

# Dormer Windows and Roof Extensions Design Guide

## INTRODUCTION

Aberdeen's dominant characteristic is its granite buildings. As granite is extraordinarily hard and consequently difficult to work, frontages of granite buildings tend to be simple in form, with architectural character being provided by elegantly proportioned windows and string courses, cornices etc. This simplicity and consistency of material creates a high degree of visual harmony in a street frontage.

Above eaves level however, roof forms can in contrast, be far less disciplined, with the result that much of the visual variety in the street scene occurs at roof level.

Dormer windows contribute greatly to this variety, along with chimneys, wall-head gables, gable skews, turrets etc. Although most dormer windows fall within a certain few standard types, their size and detailing vary enormously, from the plain to the highly ornamented. Some dormers were conceived and constructed as part of the original building design, but many have been added at a later date to allow better use of attic space. In earlier years, whether by design or by accident, these dormers were usually accommodated without greatly upsetting the balance of the roof. Recently however, dormers have been created with the maximisation of floorspace being the paramount consideration. Little attention has generally been given to form, and the balance and visual interest previously achieved, is often absent. This loss is detrimental not only to the building itself, but to the urban scene in general.



## POLICY

The Finalised Aberdeen Local Plan, "Green Spaces New Places" states in Policy 8: Design and Policy Guidance", that all development is expected to conform, where appropriate, to the City Council's published supplementary guidance. Included within the section on Domestic Guidance is "Dormer Windows and Roof Extensions".

## BACKGROUND

Until 1975 many new dormer windows and similar roof extensions were classed as "*permitted development*" and consequently did not require planning permission. Consent was however required for this type of alteration to a listed building. The coincidence of this lack of control with a surge in the modernisation of older housing resulted in considerable damage to the appearance and character of many attractive residential streets in the city.

The 1975 Town and Country Planning General Development (Scotland) Order enabled the Council's "Design Guide for Dormer Windows" produced in 1974, to be updated in 1978 to have effect in all situations throughout the City. Previously it had been applicable only to tenement buildings. That guide was revised and superseded by guidance published in 1983, which has been in use until the present time.

The 1974 and 1983 guides did result in very obvious and welcome improvements in the design of dormer windows in the city. Even with the application of this design guidance however, it became clear that further guidance was necessary to address the following issues:

- concerns about the scale of some dormers relative to the size of roof;
- the high proportion of solid to glazing in roof extensions;
- the need to give more guidance about dormers on listed buildings and in conservation areas;
- the lack of subtlety in the detailing of both modern and traditional styles of dormers;
- the need to take account of recent changes in building regulations.

## GENERAL GUIDANCE

When considering the formation or alteration of dormer windows to provide additional living space, owners tend to concentrate their efforts on maximising the internal accommodation, often to the detriment of the street scene and the building itself. It should be constantly borne in mind that the purpose of a dormer window is to provide light and ventilation to an attic space. A dormer whose main purpose is to increase the amount of floorspace with adequate headroom is in reality a roof extension. As a basic principle, new dormer windows or roof extensions should respect the scale of the building and they should not dominate or tend to overwhelm the original roof. The purpose of this design guide is to assist those intending to form, alter or extend dormer windows in their property, in formulating proposals which are likely to be considered favourably by the planning authority.



Example of unfortunate street scene which occurred when roof extensions were classed as "permitted development"

There is considerable variety in the character and types of building within the city's boundaries and it is not practical to produce guidance which covers every situation. For reference purposes the design principles referred to in this guide are covered under three general categories of building type:

- Listed buildings and buildings in conservation areas,
- Older properties of a traditional character,
- Modern properties.

Situations may arise where the extent of new dormers or roof extensions will be considered excessive. There may also be situations where any form of roof extension or dormer will be considered inappropriate e.g. on a very shallow pitched roof with restricted internal headroom. It is recommended therefore that advice from the planning authority is obtained before submitting a formal application for any consent.

## LISTED BUILDINGS AND BUILDINGS IN CONSERVATION AREAS

The planning authority has a duty to preserve and enhance the architectural and historic character of the city's listed buildings and conservation areas. It must be expected therefore that stringent controls will be applied to any proposals involving alterations to existing dormers or the formation of new dormers and roof extensions in these types of property.



Above: Examples of the variety of dormer types to be seen around Aberdeen

Below: Situation where roof pitch is too shallow to comfortably accept any type of dormer or roof extension



Applications for listed building consent will be advertised in the local press, as may applications for planning permission involving buildings in conservation areas.

