MODULAR SKYLIGHT FRAME AND SYSTEM

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Abstract

A pre-assembled skylight frame module and system is provided. A module includes opposed first and second skylight mounts, each including opposed rafters and opposed purlins to define a rectangular aperture between them. The skylight frame module includes an obtuse angle between the two attached first and second skylight mounts. The skylight mounts are adapted for receipt of pre-assembled skylight assemblies. The skylight frame module is configured for side-by-side attachment to adjacent such skylight frame modules, to provide a skylight frame assembly. The skylight system may be adapted to a variety of skylight openings by varying the rafter and purlin lengths and the angle between the connected skylight mounts.
MODULAR SKYLIGHT FRAME AND SYSTEM

BACKGROUND

[0001] Skylights are useful and popular features in buildings. Allowing natural lighting to the interior of buildings, skylights are used with residences, schools, shopping malls, office buildings, and the like.

[0002] A skylight involves an opening through the roof of a building, above which is constructed a perimeter curb for support of the skylight opening the upper roof. Construction of the skylight itself, under existing systems, may involve erection and interconnection of various struts, standards, beams, channels, gutters, and the like above the curb. Thereafter, glazing units may be installed and weatherproofed to the constructed frame assembly. Such weatherproofing might involve wet glazing, often undertaken on the job site by professional glaziers. Alternatively, dry glazing may be used, in which a complicated series of gaskets and seals are installed. Dry glazing is considered inferior by some in the market, in that it requires numerous parts that must be fitted together exactly, it is aesthetically complicated, and it requires increased maintenance. On the other hand, wet glazing on the job site may be problematic, in that professionally-trained glaziers must be located and retained, job quality may be irregular, and later responsibility for leaks or failure may be disputed between various tradesmen or material suppliers.

[0003] Assembly of existing skylight systems is primarily completed on the job site itself. Lacking standardization, various pieces and parts are brought to the site, along with the requisite relatively large number of tools for the assembly. So located, the skylight system is then constructed, piece by piece, over the sometimes large and always dangerous opening in the roof. Moreover, existing gabled skylight systems often produce lateral loading upon the mounting structure, such as the roof curb, which requires more than minimal professional design and engineering considerations. Of course, the tooling costs necessary to produce the various pieces and parts of existing skylight systems is not insignificant, as numerous parts, often of varying configurations, must be manufactured.

[0004] Once assembled, existing skylight systems often suffer from inferior drainage features. As an outside structure, skylight systems are exposed to rain and must shed that rain in an efficient and effective manner, yet existing systems often provide for inefficient or inelegant, and unattractive, drainage systems.

[0005] Transportation of the skylight system to the job site is required. Accordingly, the transportability of the various components comprised by the skylight system is an issue to be considered in design. Furthermore, the skylight system must be moved to the roof of the building for installation, which presents another transportability issue. For example, a system so bulky and cumbersome that a crane is required for lifting the system from a truck to a rooftop is less desirable than a system in which components may be handled manually by workers on site.

[0006] It is also recognized that pre-assembled individual single unit skylight lens assemblies involving a single light aperture, have reached a high level of sophistication, engineering, and reliability. Such units are delivered complete from the factory. Glazing of the light panels has already been completed, under controlled, standardized conditions in a factory by workers with specialized expertise. Installation has been simplified, and performance of these units installed in the field has been superior. Such skylight lens assemblies are available pre-assembled in several standard sizes, such as 2x2 feet, 2x4 feet, 3x3 feet, 4x4 feet, and 4x6 feet. Several models of such skylights include an integrated flashing system, weatherproofing the entire assembly. An example of such a skylight lens assembly is disclosed in application Ser. No. 10/612,386, entitled “Skylight With Sealing Gasket,” owned by the same Assignee as the present invention and incorporated herein by reference.

[0007] Accessories, such as awnings, shades, blinds, electrochromic mechanisms, and photovoltaic systems, are available for some single unit skylights. Existing skylight systems may not provide for the inclusion of such accessories, either in allowing for attachment of such systems or providing for structural support of the added weight of such systems, or providing for efficient or aesthetic wiring of electrically powered accessories.

