipment away from the street and incorporating a continuous parapet helps block the equipment from public view. Design Criteria:

- Buildings abutting residential properties or located on corner lots, at the termination of view axes, or at other prominent locations will be subject to higher rooftop equipment screening standards.
- Buildings shall have all rooftop mechanical equipment screened from the view of vehicular traffic.

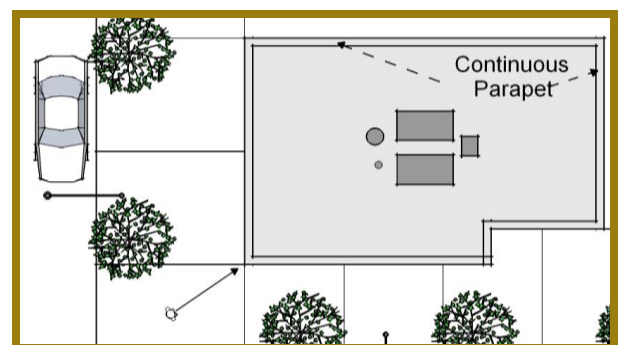


Figure 7.2: Rooftop equipment on this building is clustered near the centre of the roof, away from the street and other public spaces

- Rooftop equipment should be clustered and located near the centre of the roof to minimize visual exposure.

- The preferred rooftop equipment screening methods are roof wells, continuous parapets, or articulated rooflines. If these methods are not possible or appropriate, other methods, such as partial parapets, screening walls, or dedicated rooftop equipment rooms, may be used.



Figure 7.3: Rooftop equipment screening methods used on this building include parapets, an articulated roofline, and centralized location of equipment.

- Rooftop equipment and equipment screening should be integrated with the building form and shall complement the building's design, materials, colours, and architectural style.
- The back sides of parapets, screening walls, and raised rooflines should be coloured the same as the front side when visible from public view.



Figure 7.4: Rooftop mechanical equipment for this building is hidden by a screening wall that is integrated with the building design. The screening also articulates the roof elevation.

Design Criteria for Various Building Types:

- For low-rise buildings (3 storeys or less), rooftop mechanical equipment shall be fully screened.



Figure 7.5: The peaked roof of this low-rise building screens all rooftop equipment and helps define the intersection where the building is situated.

- For all mid-rise (4-8 storeys) and high-rise (above 8 storeys) buildings, rooftop mechanical equipment shall be fully screened from the public view at street level.
- Rooftop equipment screening for mid-rise and high-rise buildings shall contribute to an attractive skyline and the view from surrounding mid- and high-rise buildings must be considered.
- Large mechanical equipment, including refrigeration units for commercial, institutional and recreational buildings should be incorporated into the building design or, alternatively, screened with the appropriate materials.
- Significant heritage buildings shall have all rooftop equipment fully screened and/or integrated into the building in a way that respects and complements the building's heritage and architectural features.
- Civic buildings shall have all rooftop mechanical equipment fully integrated into building design.



Figure 7.6: The sloped roof of this civic building fully screens rooftop mechanical equipment and creates an attractive roofline.

- Commercial buildings including gas stations shall have all rooftop mechanical equipment fully screened. Parapets, detailed cornices, and/or articulated rooflines that enhance the building design should be incorporated, particularly for gas stations located at major intersections.



Figure 7.7: The rooftop equipment on this corner gas station is not screened and is visible from public view.



Figure 7.8: Although the rooftop equipment on this gas station is fully screened with materials matching the building, the enclosure is not well-integrated with the building form.



Figure 7.9: The articulated roofline on this gas station and car wash fully screens rooftop mechanical equipment and helps create an attractive building design.

Design Criteria for Screening Ground-based Mechanical and Non-mechanical Equipment:

- The location of all ground-based mechanical and non-mechanical equipment must be illustrated on the landscape plan and, if fencing is required, also on the site plan.
- Many types of ground based equipment will require appropriate screening not only to address views into the site from the public realm but also to provide a buffer between uses within the site e.g. screening communal ground-based air conditioner units from private amenity spaces.
- Solar panels and similar equipment are not subject to screening requirements.