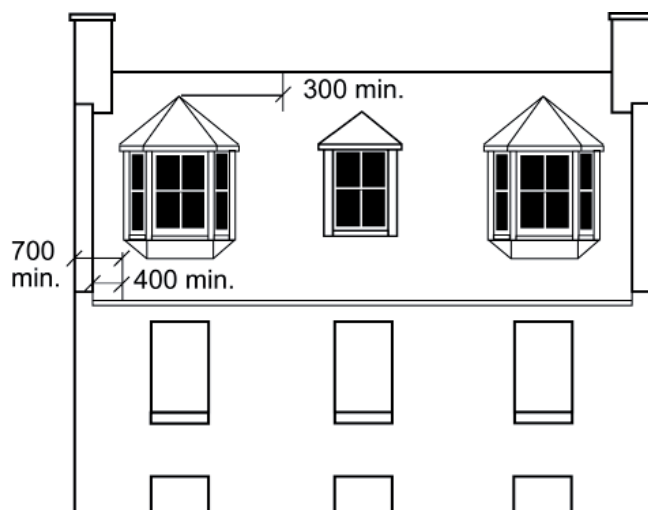
The level of constraint on dormer window design will depend to some extent on the situation of a building in the street scene or its architectural significance. Dormer windows of a design that is not contemporary with the building, may be acceptable in a few circumstances on non-listed buildings. The following principles generally will apply:

- Original dormers must be retained and repaired, and their removal and/or replacement with larger or modern dormers will not be permitted;
- The removal of inappropriate earlier dormers and roof extensions, and their replacement by architecturally and historically accurate dormers will be actively encouraged;
- In terraces or blocks of properties of uniform design where there are no existing dormers, the construction of new dormers will not be supported on the front or other principal elevations;
- In individual properties or terraces where there are existing appropriate dormers and where there is adequate roof space, the construction of new dormers which match the originals may be acceptable. Additional dormers will not be permitted however, if this results in the roof appearing overcrowded. These dormers should be closely modelled in all their detail and in their position on the roof, on the original examples. They will normally be aligned with windows below;
- Box dormers will not be permitted anywhere on listed buildings, nor will the practice of linking existing dormers with vertical or inclined panels; and
- In the case of non-listed buildings in conservation areas, consideration may be given to the provision of linked panels between windows on the private side of the building, where the extension is not seen from any public area. In such cases any linked panel should slope at a maximum of 75° to the horizontal. Non-traditional style dormers may be accepted on the rear of non-listed buildings in conservation areas, but generally not on the rear or any other elevations of listed buildings.

## FRONT ELEVATIONS OF OLDER PROPERTIES OF A TRADITIONAL CHARACTER

On the public elevations of older properties the Council will seek a traditional, historically accurate style of dormer window. In addition, all new dormers will have to be of an appropriate scale, i.e. a substantial area of the original roof must remain untouched and clearly visible around and between dormers. The main principles to be followed are:

- Existing original dormers should be retained or replaced on a "*like for like*" basis. Box dormer extensions will not normally be acceptable on the front elevations;
- The aggregate area of all dormers and/or dormer extensions should not dominate the the original roof slope. New dormers should align with existing dormers and lower windows and doors;
- Dormers will normally be fully glazed and aprons below the window will not be permitted unless below a traditional three faceted piended dormer;
- Dormers should not normally rise directly off the wallhead. In the case of stone buildings, dormers which rise off the inner edge of the wallhead will generally be acceptable. The position of the dormer on the roof is very important. Dormers which are positioned too high on the roof give the roof an unbalanced appearance;
- The outer cheek of an end dormer should be positioned at least 700mm in from the face of the gable wall or 1000mm from the verge. Where there is tabling on top of the gable, the cheek should be at least 400mm in from the inside face of the tabling. It is never acceptable for a dormer haffit to be built off the gable or party wall; and
- The ridge of any new dormer should be at least 300mm below the ridge of the roof of the original building. If it is considered acceptable for the dormer ridge to be higher than this, it should not nevertheless, breach the ridge or disturb the ridge tile or flashing.