[0008] The present invention relates to improvements upon the known skylight frame systems and provides distinct advantages over the conventional systems and methods.

SUMMARY OF THE INVENTION

[0009] In response to the discussed difficulties and problems, a new skylight frame and system has been discovered.

[0010] Certain aspects of the present invention provide for a pre-assembled skylight frame module, to be installed upon new construction or in retrofitting a new skylight to an existing structure.

[0011] As used herein, “pre-assembled” is understood to mean a construction that is fabricated and assembled distant from the installation site at which the skylight system is to be mounted.

[0012] According to certain aspects of the present invention, a first skylight mount is provided. The first skylight mount includes opposed first and second rafters and opposed upper and lower purlins, the rafters and purlins interconnected to define a rectangular aperture between them. Likewise, a second skylight mount is provided, it, too, including first and second opposed rafters, and upper and lower opposed purlins, the rafters and purlins interconnected to define a rectangular aperture between them. The first skylight mount is attached to the second skylight mount along the respective upper purlins. Attachment of the first skylight mount to the second skylight mount at the respective upper purlins may define an angle between the first and second skylight mounts ranging from 90 degrees to 180 degrees. Such attachment may be substantially rigid.

[0013] Each of the two skylight mounts of the pre-assembled skylight frame module may be configured for engagement with a pre-assembled skylight lens assembly, of predetermined size, over each of the rectangular apertures of the skylight mounts.

[0014] Other aspects of the present invention also provide that the cross-sectional configuration of the upper and lower
purlins may be substantially the same. Likewise, the cross-sectional configurations of the first and second rafters may be substantially the same.

[0015] The lower purlins may include a hinge member adapted for attachment to a roof curb hinge. The roof curb hinge, so used, may attach the pre-assembled skylight frame module to the roof curb or other mounting structure upon the building roof. In one embodiment, the lower purlins of the skylight mounts may include within their structure a hinge member adapted for attachment to a roof curb hinge.

[0016] The skylight mounts, constructed of the rafters and purlins, may include a top wall configured for abutment with a skylight lens assembly gasket of a pre-assembled skylight lens assembly.

[0017] Adapted for receipt of a pre-assembled skylight lens assembly, the pre-assembled skylight frame modules of the present invention may include a screw receiver for receipt of screw attachment of the pre-assembled skylight assemblies to the skylight mounts.

[0018] Channels within the rafters of the skylight mounts may also be provided. Similarly, the purlins of the skylight mounts may include channels.

[0019] Further, at least one of the skylight frame modules of the present invention may be adapted for attachment of skylight accessories, such as awnings, shades, blinds, electrochromic mechanisms and photovoltaic systems.

[0020] According to certain other aspects of the present invention, a skylight frame system is provided, comprising at least two pre-assembled skylight frame modules. Such pre-assembled skylight frame modules are configured for side-by-side installation, each such module including a first and second skylight mount. Each of the first and second skylight mounts include opposed rafters, an upper purlin and an opposed lower purlin, the rafters and purlins interconnected to define a rectangular aperture between them. Within such skylight frame system, each first and second skylight mounts are attached together at their respective upper purlins. Such attachment may be at an obtuse angle, thereby forming a gable, or may be at 180 degrees. Further, the rafters between the modules are configured for attachment one to the other, for instance at the job site. The attachment of the first skylight mount and the second skylight mount may be substantially rigid, for instance by welding.

[0021] Each of the first and second skylight mounts are adapted for engagement with a pre-assembled skylight lens assembly, of predetermined size, over the rectangular apertures.

[0022] Some of the rafters of the skylight mounts may include within them a secondary gutter, for drainage of water.

[0023] At least one of the lower purlins of one of the skylight mounts of the skylight frame system herein may include a hinge member adapted for attachment to a roof curb hinge. Alternatively, a hinge may be connected with at least one of the lower purlins for hingeable attachment to a roof curb.

[0024] The rafters of the skylight mounts of the within skylight frame system may have substantially the same cross-sectional configuration. Likewise, the purlins may have substantially the same cross-sectional configuration.

[0025] The skylight frame system disclosed herein may include skylight frame modules in which at least one of the rafters is configured to engage with another rafter of an adjacent module upon installation of the module side-by-side, one of the rafters having a male member and the adjacent rafter having a complementary female member configured to engage with the male member.

