Title of the Invention: Dormers, dormer shells and dormer shell weathering bars
Abstract Title: Unitary dormer shell with weathering bar

A dormer comprised of a unitary glass reinforced plastic dormer shell having first and second side walls 11, 12 that rise from a basal plan P and converge towards each other with their height decreasing from front to back, a frontal wall with a window aperture A between the two walls, a flange F extending from the bottom of the side walls comprising a dam formation D around the periphery and a weathering bar (figure 2a, ref 38) comprising a bar with multiple flat and angled surfaces having the same width as the space between the front edges of the flange and is fitted underneath a flange end portion. The weathering bar may have spaced abutments which when the bar is fitted abut interior portions of the dormer shell side walls to prevent lengthwise movement of the weathering bar. A weathering bar is also claimed.
Fig. 19

19/19
DORMERS, DORMER SHELLS, AND DORMER SHELL WEATHERING BARS

FIELD OF THE INVENTION

This invention relates to dormers employing prefabricated unitary glass-reinforced dormer shells and is more particularly concerned with roof weathering bars for use with dormer shells.

STATEMENT OF PRIOR ART

The classical wooden frame dormer although of, often, pleasing appearance is, by reason of its bespoke character and the consequent time-consuming effort called for in its construction and installation on site, often inappropriate for large scale building developments, where cost is paramount. As a consequence, it is now not uncommon to employ a prefabricated unitary glass-reinforced plastic moulded shell as the principal constructional element for the dormer.

In distinction from prior art dormers, whether of the gable ended type or of the flat-roofed so-called shed type, employing pre-fabricated unitary glass-reinforced plastic dormer shells, dormers in accordance with the present invention are of two-part construction, there being a dormer shell having a specific design feature not to be found in prior art dormer shells, which feature together with a bar, hereinafter referred to as a “weathering bar”, not present in prior art arrangements, also, for use, at installation of a dormer at a roof site, the dormer shell embodying the specific design feature and the weathering bar cooperating with one another such as to enhance weathering of the roof around the forward end of the dormer shell.

Whilst an embodiment of the invention is hereinafter described in the context of a dormer having a dormer shell not of state of the art, being a design described and claimed in Applicants co-pending UK Patent Application GB No. , the invention is not limited in its application to the design of the described embodiment but, as previously intimated, finds application in dormers of other design, including dormers well known in the prior art. Accordingly, the invention the subject of the present Application is to be construed in accordance with the claims as set out in the claims schedule hereof.

SUMMARY OF FEATURES OF THE INVENTION

The present invention is a dormer shell on offers a prefabricated unitary glass-reinforced plastic dormer shell of the gable-ended type which is adapted for use on roofs of any pitch within a prescribed range, which calls for the provision of one mould, only, in its fabrication and which, yet, it is contended, avoids the drawbacks, as stated above, encountered with the use and installation of
prefabricated unitary glass-reinforced plastic dormer shells.

According to the invention, a glass-reinforced plastic shell for a dormer comprises:

a unitary glass-reinforced plastic dormer shell having:

first and second side walls which rise with all but first and second side-wall end edge-segments, respectively, of their bottom edges contained in a basal reference plane, said edge end-segments rising, upwardly inclined, from said basal reference plane in the direction towards the front ends, respectively, of said dormer shell;

a frontal wall which bridges the space between said side walls at the forward end of said dormer shell, and which is pierced with a window aperture;

first and second flange portions integral with the shell along said shell first and second side wall bottom edges, the flange portions having flange end portions which rise with first and second inclined edge end-segments, respectively, and which are contained in a plane containing the bottom edge of said front wall, the flange incorporating a dam formation inset with respect to the free outer edge of the flange and extending substantially the full length of the flange; and,

a weathering bar, being a bar having a flat first face and a second face formed, at the ends thereof, with first and second ramp-form portions of ramp angle equal to the angle subtended by said flange end portions with respect to said basal reference plane, the weathering bar having a length equal, substantially, to the distance separating the outer edges of said first and second flange portions at locations to the sides of the dormer shell front end, said bar, when clad with sheet lead, or like malleable material, being adapted to occupy space behind said front wall with a lead clad front edge face thereof in face to face contact with the rear surface of said wall and to coact with said dormer shell at the front end thereof such that, with said ramp-form end portions of said bar projecting outwardly with respect to said dormer shell side walls, to lie beneath said flange end portions, the flat first face being then contained in said basal reference plane.

