

3. Roofs

Preserve all significant defining characteristics of an existing roof or part thereof. Maintain a roof as long as possible, making repairs as required. When necessary, replace roofing materials or other features to match the original. If possible, restore original defining roofing materials or other features that were removed from the building in the past.

The defining characteristics of the roof include:

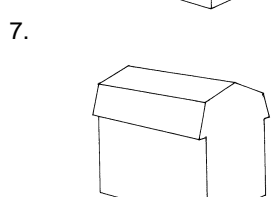
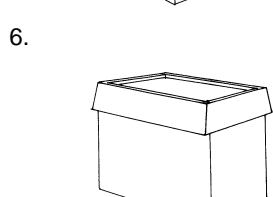
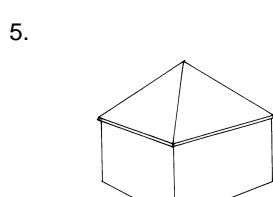
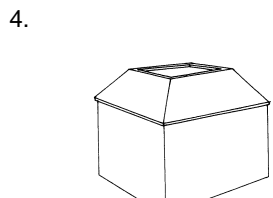
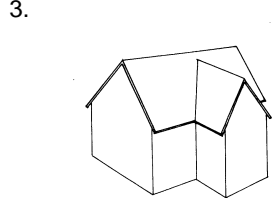
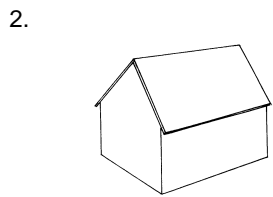
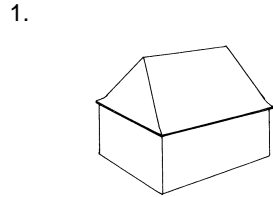
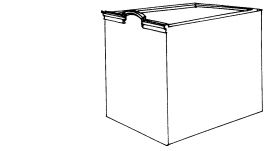
- the overall form as well as the presence and shape of dormers, chimneys and other secondary elements;
- the type of roofing material including its colour, size and pattern of placement.
- details such as cornices, brackets, gables, eaves, skylights, gargoyles, roofing trim (including decorative metal flashings, finials and ironwork such as cresting), gutters and downspouts.

Most buildings in Westmount have either true sloping roofs (Norman, gabled, multi-gabled, false pavilion, hip, and mansard) or decorative sloping roofs (such as false mansards) facing the street that conceal flat roofs. The steep topography of many parts of the city increases the visibility of roofs from streets and other public places as well as from other buildings. This means that roofs play a particularly important part in defining the character of most Westmount buildings and the architectural character of the city as a whole. A roof is therefore considered to be a major defining characteristic of a building.

When a building is part of an ensemble of two or more buildings, it is particularly important to maintain or restore the matching defining characteristics of the roof. This is equally true where there is a predominance of one roofing treatment in a streetscape or character area.

A permit is required for any change of shape, materials, colour or design on any roof as well as replacing the roofing materials of a sloping roof. The resurfacing of a built-up asphalt flat roof does not require a permit.





3.1 Repair of existing roofs

Repair a roof as needed in a way that preserves its defining characteristics.

3.1.1 Repair and replacement of individual elements

Repair, restore or, if necessary, replace all defining roof features in their original locations and styles. Materials used for all related roofing repairs and replacement should duplicate the existing (except as described in section 3.2).

A special effort should be made to maintain features that are harder to replace such as decorative metalwork and coloured or patterned slate.

3.1.2 Drainage

The materials used for the repair and replacement of gutters and downspouts must be prepainted or galvanized metal or copper.

Note that roofs must drain onto the property on which they are located.

3.1.3 Maintenance

Good maintenance is the best way to avoid costly repairs or replacement. Inspect and maintain the roof regularly (clean gutters and drainpipes each year, inspect flashing and chimneys, etc.) in order to prevent water penetration, moisture condensation or other damage to the building. Remove snow and ice from eaves and valleys and remove icicles from eaves and eavestroughs.

The roof is the part of the building most exposed to the weather but, since it is inaccessible and often out of sight, it is the easiest to neglect. Undetected, leaks can cause very serious damage to the structure, interior finishes or contents in a matter of minutes.

Flat (1) and decorative sloped roofs: False Pavilion (5) and False Mansard (7) are most common in the row houses of Lower Westmount and in the semi-detached houses of Middle Westmount. Sloped roofs: Norman (2), Gabled (3), Multi-gabled (4), Hip (Pavilion) (6) and Mansard (8) are characteristic of detached houses of Middle and Upper Westmount.

3.2 Roofing materials

Original significant roofing materials must be maintained and, if previously removed, should preferably be restored. In all cases of roof replacement, higher quality materials (types A and B, listed to the right) must be used. Lower quality materials (type C) are not generally acceptable.