Piended dormers on typical Aberdeen tenement (linking dormers not acceptable on front elevations)



Above: Unfortunate treatment of traditional half dormer bay window

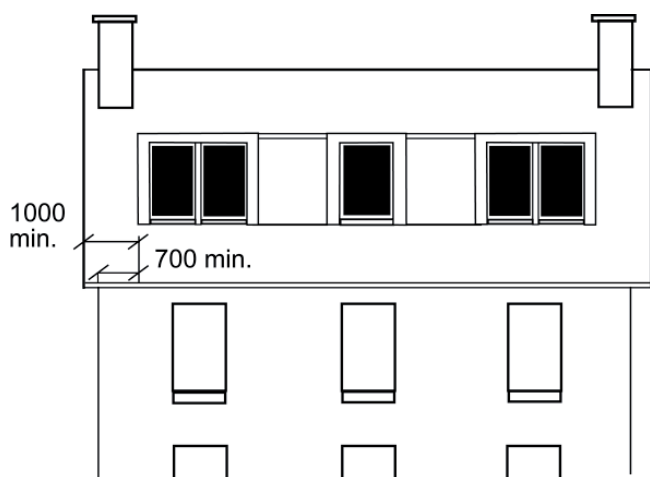
Below: Extreme example of insensitive roof extension



## REAR ELEVATIONS OF OLDER PROPERTIES AND OTHER EXCEPTIONS

The guidelines for older properties may be relaxed where a property is situated between two properties which have existing box dormer extensions, or in a street where many such extensions have already been constructed. They may also be relaxed on the non-public (rear) side of a property. In such cases, and notwithstanding the design and finish of neighbouring development, the following minimum requirements will apply:

- The aggregate area of all dormer and/or dormer extensions should not dominate the original roof slope;
- Dormer eaves should be a minimum of 400mm in from the inside face of the gable tabling;
- The front face of dormer extensions should be a minimum of 400mm back from the front edge of the roof, but not so far back that the dormer appears to be pushed unnaturally up the roof slope.
- Flat roofs on box dormers should be a reasonable distance below the ridge;
- Windows should be located at both ends of box dormers;
- A small apron may be permitted below a rear window; and
- Solid panels between windows in box dormers may be permitted but should not dominate the dormer elevation.



Flat roofed box dormer (normally only acceptable on rear elevations)

## ROOFLIGHTS

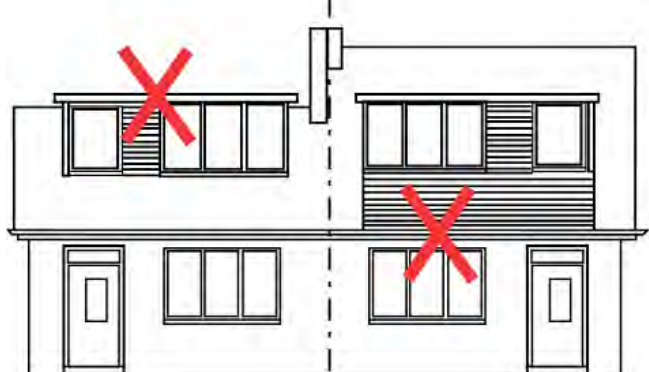
The installation of 'Velux' type rooflights is a simple and cost effective method of allowing additional natural light and ventilation into an attic or roofspace. An excessive use of these rooflights can however, create visual clutter on a roof. Consent is required for the installation of such rooflights on listed buildings, on buildings in conservation areas and on flats. When considering the installation of a rooflight, account should be taken of the following:-

- A rooflight provides considerably more light than a normal vertical window of the same dimension. Many rooflights installed are consequently, larger and more numerous than is really necessary. In a roofspace used only for storage, the smallest rooflight will generally be adequate;
- Rooflights should have a conspicuously vertical proportion. Seen from ground level, the foreshortening effect will tend to reduce the apparent height of the window, giving it a more squat appearance;
- On older buildings, and particularly on listed buildings and buildings in conservation areas, a 'heritage' type of rooflight will be preferred. Even the addition of a central glazing bar to a rooflight can provide a more authentic appearance in such instances;
- Large timber or cast iron rooflights divided into several sections were frequently provided above stairwells. It is not ideal to replace these with a single 'Velux' type rooflight. If the original rooflight cannot be repaired, aluminum or steel patent glazing is a more satisfactory option; and
- For rooflights fitted into slated roofs, Velux can provide a special flashing with their rooflights to keep the projection of the rooflight above the plane of the slates to a minimum.
- There are available metal roof windows which have an authentic traditional appearance whilst meeting current standards for insulation and draught exclusion.