Preferably, a box-form window reveal structure projects rearward from said frontal wall at said window aperture, the bottom wall of the reveal structure extending transversely of said frontal wall structure; and, forming part of said weathering bar second face intermediate said first and second ramp-form portions, there is a third ramp-form portion having a ramp angle equal to the angle subtended by the lower wall of said box-form structure with respect to said basal reference plane and being of a length substantially equal to that of said bottom wall of the window reveal, the spacing of said reveal structure bottom wall from said third ramp-form portion, being such that when, in use, with the dormer shell installed at a roof site, with the first face of the weathering bar contained in the basal reference plane, the third ramp-form portion, lead-clad, is in face to face contact with the under-surface of said reveal bottom wall.
The foregoing and other notable features of dormers and dormer shells in accordance with the invention are hereinafter set forth in the claims schedule hereof, and their texts are, mutatis mutandis, notionally here set forth.

BRIEF DESCRIPTION OF THE DRAWINGS

A preferred embodiment of the invention is next described with reference to the accompanying drawings in which:

Fig.1 is a general pictorial diagram of a dormer installation at a roof site of 30° pitch angle;
Fig.2 is an exploded pictorial diagram showing the dormer shell and other elements of the dormer of Fig.1;
Fig.3 is a side elevation of the dormer installation of Fig.1;
Fig.4 is longitudinal section of the dormer installation of Fig.1, the section being taken on the medial fore and aft plane containing the ridge line of the roof of the shell of the dormer;
Fig.5 is a pictorial view of a forwardly tilted dormer shell;
Fig.6 is a scrap pictorial sectional diagram showing, with hidden detail, a corner of the dormer installation, the flange portion being obliquely sectioned such as to expose particular features of the dormer installation illustrated in Fig.1;
Fig.7 is a scrap pictorial sectional diagram corresponding to Fig.6, but with hidden detail removed;
Figs.8, 9, and 10 show three orthogonal views of a dormer shell fitted with a window, the shell being shown supported at a pitch angle of 30°;
Fig.11 shows, in pictorial representation, the dormer with the dormer shell of Figs.8, 9, and 10, together with associated dormer parts, at a 30° pitch angle;
Figs.12, 13, and 14, show three corresponding views of the dormer shells when supported at a pitch angle of 50°;
Fig.15 shows, in pictorial representation of the dormer with the dormer shell of Figs.12, 13, and 14 together with associated dormer parts, at 50° pitch angle;
Fig.16 is a pictorial diagram showing the interior of the dormer shell at a pitch angle of 30°;
Fig.17 is a pictorial diagram showing the interior of the dormer using the dormer shell of Fig.16;
Fig.18 is a scrap pictorial diagram showing a rear corner of the flange of the dormer shell, and the roof rafters and battens at the site of the roof installation; and,
Fig.19 is a part exploded pictorial view of the dormer in association with a timber internal support frame for the dormer shell.
A DESCRIPTION WITH REFERENCE TO THE DRAWINGS OF CHARACTERISTIC FEATURES OF AN EMBODIMENT OF THE INVENTION

A gable-ended prefabricated unitary glass-reinforced plastic shell for a dormer comprises:

first and second side walls, 11, 12, respectively, substantially identical in size and shape, being side walls which rise substantially from a dormer shell basal reference plane P and which converge towards one another in the fore and aft direction of the dormer shell whilst diminishing in height, also, in that direction, said basal reference plane P containing all but first and second edge end-segments, 13, 14, of the lower edges, 15, 16, respectively, of said side walls, said edge end-segments, 13, 14, being upwardly inclined at a certain angle $\alpha$ in the fore and aft forward-pointing direction of the dormer shell with respect to said basal reference plane P;

a pitched roof having first and second roof portions, 17, 18, respectively, symmetrically disposed with respect to a fore and aft extensive roof ridge line R;

a frontal wall structure W pierced with a window aperture A, being a structure which bridges the space between said side walls, 11, 12, at the forward end of the dormer shell; and,

a flange F which extends, uninterrupted, integral with side wall lower edges 15, 16, including at least an initial portion of each of said upwardly inclined edge end-segments 13, 14, and around the rear ends of the side walls and of the roof portions 17, 18, and which incorporates a dam formation D, inset with respect to the free outer edge 19 of the flange F and extends the full length of the flange. The dam formation D whilst extending along the upwardly inclined flange portions integral with the side wall lower edges, 15, 16, has (Figs. 5 and 10) a tapered edge-profile.