3.2.1 Roofs which have their original roofing materials

If it is necessary to replace an original roofing material of a category I or II building, the replacement should be identical to the existing. Roofing materials that are typical to Westmount's traditional buildings are superior in quality, material, appearance and life span. These "type A" materials include slate, terra cotta, and copper.

In certain category I and II buildings that are not part of an ensemble, it might be possible to replace one type A material with another type A material provided that it can be demonstrated that the material is architecturally suitable and that the harmony of the streetscape or character area would not be compromised.

Note that type C roofing must be upgraded to type B or preferably A. However, an exception would be made in those rare cases where it is the original material of a category I or II building in which case the original material type must be maintained.

3.2.2 Roofs whose roofing materials were previously replaced with another material

In the case of a category I* building or of a small, highly visible roof area located close to the sidewalk, (such as a false mansard roof located on a row house in Lower Westmount,) the type A material originally used on the building must be installed.

In other cases, it is highly recommended that the original type A material be used. However, if a building had its original roofing replaced with a type B or C material, it may be re-roofed with a type B material whose texture and colour harmonize with others in the ensemble or with those of the surrounding homogeneous streetscape or character area, if applicable.

3.2.3 Cool Roofs

The construction of roofs with a high solar reflectance—or albedo—can help to reduce urban heat island effect. Cool roofs reflect solar radiation away from the roof, which keeps the house cooler in summer, with or without air conditioning. Cool roofs do reflect energy in the winter, but in general, their presence results in a net energy saving.

In order to reduce urban heat islands, owners should consider using roofing materials with high solar reflectance on flat roofs for new

City of Westmount
Building and Planning Department
(514) 989-5219

Revised: Revised December 6th, 2004, R-RCA04 23020; May 2nd, 2016, R-1495

Roofing materials on sloping roofs

Type A

- slate;
- terra cotta;
- copper or "fish-scaled" tin.

Type B

- fibre-reinforced-cement type artificial slate;
- cement tile.

Also in this category though of lesser quality:

- laminated (built-up) asphalt shingle.

In all cases, in variegated colours similar to slate.

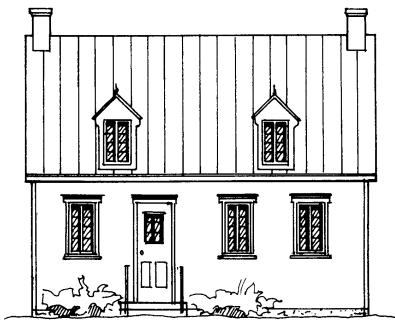
Type C

(not generally acceptable in Westmount)

- standard 20-year asphalt shingles;
- low-slope bituminous membranes;
- large industrial-type pre-finished metal sheets.



constructions, extensions and replacements.



Original roof



Inappropriate modifications

The shape of character-defining roofs and dormers should be preserved (top) and not modified (bottom).

3.3 Roof-top additions, dormers, skylights and roof windows

Changes to the shape of a roof of an existing building must be designed to minimize their visibility and their impact on the existing building. The use of dormers, skylights and roof windows should not detract from the design of the building

3.3.1 Roof-top additions

Roof-top additions on buildings in Category I and those parts of Category II buildings visible from the public way are almost always unacceptable. In some cases, a modification to the roof to incorporate additional space in the building may be acceptable (if permitted by the zoning by-law) provided the addition:

- is located and has a form that enables it to harmonize with the design of the building, particularly as seen from the public way and neighbouring properties;
- does not interrupt the visual continuity of the roofline in a uniform streetscape (e.g. rowhouses or other buildings in close proximity and of similar height);
- matches other roofs on the building (or in the ensemble or streetscape) in form, materials and details.

3.3.2 Dormers

The enlargement of dormers or the addition of new ones is not generally acceptable on the main facades of Category I or II buildings. However, it may be acceptable in cases where the design is compatible with the character of the building.

3.3.3 Skylights

Skylights on flat roofs should be designed so that they cannot be seen from the public way, nor be highly visible from adjacent buildings.

3.3.4 Roof windows

Roof windows (velux-style) are not permitted on sloped roofs visible from the public way, nor when highly visible from adjacent buildings. They are generally not acceptable in any part of a Category I building. The design and colour of the framing must blend in with the roofing.

Traditionally, sloping roofs were opaque.



3.4 Structures on roofs

Design all structures on the roof of existing and new buildings, such as bulkheads, penthouses or decks, as an integral part of the overall composition of the building and minimize their visual impact.

3.4.1 Roof decks

Roof decks, access structures, railings and privacy screens must be set back from the face of the building so that they are not visible from the public way and so that they do not negatively affect the design of other elevations. Materials, details and colours must harmonize with the existing building. Enclosures, if required for safety or privacy, should be designed in a way similar to a balcony railing rather than using a fence design.