[0026] The skylight frame system may also include channels within the rafters, or within the purlins, or within both.

[0027] The skylight frame system disclosed herein also may include, with at least one of the skylight frame modules, configuration for attachment of skylight accessories.

[0028] The rafters and purlins of the skylight mounts of the skylight frame modules of the within skylight frame system may include a top wall configured for abutment with a gasket carried by a pre-assembled skylight lens assembly. Similarly, the rafters and purlins may also include a screw receiver for receipt of screw attachment of a pre-assembled skylight system.

[0029] Structural and operational details of preferred designs of the modular skylight frame and system and components embodying the invention and advantages obtained thereby will become apparent from the appended drawings and the detailed description to follow.

BRIEF DESCRIPTION OF THE DRAWINGS

[0030] The aspects described above, as well as other apparent aspects, advantages, and objectives of the present invention are apparent from the detailed description below in combination with the drawings. It should be noted that the appended drawings are not necessarily to scale in all instances, but may have exaggerated dimensions in some respect to illustrate the principles of the invention.

[0031] FIG. 1 is a perspective, partially disassembled view of a modular skylight system in accordance with certain aspects of the present invention, with two pre-assembled skylight systems installed thereupon along with two accessories;

[0032] FIG. 2 is a perspective view of a modular skylight frame suitable for use in the system of FIG. 1, or alone;

[0033] FIG. 3A is a cross-sectional perspective view taken along line B-B in FIG. 1;

[0034] FIG. 3B is a cross-sectional view of one exemplary embodiment of one aspect of the present invention, taken along line B-B in FIG. 1;

[0035] FIG. 3C is a cross-sectional view of an alternative exemplary embodiment, taken along line B-B in FIG. 1;

[0036] FIG. 4A is a cross-sectional view of one embodiment, taken along line C-C in FIG. 1;

[0037] FIG. 4B is a cross-sectional view of an alternative exemplary embodiment, taken along line C-C in FIG. 1;

[0038] FIG. 5 is a cross-sectional perspective view of an exemplary embodiment, taken along line D-D in FIG. 1;

[0039] FIG. 6 is a cross-sectional perspective view, taken along line E-E in FIG. 1.
DETAILED DESCRIPTION

[0040] Reference will now be made in detail to the presently preferred embodiments of the invention, one or more examples of which are illustrated in the drawings. Each example is provided by way of explanation of the invention, and is not meant as a limitation of the invention. For example, features illustrated or described as part of one embodiment may be used on another embodiment to yield a still further embodiment. It is intended that this application includes such modifications and variations as come within the scope and spirit of the invention. Repeat use of reference characters throughout the present specification and appended drawings is intended to represent the same or analogous features or elements of the invention.

[0041] FIG. 1 shows an exemplary embodiment of a modular skylight frame system in accordance with certain aspects of the present invention. The frame system, generally 10, is adapted for installation about an opening through a building roof. The frame system 10 may be used with new construction or may be used to retrofit a newer skylight system to an existing building structure. The system depicted in FIG. 1 illustrates six skylight apertures and, as will be appreciated from the description below, is constructed of three skylight frame modules. For illustration purposes, two lens assemblies 20 are depicted on FIG. 1. Likewise, each of the skylight lens assemblies 20 upon system 10 may include an accessory 84.

[0042] FIG. 2 illustrates a modular skylight frame 15. Modular skylight frame 15 includes first skylight mount 18 and second skylight mount 19. Each of the skylight mounts includes an upper purlin 30 and a lower purlin 40. Likewise, each of the two skylight mounts includes a left rafter 50 and a right rafter 60. The rafters and purlins of each skylight mount are interconnected to define rectangular apertures therebetween; aperture 23 is defined within first skylight mount 18 and aperture 24 is defined within second skylight mount 19.

[0043] As illustrated in FIG. 2, upper purlins 30 of the respective skylight mounts 18 and 19 are attached at purlin juncture 17. Such attachment may be by weldment or by mechanical connection. In the illustrated embodiment, purlin juncture 17 is configured to define angle A between first skylight mount 18 and second skylight mount 19, thereby forming a gable.