The geometrical relationship between said ridge line R and the upper edges, 21, 22, respectively, of the side walls 11, 12, determines that the outer surfaces of the roof portions, 17, 18, each have a three-dimensional shape such that orthogonal projections, onto said basal reference plane P, of vectors normal, at substantially every point, respectively, to said outer surfaces, may be resolved each into two components, one said component having a direction X towards the front, the other in a direction Y towards one side or the other, as the case may be, of said dormer shell, this regardless of tilt, within a certain angular range, of said dormer shell about an axis Z--Z extending transversely with respect to said fore and aft direction of said dormer shell, at the forward end thereof.

In the embodiment depicted a concave curve has, for reasons stated hereinafter, been chosen for the contour of the roof ridge line R.

In the embodiment, also, the upper edges, 21, 22, of the side walls, 11, 12, respectively, and side edges, 23, 24, of the roof portions, 17, 18, respectively, are straight edges, and the roof portions and
the side wall portions are united along the said edges.

The lower and upper edges, 15, 16; 21, 22, of the two side walls, 11, 12, respectively converge to attain the level of the basal reference plane P at spaced positions, 25, 26, respectively, symmetrically located with respect to the plane normal to said reference plane and containing said roof ridge line R, and the roof ridge line R is convergent towards said plane P such as to attain the level of the latter plane at a position 27 intermediate said spaced positions, 25, 26, and to the rear thereof.

The side walls, 11, 12, are convergent not only in the rearward fore and aft direction of the dormer shell, they are convergent, also, transversely to said fore and aft direction, being inclined inwardly toward the medial fore and aft plane of the dormer shell which contains said roof ridge line R. In the example, the side walls have straight upper edges and the roof portions, straight side edges.

The frontal wall structure W comprises: a wall which has a lower portion 28 of substantially trapezoidal shape, and a and a substantially triangular upper portion 29, The trapezoidal portion, which is pierced with the window aperture A, is contained in a plane having a rearward inclination α with respect to the basal reference plane P, the upper boundary of the trapezoidal portion being defined by a notional transverse line T--T which extends between the forward ends of the upper edges, 21, 22, respectively, of the side walls, 11, 12. The triangular upper portion 29 which is contiguous with the trapezoidal lower portion 28 at the line T--T, occupies the space adventitiously presented by the roof portions, 17, 18, at their forward ends, and has a rearward inclination β with respect to the trapezoidal lower portion, the rearward inclination β of the triangular portion being such that, with the dormer shell tilted about the frontal transverse axis Z--Z through a tilt angle equal to the prescribed smallest angle of said certain angular range, the trapezoidal lower portion 28 is contained in a vertical plane, whereas with the dormer shell tilted through a tilt angle equal to the prescribed greatest angle of said certain angular range about said transverse axis, it is the triangular upper portion which is contained in a vertical plane.

The window aperture A is of rectangular shape, and a window reveal box-form structure 30 of corresponding cross-section, has an upper wall 31 of a depth significantly greater than the reveal lower wall, as 32, such as, at installation of a window in the reveal, to permit the window to be fitted between the lower and upper reveal walls, 32, 31, such as to occupy a vertical plane regardless of the tilt angle, within said certain range, of the dormer about the frontal transverse axis Z--Z.

The side walls, 33, 34, respectively, of said window reveal box-form structure 30 stand, in relation to said dormer shell side walls, 11, 12, respectively, such that between the dormer shell side walls
and the box-form structure side walls, 33, 34, there are first and second recesses, 35, 36, respectively, which reach in an upward direction from beneath the dormer front end. The lower edge 37 of the trapezoidal lower segment 28 is contained in the same plane as the inclined edge end-segments 13, 14, of the dormer shell side wall lower edges, 15, 16, that is to say, at an angle $\gamma$ with respect to the basal reference plane P.

The dormer shell hereinbefore described is the primary component of the dormer to be installed at a roof site. The dormer comprises, also, a weathering bar 38, for use when a dormer shell is installed at a roof site to contribute to the weathering of the dormer shell at its forward end. The weathering bar has: a flat first face 39, and a second face 40 having first and second formations 41, 42, respectively, outstanding therefrom, outward-facing shoulders, 43, 44, of which are spaced apart along the second face 40 with a spacing corresponding to the spacing between the interior surfaces of the dormer side walls, 11, 12. To the sides of the outward-facing shoulders, 43, 44, there are weathering bar first and second ramp-form end portions, 45, 46, respectively, said end portions being equal in length and being, each, with a ramp angle, with respect to said flat first face 39, equal to the angle $\alpha$, with respect to said basal reference plane P, and of the edge end-segments, 13, 14, of the side wall ramp-form flange end portions, 47, 48, which are integral, respectively, therewith, the length of the ramp-form flange end portions, 47, 48, being such that the extremities, 49, 50, thereof are spaced apart with the spacing separating the free outer edges, 51, 52, respectively, of the weathering bar ramp-form end portions, 45, 46.