Roof decks can provide useful outdoor space, especially on small properties without a yard. They must comply with restrictions on the use of combustible materials within 914 mm (3'-0") of property lines. When constructing a deck, care must be taken to ensure that the new construction does not damage the original roof, causing leaks that are difficult to repair.

3.4.2 Mechanical and electrical equipment

Whenever possible, mechanical and electrical equipment should be located within the building or possibly on the ground (see also section 5.2.3 and 6.7.3).

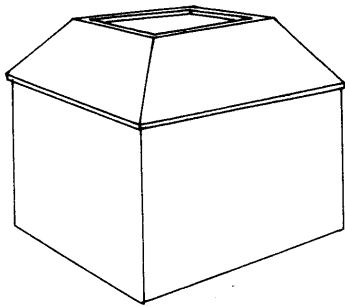
- Sloped roofs must, in all cases, remain free of antennae as well as any mechanical and electrical devices, with the exception of discreetly-integrated roof and plumbing vents.
- On flat roofs, equipment which cannot be located within the building or on the ground should be located and installed so that it is not visible from the public way and is designed to harmonize in form and colour with the building. Large equipment visible from neighbouring properties must be screened in an enclosure compatible in form, materials and colour with the style of the roof and building. Geothermal systems may be a good alternative for heating and cooling and they can eliminate the need for condensers and other equipment on the roof.

3.4.3 Antennae

If the by-law permits a roof installation of an antenna or satellite dish, it must be located so that it cannot be seen from the public way. Screening may be required.

Note that there is a section of the zoning by-law dealing specifically with satellite dishes and antennas.





Sloping roofs

In some districts, the permissible building height is greater for sloping roofs than for flat ones, in order to encourage use of sloped roofs. Within a sloping roof, a flat portion up to 15% of the roof area and enclosed by the sloping portions may be permitted. Also, no part of the sloping roof may exceed a slope of 60°.

3.4.4

units

Solar Panels and similar alternative energy

It can be challenging to install solar panels on buildings constructed up to a century before such equipment was imagined. If possible, they should be located on an existing accessory building (e.g. a garage). Solar panels and other similar alternative energy units on main buildings could be acceptable if they are well integrated and do not visually detract from the natural and built heritage qualities of the building or neighbouring properties.

3.4.5.

Green Roofs

If permitted by applicable by-laws and codes, green roofs are permitted on flat roofs of all buildings, Green roofs offer several advantages:

- the mass of the planting beds acts as thermal insulation which reduces heating loads in the winter and reduces cooling loads in the summer.
- The mass of the planting beds also provides sound insulation.
- The evaporation of cooled moisture back into the atmosphere helps to reduce heat island effect
- The planting beds absorb rainwater, which reduces the volume of water being sent to the municipal sewer system.
- The plants and earth act as natural filters for pollutants and heavy metals.
- The plants convert carbon dioxide into oxygen through photosynthesis, which improves urban air quality.
- Green roofs can contribute to the creation of natural habitat for birds and increase the amount of agricultural space in the community.

3.5 Roofs on additions and new buildings

Roofs over additions must match the defining characteristics of the roof of the main building. On new buildings located within a homogeneous streetscape or character area, the shape and materials of the roof should match the predominant characteristics of nearby buildings. If a new building is built within an architectural ensemble, the roof should match all details of the other buildings in the ensemble.

3.5.1 Shape

The overall roof form of additions should match the main building. On new buildings located within a homogeneous streetscape or character area, the shape and use of features such as dormers, chimneys etc. should match the predominant characteristics of nearby buildings. To avoid damage to the walls of the building, the edges of sloping roofs should be designed to ensure that water drips clear of the wall below.

3.5.2 Flat roofs

Avoid large, flat roofs visible from the public way or adjacent buildings. A flat roof might be acceptable if the roofing surface is not visible from the public way and if it is treated to minimize its visual impact from nearby buildings (e.g. using parapet walls; reducing its visual expanse by using roof landscaping to articulate the surface; screening mechanical equipment and skylights, incorporating planting areas and using special types of gravel). In some cases, the use of a low-slope pavilion roof may be an appropriate way to avoid a flat roof.

3.5.3 Roofing materials

The roofing material of an addition must match that of the main building. On new buildings located within a homogeneous streetscape or character area, the roofing material should match the predominant type A material. Where it can be demonstrated that relationships to the streetscape or character area do not apply, type B materials may be used.

It might be appropriate to use copper (or painted metal if not visible from the public way) for roofs over secondary building elements (entrance canopies, vestibules, bay windows, sunrooms, etc.) even though the main roof is slate. The roof over an addition to a building whose type C roofing is not being replaced should generally be a type A or B material that matches the main roof as much as possible.