[0044] It will be appreciated that system 10 depicted in FIG. 1 comprises three skylight frame modules 15, interconnected side-by-side. Within the scope of this invention, combinations of skylight frame modules 15, of matching rafter lengths and of either equal or varying purlin lengths, may be used to constitute system 10. FIG. 3A, taken at line B-B in FIG. 1, illustrates the attachment of a left rafter 50 of one such skylight module with a right rafter 60 of an adjacent skylight module. As depicted in FIG. 3A, left rafter 50 is abutted against right rafter 60. Left rafter 50 may be attached to right rafter 60 by a variety of means, including bolting, or by male-female interfitting configurations as will be described below with reference to FIG. 3C. Still with reference to FIG. 3A, rafters 50, 60 are understood to include rafter grooves 51. Rafter grooves 51 are adapted for receipt of screw attachment of pre-assembled skylight lens assemblies 20 upon the skylight mounts. Such screws may be passed through the flashing or other mounting structures of the pre-assembled skylight assemblies, and received within rafter grooves 51 for secure attachment of such pre-assembled skylight assemblies to the modular skylight frame system 10.

[0045] Rafters 50, 60 may also be understood to include secondary gutters 52. Secondary gutters 52, disposed lower than skylights mounted upon rafters 50, 60, are configured for receipt of water from above and shedding of such water out of the skylight system 10. Such water is prevented from entering beneath the skylight assembly 10 by gutter cap 53, which bridges between the two secondary gutters 52 of rafters 50, 60.

[0046] Also depicted in FIG. 3A is rafter cap 56. Rafter cap 56, in cooperation with rafters 50, 60, forms channel 57. Rafter cap 56 may be installed after wiring, insulation, or the like is passed through channel 57, thereby concealing such material from view and presenting an aesthetically appealing outer surface, and may be removable for later access to channel 57. Such wiring may be utilized for accessories 84, such as awnings, shades, blinds, electrochromic mechanisms, and photovoltaic systems.

[0047] With reference now to FIG. 3B, greater detail may be understood as to one embodiment of rafters 50, 60. As depicted therein, for example, rafter 50 may include a top wall 581. Top wall 581 may include a gasket registration notch 32, adapted for receipt of a skylight gasket 21 of a pre-assembled skylight lens assembly 20. First wall 581, in cooperation with such a gasket 21, allows for a weatherproof seal between rafter 50 and a skylight lens assembly 20.

[0048] Rafter 50 may also include interior wall 582. Interior wall 582 is interior to system 10 and lies within the interior space of building upon which system 10 is installed.

[0049] Rafter 50 may also include a third wall 583, in a preferred embodiment generally perpendicular to first wall 581, and presented for attachment to a skylight lens assembly 20 mounted thereon. Third wall 583 may include rafter groove 51, for receipt of screw attachment of skylight lens assembly 20 to rafter 50.

[0050] Rafter 50 may also include a fourth wall 584, in a preferred embodiment generally perpendicular to third wall 583. Fifth wall 585 is connected with fourth wall 584, in a preferred embodiment generally perpendicularity, and sixth wall 586 is connected to fifth wall 585 generally perpendicularly in a preferred embodiment. Fifth wall 585 and sixth wall 586 form two of the three sides of secondary gutter 52. Secondary gutter 52 is completed by the upper extension of seventh wall 587. Eighth wall 588, in a preferred embodiment, is oriented generally perpendicularly and inwardly from seventh wall 587. Finally, ninth wall 589 extends from eighth wall 588 to complete the cross-sectional configuration of one embodiment of rafter 50.

[0051] As illustrated for example in FIG. 3B, a rafter cap 56 is depicted attached to rafter 50. Rafter cap 56 may be configured for snap-fit engagement with rafter cap cleats 590 on interior wall 582 and ninth wall 589.

[0052] In one embodiment, rafter 50 is attached to rafter 60 with rafter bolt 54. Rafter 50, 60 may also include screw bosses 55, for receipt of the head of rafter bolt 54. So configured, and with the use of washer 58, rafter 50 may be attached to rafter 60 with use of only a single wrench, as the head of rafter bolt 54 is kept by a screw boss 55.