## MODERN PROPERTIES

Dormers and box dormer extensions have become common features in many modern housing areas, and the wide variety of designs of modern dwellings necessitates a greater flexibility in terms of design guidance. The amenity of other properties and the residential neighbourhood must however, still be protected, with the integrity of the building being retained after alteration. The following basic principles may be used to guide the design and scale of any new dormer extension:

- The dormer extension should not appear to dominate the original roofspace.
- The dormer extension should not be built directly off the front of the wallhead as the roof will then have the appearance of a full storey. On public elevations there should be no apron below the window, although a small apron may be acceptable on the rear or non-public elevations. Such an apron would be no more than three slates high or 300mm, whichever is the lesser;

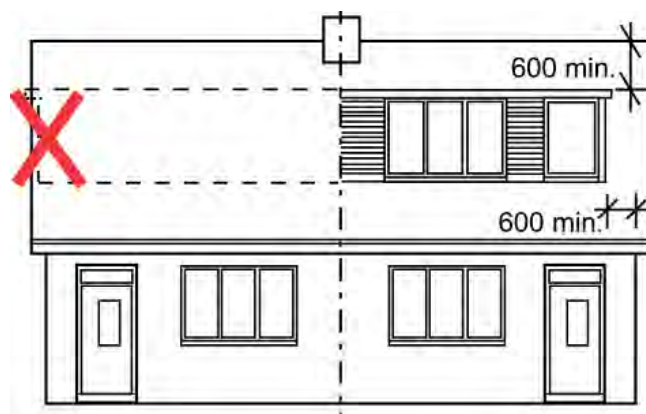


Dormer extension should not extend to or breach ridge (roof too shallow)

Dormer extension should not be built off front of wall head

- The roof of the proposed extension should not extend to, or beyond the ridge of the existing roof, nor should it breach any hip. Dormer extensions cannot easily be formed in hipped roofs. Flat roofed extensions should generally be a minimum of 600mm below the existing ridge;

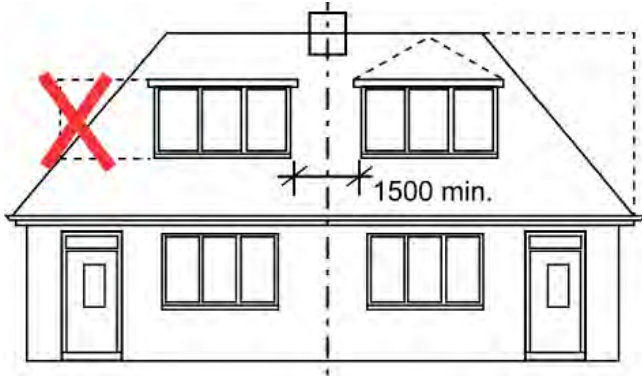
- The dormer extension should be a minimum of 600mm in from the gable. The dormer haffit should never be built off the gable or party walls, except perhaps in the situation of a small semi-detached house where the dormer extension may sometimes be built off the common boundary. In terrace situations, or where a detached or semi-detached bungalow is very long, dormer extensions should be kept about 1500mm apart (i.e. dormer haffits should be 750mm back from the mutual boundary) so as not to make the dormer appear continuous or near continuous;



Box dormer extension on small semi-detached house (in this case it is permissible to build up to the party wall) Dormer should not extend out to verge

- The outermost windows in dormer extensions should be positioned at the extremities of the dormer. Slated or other forms of solid panel will not normally be acceptable in these locations. In the exception to this situation, a dormer on a semi-detached house may have a solid panel adjacent to the common boundary when there is the likelihood that the other half of the house may eventually be similarly extended in the foreseeable future. In this case the first part of the extension should be so designed as to ensure that the completed extension will eventually read as a single entity;
- There should be more glazing than solid on the face of any dormer extension.
- Box dormer extensions should generally have a horizontal proportion. This need not apply however, to flat roofed individual dormer windows which are fully glazed on the front;

- Finishes should match those of the original building and wherever possible the window proportion and arrangement should echo those on the floor below;
- The design of any new dormer extension should take account of the design of any adjoining dormer extension.



Flat roofed dormers on more traditional hipped roof house (Dormers should not breach hips. A pitched roof on this kind of dormer greatly increases its bulk). Extending roof to the gable on one side only is best avoided.

## OTHER FORMS OF DORMER WINDOW AND ROOF EXTENSION

### Hipped roof extensions

Whilst extending a hipped roof on one half of a pair of semi-detached houses to terminate at a raised gable can generally be accepted, it is not an ideal solution to the problem of increasing attic space, except when both halves of the building are similarly extended. An extension on one side only gives the roof an unbalanced appearance.