The weathering bar 38 is such that when, in use, with the outward-facing shoulders, 43, 44, abutting the interior surfaces, respectively, of the side walls 11, 12, and with the weathering bar 38 received with the ramp-form end portions, 45, 46, thereof respectively positioned beneath the side wall ramp-form flange end portions, 47, 48, the flat first face 39 of said weathering bar 38 is contained, in the basal reference plane P.

Between said first and second formations, 41, 42, there is a third ramp form portion 53 of length equal substantially to the length of the lower wall 32 of the box-form structure 30 and having a ramp angle $\delta$ equal to the angle subtended by said lower wall 32 to the basal reference plane P. When, in use, the flat first surface 39 of the weathering bar is contained in the basal reference plane P, the third ramp form portion 53 is in face to face contact with the under-side of the box-form structure lower wall 32.

In the course of installation of a dormer at a roof site, a body of sheet lead, or other suitably malleable sheet material, 54, is employed in association with the weathering bar 38 to contribute to the weathering of the dormer shell at its forward end. As shown in Fig. 2, the sheet lead is shaped, in situ, at installation of the dormer, or by being preformed, off-site, to conform to the profile of the
ramp form portions, 45, 46, 53, and the forward edge face 55, of the weathering bar.

As previously noted, with the weathering bar installed beneath the dormer shell at its forward end, the flat first face 39 of the weathering bar is flush with the basal reference plane P. The weathering bar, clad, as stated, with lead sheet 54, stands with its clad forward edge face 55 in face to face contact with the rear side of the trapezoidal wall portion 28 down to the level of the edges 56, 57, respectively, of forward edge faces, 58, 59, respectively, of the the ramp-form portions, 45, 46, the bottom portion 60 of the forward edge face 55, that is to say, the portion of the edge face 55 at the level below that of said forward edges 56, 57, projecting beneath the lower edge 37 of the trapezoidal wall portion 28, the sheet lead lifting from the edge face 55 of the weathering bar to emerge (Figs. 6, 7, and 14) from beneath the lower edge 37, the so-emergent (Fig.1) lead sheeting forming a flashing apron portion over a course of slates or tiles 61, flat interlocking or contoured, as the case may be, abutting the trapezoidal wall portion 28, and sideways, with the lead clad weathering bar ramp-form end portions, 45, 46, underlying the side wall ramp-form flange end portions, 47, 48, in face to face contact with their undersides, respectively, to form first and second flashing skirt portions, respectively.

Roof battens are cut, such that the cut ends abut the outer edge of the dam formation D, and the slates or tiles with which the roof is clad at the sides of the dormer shell at its forward end are cut also, appropriately, as shown, to rest on the dam formation D and overlap, in part, the portion of the flange F separating the dormer side walls, 11, 12, and the dam formation D. As may be seen, the side skirt flashing portions, extend at the sides outward beyond the edges of the flange F and are there overlaid with tiles or slates, as shown.

The range of pitch roof pitch angles to which a dormer embodying a dormer shell as previously described may be fitted extends, in practice, substantially between 30° and 50°, this being a suitable range of roof pitch angles and characteristic of those pitch angles commonly encountered in modern domestic and other building projects.

The softer visual impression of a dormer having a ridge line R of gently concavely curved contour, when installed on a roof, which may be of any pitch angle within the prescribed range, mitigates from the, perhaps, harsher visual impact of a dormer, in accordance with the invention but with, say, a straight line roof ridge, particularly where the dormer is installed on roofs of pitch angle around the upper end, 50°, of the chosen range.

In accordance with standard practice where the dormer shell to be installed is of glass-reinforced plastic the structural stability of the dormer is enhanced by timber reinforcement members secured as by adhesive bonding to interior surfaces of the dormer shell. Suitably, a timber frame, typically as depicted in Fig.19, might be employed in the interior reinforcement of the shell, members of the
the timber frame being embedded, after being bonded, as by an epoxy resin, to the dormer shell, in a high U-number layer of insulative foam material sprayed over the timber frame so bonded.