[0053] As illustrated in FIG. 3B, attachment together of rafters 50, 60 define between them a primary gutter 599. Primary gutter 599 is defined by respective opposing walls 583, respective fourth walls 584, and gutter cap 53.

[0054] With reference to FIG. 3B, it will be understood that rainwater falling upon a skylight lens assembly 20 may
be shed off of skylight lens frame 22 toward fourth wall 584, and shed from system 10 by primary gutter 599. From there, water is prevented from entering rafters 50, 60 by gutter cap 53. Instead, such water may be allowed to enter secondary gutter 52, and thereby be shed from the system 10.

[0055] FIG. 3C illustrates an alternative embodiment for attachment of adjacent rafters of modules 15. As depicted therein, left rafter 50 is attached to right rafter 60. Such attachment is provided by receipt of flange 93 within the gutter defined by alternative fifth wall 585, alternative sixth wall 586, and wall 594. Alternative seventh wall 587 is configured to attach directly to alternative fourth wall 584, eliminating walls 585 and 586 from the alternative embodiment depicted in FIG. 3B, to create a hidden standing seam between rafters 50, 60. Such configuration allows for attachment of left rafter 50 to right rafter 60 without use of nuts or other mechanical fasteners. Rainwater falling upon a skylight lens assembly 20 may be shed from skylight lens frame 22 to fourth wall 584. Such rainwater would either be shed from the system by fourth wall 584, or may enter between walls 585 and 594, to be shed from the system.

[0056] Comparison of FIGS. 3B and 3C illustrate that, in one embodiment of the present invention depicted in FIG. 3B, left rafter 50 and right rafter 60 may have cross-sections that are substantially identical. As such, a beam extruded or otherwise fabricated to form a left rafter 50 may be oriented reversely and thus form a right rafter 60, with the two rafters 50, 60 thereby attachable one to the other. Alternatively, in the embodiment depicted in FIG. 3C, left rafter 50 differs from right rafter 60, requiring a different extrusion or other formative process.

[0057] FIG. 4A illustrates a cross-sectional view of a purlin 40 attached to a curb 70. Purlin 40 may include a top wall 481, including a gasket registration notch 32 for receipt of a skylight lens assembly gasket 21. Purlin 40 may also include an interior wall 482, oriented for presentment to the interior of the skylight system 10 upon completion of installation. Lower purlin 40 may also include third wall 483, disposed from the opposed end of top wall 481. Third wall 483 may include purlin groove 31, for receipt of screw attachment of a skylight lens assembly 20. Oriented away from third wall 483 is fourth wall 484, in a preferred embodiment at a right outward angle from third wall 483. Fifth wall 487 is attached to the end of fourth wall 484, in a preferred embodiment at approximately right angle. Along the length of fifth wall 487 may be included counterflashing flange 496, for receipt of and attachment to counterflashing 75. Attached to fifth wall 487 is a bottom wall 488, and extending from bottom wall 488 is lower wall 489. Interior wall 482 and bottom wall 489 may include cleats 490, for snap-fit engagement with purlin cap 46. As will be observed, lower purlin 40 and purlin cap 46 cooperate to form channel 491, adapted for receipt and concealment of electrical wiring, insulation, and the like.

[0058] Attached to bottom wall 488 may be male hinge piece 42, which may be attached with hinge bolt 45. It is to be understood that male hinge-piece 42 may be an elongated member, extending all or part of the length of lower purlin 40. At installation, male hinge piece 42 is slidably installed within female hinge piece 43, and female hinge piece 43 may then be bolted or screwed to curb 70, for example with curb bolt 44. Disposed between curb 70 and female hinge piece 43 is curb flashing 71. Curb flashing 71 includes inboard lip 72, configured to prevent drainage of condensation or water to the interior of a building and instead to prompt drainage of such water outboard of system 10. Curb flashing 71 may also include outboard flange 73, for further protection of curb 70 from water draining from curb flashing 71.

[0059] Lower purlin 40 may include a plurality of holes 499, for drainage of condensation from within system 10.

[0060] FIG. 4B illustrates an alternative embodiment of lower purlin 40, in which male hinge piece 42 is not a separate component to be bolted to lower purlin 40, but instead male hinge piece 498 is a part of and extends outwardly from alternative bottom wall 488.