### Half dormer windows

Half dormer windows have the lower part of the window within the masonry wall, with the part in the roof space surrounded by masonry or timberwork. This type of window is usually quite narrow, vertical in proportion, and is appropriate when the floor is below the wall-head level.

### Wall-head gables

A wall-head gable commonly has a centre window, with flues passing each side within the masonry to a common central chimney. It would be essential for any such feature to be constructed in the same material as the wall below.

(Both half dormer window and wall-head gables have a strong visual impact which could substantially alter the character of a building. They are therefore, unlikely to be acceptable on listed buildings, but might be accepted in conservation areas or on other older buildings of a traditional character.)

## MANSARD ROOFS

Mansard roofs are a common, even a somewhat overused method of obtaining additional attic floorspace having standard headroom overall. Mansard roofs tend to have a top heavy appearance on buildings which have only a single storey of masonry, and should be restricted to buildings of two or more masonry storeys. They will not normally be acceptable in semi-detached or terraced situations unless all the other properties in the group are to be similarly altered at the same time. In effect, few situations will arise where an existing roof can readily be converted to a mansard roof.

On the occasions when a mansard roof solution is acceptable, considerable attention to detail is required to ensure that the altered roof is visually authentic. The following points should be observed:

- There should be no fascia at the eaves, nor should the mansard project forward of the masonry line;
- The mansard should be taken down to either a concealed lead gutter behind a masonry parapet, or to an "ogee" or half round cast iron gutter in line with the face of the masonry;
- The gables of the building should be extended up in the same material as the original gables, and should terminate at a masonry skew in the same profile as the mansard roof. It will not normally be acceptable to return the mansard roof across the gable with hipped corners;
- The lower slope of the roof should be inclined at no greater than 75° to the horizontal.

## **BUILDING REGULATIONS APPLICABLE TO DORMER WINDOWS**

### **Fire resistance**

The Building Regulations permit haffits of dormer windows and box dormer extensions to be any distance from the boundary. If however they are 1 metre or less from the boundary, they must have a fire resistance of 1 hour from the inside of the haffit. These figures apply to all buildings.

### **Emergency escape**

The Building Regulations require a suitably designed and located emergency escape window in every apartment in an upper storey of a dwelling house not more than 4.5 metres above ground level, or which is an inner room (i.e. a room accessed solely from another room), except where an alternative escape route is available.

### **Cleaning of windows**

The Building Regulations require that within a dwelling, all windows which at any part are more than 4.0 metres above the adjacent ground level, should be so constructed as to enable their internal and external surfaces to be safely cleaned from within the building, or to have a load bearing surface, or access system, mounted on the building.

### **Daylight and ventilation**

The area of glazing in windows in apartments should be not less than 1/15th of the floor area of the apartment. Natural ventilation of apartments should be provided by opening sashes in windows having an area of not less than 1/30th of the floor area of the apartment, and with trickle ventilation.

## **CONSTRUCTIONAL POINTS TO NOTE**

On modern flat roofed dormers or box dormer extensions, the roof should fall to the front of the dormer, to enable fascias to be kept as thin as possible. The box-like appearance can be mitigated if the dormer roof projects beyond the face and cheeks of the dormer by at least 100mm. Painting the fascia a dark or neutral colour reduces its visual impact, as does the provision of a half round gutter returning along the sides of the dormer.

Whenever possible, fascias on box dormer extensions should be confined to window locations, particularly on traditional types of buildings, with infill panels between windows finished at the top with a lead flashing and/or neat aluminum eaves trim. Fascias which are continuous along the whole length of the dormer, tend to create a conspicuous band at roof level, particularly if painted white.

Vertical facings on each side of a dormer window or dormer extension, should be no more than 120mm wide.

## **DRAWINGS**

Drawings submitted with applications for planning permission or listed building consent should show the full context of the proposal. An application to form a dormer window on a semi-detached house for example, should show in plans and elevations the existing situation on the other half of the building.

If you require any further information please contact:

**Masterplanning, Design and Conservation  
Enterprise, Planning and Infrastructure  
Aberdeen City Council  
Business Hub 4  
Marischal College  
Broad Street  
Aberdeen AB10 1AB**

**Telephone: 01224 522155  
Fax: 01224 523180  
E-mail: [pi@aberdeencity.gov.uk](mailto:pi@aberdeencity.gov.uk)**