The dormer to the present invention, by virtue of the uninterrupted the gully for water formed around the dormer shell by the flange, and the power of the bilateral three-dimensional form of the dormer roof to shed water incident upon the roof at any point of the three-dimensional surface portions of the roof, regardless of the pitch angle of the roof on which the dormer is installed, always in a forward and sideways downward direction, avoids common weathering problems encountered with prior art designs of unitary GLP dormers, and the outwardly sloping dormer shell side walls enhance the flow of water from the dormer roof to the uninterrupted gully along the sides and around the back of the dormer shell.

Not only is the prefabricated unitary glass-reinforced dormer shell of novel design, the provision at the forward end of the shell of the weathering means constitutes a novelty, also. Prior art prefabricated unitary glass-reinforced dormer shells have apart from other undesirable performance attributes, been deficient in failing to provide a reliable means of rendering the dormer when installed, waterproof particularly at the forward corners of the dormer shell. Weathering means provided, as described, at the forward end of the dormer shell in accordance with the present invention, at installation thereof, constitute an efficient sealing arrangement, rendering the dormer immune from water penetration at the front of the shell and, especially, at the forward corners, where the ramp-form outer portions and the endmost portions of the flange overlying the latter flange portions F', ensure a watertight closure at these locations.
CLAIMS

1. A dormer which comprises:
   a unitary glass-reinforced plastic dormer shell having:
   first and second side walls which rise with all but first and second side-wall end edge-segments, respectively, of their bottom edges contained in a basal reference plane, said edge end-segments rising, upwardly inclined, from said basal reference plane in the direction towards the front ends, respectively, of said dormer shell;
   a frontal wall which bridges the space between said side walls at the forward end of said dormer shell, and which is pierced with a window aperture;
   first and second flange portions integral with the shell along said shell first and second side wall bottom edges thereof, the flange portions having flange end portions which rise with first and second inclined edge end-segments, respectively, and which are contained in a plane containing the bottom edge of said front wall, the flange incorporating a dam formation inset with respect to the free outer edge of the flange and extending substantially the full length of the flange; and,
   a weathering bar, being a bar having a flat first face and a second face formed with first and second ramp-form portions at the ends thereof, being end portions of ramp angle equal to the angle subtended by said flange end portions with respect to said basal reference plane, the weathering bar having a length equal to the distance separating the outer edge of said uninterrupted flange at its locations to the sides of the dormer shell front end, said bar, when clad with sheet lead, or like malleable material, being adapted to occupy space behind said front wall with a lead clad front edge face thereof in face to face contact with the rear surface of said wall and to coact with said dormer shell at the front end thereof such as to secure the bar with respect to said dormer shell with said ramp-form end portions of said bar projecting outwardly with respect to said side walls to lie beneath said flange end portions, said flat first face being then contained in said basal reference plane.

2. A dormer as claimed in any of claims 1 in which: a box-form window reveal structure projects rearward from said frontal wall at said window aperture, the bottom wall of the reveal structure extending transversely of said frontal wall structure; and, forming part of said weathering bar second face intermediate said first and second ramp-form portions, there is a third ramp-form portion having a ramp angle equal to the angle subtended by the lower wall of said box-form structure with respect to said basal reference plane and being of a length substantially equal to that of said bottom wall of the window reveal, the spacing of said reveal structure bottom wall from said third ramp-form portion, being such that when, in use, with the dormer shell installed at a roof site,
with the first face of the weathering bar contained in the basal reference plane, the third ramp-form portion, lead-clad, is in face to face contact with the under-surface of said reveal bottom wall.

3. A dormer as claimed in any of claim 1 or 2 in which said weathering bar has spaced abutment surfaces which, when at installation of the dormer shell at a roof site said weathering bar is in place with respect to said shell, the aforesaid abutment surfaces abut interior portions of the dormer shell side walls, respectively, such as to prevent lengthwise movement of said weathering bar with respect to said dormer shell.

4. A dormer as claimed in claim 3 in which said first and second abutment surfaces are outward-facing surfaces of first and second abutment formations respectively located, the one between said first and third, the other between said second and third ramp-form portions of the weathering bar.

5. A weathering bar for use in association with a dormer shell, being a shell as specified in claim 1, such as, together, to constitute elements of a dormer as claimed in any of claims 1 to 4.

6. A weathering bar as claimed in claim 5 substantially as hereinbefore described with reference to the accompanying drawings.