[0061] FIG. 5 is a cross-sectional view taken at line D-D of FIG. 1, showing the attachment of upper purlins 30 of two skylight mounts 18, 19 in a skylight frame module 15. As shown therein, two upper purlins 30 are attached at purlin juncture 17. Purlin juncture 17 is understood to the point of proximity of the respective intersections 390 of walls 387 and bottoms 488 of the upper purlins 30 of skylight mounts 18, 19. Such attachment may be by way of mechanical attachment (not shown) or by weldment. In the case of weldment, such weldment may be along the entirety of the lengths of upper purlins 30, or only a portion or portions of such length.

[0062] Also as shown in FIG. 5, an alternative purlin cap 46 is depicted, for comparison with purlin cap 46 depicted in FIG. 4A. Between upper purlin 30 and purlin cap 46 is defined channel 491.

[0063] Purlin juncture 17 is provided to attach upper purlins 30 at angle A.

[0064] Also as depicted in FIG. 5, top cap 16 is disposed at top walls on the respective upper purlins 30 to prevent intrusion of water to purlin juncture 17, and may be weatherproofed thereto with caulking, gasketing, or the like. Top cap 16 may be attached by conventional methods.

[0065] Comparison of lower purlin 40 in FIG. 4A to upper purlins 30 in FIG. 5 reveals that the same cross-sectional configuration may be used for lower purlins 40 and upper purlins 30. Alternatively, different cross-sectional configurations may be used, as revealed by comparison of the alternative lower purlin 40 in FIG. 4B to the upper purlins 30 in FIG. 5.

[0066] FIG. 6 illustrates the cross-sectional view of an exemplary end glazing panel, to close the ends of the skylight system 10. As depicted therein, glazing rails 83 may carry glazing panels 85, and are configured for attachment to right rafter 60 and curb 70. An alternative end cap seal 81 may be provided for attachment to right rafter 60, in snap-fit engagement to cleat 591 and glazing rail 83. Alternatively, solid panels (not shown) may be used to clear the ends of system 10. Ridge joint end cap 86 may be used in cooperation with top cap 16 to close the end of system 10.

[0067] Consideration of the foregoing description illustrates that system 10 may be adapted for a wide variety of skylight applications. For a skylight opening of a given length and width, only three variables need be considered. First, from the available, standardized pre-assembled skylight systems commercially available, which length and width may be chosen for the intended length and width of skylight opening. Once such selection is made, angle A may be calculated. For example, an opening six and a half feet wide and twenty feet long might result in the selection of standardized, pre-assembled 4x4 foot skylight assemblies.
Angle A may then be calculated to be approximately 93 degrees, and five pre-assembled skylight frame modules could be constructed accordingly. Thereafter, each such module approximately 4x5 feet in footprint, could be stacked one atop the other, shipped to the site, carried by hand to the skylight opening, and assembled thereon with simple and few tools. Thereafter, ten such 4x4 foot standardized pre-assembled skylight assemblies could be installed upon the constructed skylight frame system. Male hinge piece 42 (FIG. 4A) and female hinge piece 43 allow for a broad range of such gable angles A, such as 90° to 180°, and attachment of upper purlins 30 together result in a rigid frame producing minimal lateral stress upon curb 70.

[0068] System 10 provides for superior drainage of rainwater from system 10. For example, rainwater falling upon top cap 16 would be shed to fourth wall 484 (FIG. 3B). Such rainwater may flow from fourth wall 484, or may flow into secondary gutters 52. In either event, such rainwater would flow from the rafters 50, 60, and be disposed outboard of system 10 upon counter flashing lip 76 (FIG. 4A) to the roof.

[0069] It will also be observed that the skylight mounts 18, 19 (FIG. 2) and, for example) are also adapted for receipt of accessories. For example, rafters 50, 60 are structurally rigid to support such systems and are capable of accepting interior shade accessories. The pre-assembled skylight frame modules 15 are also capable of accepting exterior awning accessories and the like. Furthermore, upper purlins 30 and lower purlins 40 are structurally rigid to support hinges and electrical ventilation operators, for opening the skylight lens assemblies 20 for example.

[0070] While the invention herein is capable of attaining the objects of the invention, it is to be understood that it is the presently preferred embodiments of the present invention and is thus representative of the subject matter that is broadly contemplated. It is to be further understood that the scope of the present invention fully encompasses other embodiments that may become obvious to those skilled in the art. It is intended that the present invention include such modifications and variations as come within the scope of the appended claims and their equivalents, in which reference to an element in the singular is not intended to mean “one and only one” unless explicitly so stated, but rather “one or more.”

1. A pre-assembled skylight frame module, comprising:
   a first skylight mount, said first skylight mount including a first rafter and an opposed second rafter, an upper purlin defining a purlin length and an opposed lower purlin, said first and second rafters and upper and lower purlins of said first skylight mount interconnected to define a first rectangular aperture therebetween,
   a second skylight mount, said second skylight mount including a first rafter and an opposed second rafter, an upper purlin defining a purlin length and an opposed lower purlin, said first and second rafters and upper and lower purlins of said second skylight mount interconnected to define a second rectangular aperture therebetween,
   said first skylight mount attached to said second skylight mount along said purlin lengths of respective said upper purlins.

2. The pre-assembled skylight frame module of claim 1, wherein said attachment of said first skylight mount and said second skylight mount defines an obtuse angle between said first and second skylight mounts.

3. The pre-assembled skylight frame module of claim 1, wherein said attachment of said first skylight mount and said second skylight mount is substantially rigid.

4. The pre-assembled skylight frame module of claim 1, wherein each said first and second skylight mounts is configured for engagement with a pre-assembled skylight lens assembly of predetermined size over said rectangular aperture.

5. The pre-assembled skylight frame module of claim 1, wherein each said upper purlin defines a cross-sectional configuration and said lower purlin defines substantially the same cross-sectional configuration.

6. The pre-assembled skylight frame module of claim 1, wherein each said first rafter defines a cross-sectional configuration and said second rafter defines substantially the same cross-sectional configuration.

7. The pre-assembled skylight frame module of claim 1, wherein at least one of said lower purlins includes a hinge member adapted for attachment to a roof curb hinge.

8. The pre-assembled skylight frame module of claim 1, further including at least one hinge connected with at least one of said lower purlin for hingeable attachment to a roof curb.

9. The pre-assembled skylight frame module of claim 1, wherein said rafters and purlins include a top wall configured for abutment with a skylight lens assembly gasket.

10. The pre-assembled skylight frame module of claim 1, wherein said rafters and purlins include a screw receiver for receipt of screw attachments from a skylight system.

11. The pre-assembled skylight frame module of claim 1, wherein at least one of said rafters defines a channel therein.

12. The pre-assembled skylight frame module of claim 1, wherein at least one of said purlins defines a channel therein.

13. The pre-assembled skylight frame module of claim 1, wherein at least one of said pre-assembled skylight frame modules is adapted for attachment of skylight accessories.

14. A skylight frame system, comprising:

   at least two pre-assembled skylight frame modules for side-by-side installation, each said module including:
   a first skylight mount, said first skylight mount including opposed rafters, an upper purlin and an opposed lower purlin, said rafters and purlins interconnected to define a rectangular aperture therebetween,
   a second skylight mount, said second skylight mount including opposed rafters, an upper purlin and an opposed lower purlin, said rafters and purlins interconnected to define a rectangular aperture therebetween,
   said first skylight mount attached to said second skylight mount at respective said upper purlins,

   wherein adjacent said rafters between said modules are configured for attachment one to the other.

15. The skylight frame system of claim 14, wherein said attachment of said first skylight mount and said second skylight mount defines an obtuse angle between said first and second skylight mounts.

16. The skylight frame system of claim 14, wherein said attachment of said first skylight mount and said second skylight mount is substantially rigid.
17. The skylight frame system of claim 14, wherein each of said first and second skylight mounts are each adapted for engagement with a pre-assembled skylight lens assembly of predetermined size over said rectangular aperture.

18. The skylight frame system of claim 14, wherein at least one of said rafters defines therein a secondary gutter.

19. The skylight frame system of claim 14, wherein at least one of said lower purlins includes a hinge member adapted for attachment to a roof curb hinge.