7. A dormer shell for use with a weathering bar, being a weathering bar as specified in any of claims 1 to 4 such as to constitute elements of a dormer as claimed in any of claims 1 to 4.

8. A dormer shell as claimed in claim 7 substantially as hereinbefore described with reference to the accompanying drawings.
AMENDMENTS TO THE CLAIMS HAVE BEEN FILED AS FOLLOWS

CLAIMS

1. A dormer which comprises:
   a unitary glass-reinforced plastic dormer shell having:
   first and second side walls which rise, with all but first and second side-wall end edge-
   segments, respectively, of their bottom edges contained in a basal reference plane, said edge end-
   segments rising, upwardly inclined, from said basal reference plane in the direction towards the
   front ends, respectively, of said dormer shell;
   a frontal wall which bridges the space between said side walls at the forward end of said
doctor shell, and which is pierced with a window aperture;
   first and second flange portions integral with the shell along said shell first and second side
   wall bottom edges thereof, the flange portions having flange end portions which rise with first and
   second inclined edge end-segments, respectively, and which are contained in a plane containing the
   bottom edge of said front wall, the flange incorporating a dam formation inset with respect to the
   free outer edge of the flange and extending substantially the full length of the flange; and,
   a weathering bar, being a bar having a flat first face and a second face formed with first and
   second ramp-form portions at the ends thereof, being end portions of ramp angle equal to the angle
   subtended by said flange end portions with respect to said basal reference plane, the weathering bar
   having a length equal to the distance separating the outer edge of said uninterrupted flange at its
   locations to the sides of the dormer shell front end, said bar, when clad with sheet lead, or like
   malleable material, being adapted to occupy space behind said front wall with a lead clad front edge
   face thereof in face to face contact with the rear surface of said wall and to coact with said dormer
   shell at the front end thereof such as to secure the bar with respect to said dormer shell with said
   ramp-form end portions of said bar projecting outwardly with respect to said side walls to lie
   beneath said flange end portions, said flat first face being then contained in said basal reference
   plane.

2. A dormer as claimed in any of claims 1 in which: a box-form window reveal structure projects
rearward from said frontal wall at said window aperture, a bottom wall of the reveal structure
extending transversely of said frontal wall structure; and, forming part of said weathering bar
second face intermediate said first and second ramp-form portions, there is a third ramp-form
portion having a ramp angle equal to the angle subtended by the lower wall of said box-form
structure with respect to said basal reference plane and being of a length substantially equal to that
of said bottom wall of the window reveal, the spacing of said reveal structure bottom wall from said

...
with the first face of the weathering bar contained in the basal reference plane, the third ramp-form portion, lead-clad, is in face to face contact with the under-surface of said reveal bottom wall.

3. A dormer as claimed in any of claim 1 or 2 in which said weathering bar has spaced abutment surfaces which, when at installation of the dormer shell at a roof site said weathering bar is in place with respect to said shell, the aforesaid abutment surfaces abut interior portions of the dormer shell side walls, respectively, such as to prevent lengthwise movement of said weathering bar with respect to said dormer shell.

4. A dormer as claimed in claim 3 in which said first and second abutment surfaces are outward-facing surfaces of first and second abutment formations respectively located, the one between said first and third, the other between said second and third ramp-form portions of the weathering bar.

5. A weathering bar for use in association with a dormer shell, being a shell as specified in claim 1, such as, together, to constitute elements of a dormer as claimed in any of claims 1 to 4.

6. A weathering bar as claimed in claim 5 substantially as hereinbefore described with reference to the accompanying drawings.

7. A dormer shell for use with a weathering bar, being a weathering bar as specified in any of claims 1 to 4 such as to constitute elements of a dormer as claimed in any of claims 1 to 4.

8. A dormer shell as claimed in claim 7 substantially as hereinbefore described with reference to the accompanying drawings.
**Patents Act 1977: Search Report under Section 17**

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<td>FR2683565 A (GEORGES) - See whole document, especially figure 2, reference 2.</td>
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<td>DE3729935 A (MEISINGER KG M) - See whole document, especially figure 1, reference 42.</td>
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**A** Document indicating technological background and/or state of the art.

**P** Document published on or after the declared priority date but before the filing date of this invention.

**E** Patent document published on or after, but with priority date earlier than, the filing date of this application.

**Field of Search:**

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC:

Worldwide search of patent documents classified in the following areas of the IPC:

E04B; E04D

The following online and other databases have been used in the preparation of this search report:

WPI & EPODOC

**International Classification:**

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