20. The skylight frame system of claim 14, further including a hinge connected with at least one said lower purlin for hingeable attachment to a roof curb.

21. The skylight frame system of claim 14, wherein each said first rafter of a said skylight mount defines a cross-sectional configuration and each said second rafter defines substantially the same cross-sectional configuration.

22. The skylight frame system of claim 14, wherein each said upper purlin of a said skylight mount defines a cross-sectional configuration and each said lower purlin defines substantially the same cross-sectional configuration.

23. The skylight frame system of claim 14, wherein each said module includes at least one said rafter disposed for engagement with at least one rafter of an adjacent said module upon said side-by-side installation, one of said rafters of one of said modules including a male member and the adjacent said rafter of the adjacent said module including a female member configured for engagement with said male member.

24. The skylight frame system of claim 14, wherein at least one of said rafters defines a channel therein.

25. The skylight frame system of claim 14, wherein at least one of said purlins defines a channel therein.

26. The skylight frame system of claim 14, wherein said at least one of said pre-assembled skylight frame modules is adapted for attachment of skylight accessories.

27. The skylight frame system of claim 14, wherein said rafters and purlins include a top wall configured for abutment with a gasket carried by a skylight lens assembly.

28. The skylight frame system of claim 14, wherein said rafters and purlins include a screw receiver for receipt of screw attachments from a skylight system.

29. A skylight frame system, comprising:

at least two pre-assembled skylight frame modules for side-by-side installation, each said module including:

a first skylight mount, said first skylight mount including a first rafter and a second rafter parallel to said first rafter, said first skylight mount further including an upper purlin and a lower purlin parallel therebetween and perpendicular to said first and second rafters, said rafters and purlins defining an opening therein of predetermined dimensions;

a second skylight mount, said second skylight mount including a first rafter and a second rafter parallel to said first rafter, said second skylight mount further including an upper purlin and a lower purlin parallel therebetween and perpendicular to said first and second rafters, said rafters and purlins defining an opening therein of predetermined dimensions and an outside perimeter therearound, respective said upper purlins of said first and second skylight mounts substantially rigidly attached to define a predetermined angle between said first and second skylight mounts, said first and second skylight mounts each adapted for receipt of a pre-assembled skylight lens assembly of predetermined size over said opening, said at least two pre-assembled skylight frame modules configured for attachment one to the other.

30. The skylight frame system of claim 29, further including a male hinge member upon at least one of said lower purlins of said skylight mounts adapted for attachment to a receiving hinge member upon a roof curb.

31. The skylight frame system of claim 29, wherein at least one of said lower purlins is attached to a hinge for connection to a roof curb.

32. The skylight frame system of claim 29, wherein said rafters and purlins include a top wall configured for abutment with a gasket carried by a skylight lens assembly.

33. The skylight frame system of claim 29, wherein at least one of said rafters defines a secondary gutter therein.

34. The skylight frame system of claim 29, wherein said rafters and purlins include a screw receiver for receipt of screw attachments from a skylight system.

35. The skylight frame system of claim 29, wherein said rafters and purlins are configured for mechanical engagement with a skylight lens assembly.

36. The skylight frame system of claim 29, wherein each said module includes at least one said rafter disposed for engagement with at least one rafter of an adjacent said module upon said side-by-side installation, one of said rafters of one of said modules including a male member and the adjacent said rafter of the adjacent said module including a female member configured for engagement with said male member.

37. The skylight frame system of claim 29, wherein at least one of said rafters defines a channel therein.

38. The skylight frame system of claim 29, wherein at least one of said purlins defines a channel therein.

39. The skylight frame system of claim 29, wherein said at least one of said pre-assembled skylight frame modules is adapted for attachment of skylight accessories.

40. The skylight frame system of claim 29, further including a top ridge cap over said attachment of said purlins.

41. The skylight frame system of claim 29, wherein each said upper purlin of a said skylight frame mount defines a cross-sectional configuration and each said lower purlin defines substantially the same cross-sectional configuration.

42. The skylight frame system of claim 29, wherein each said first rafter of a said skylight frame mount defines a cross-sectional configuration and each said second rafter defines substantially the same cross-sectional configuration.