A device for mounting the base of a satellite dish is disclosed. The base mounting device is secured to a shingled roof or sidewall structure with little or no disruption to the integrity of the shingled roof or sidewall. The mounting device provides an extremely stable structure suitable for securing a mounting base of a satellite dish mounting unit. The base mounting device is readily moved from one location to another, or completely removed from the roof or sidewall structure with minimal impact on the integrity of the shingled roof or sidewall covering.
BLIND FASTENER SATELLITE DISH MOUNTING DEVICE

CROSS-REFERENCE TO RELATED APPLICATIONS, IF ANY

[0001] This application claims the benefit under 35 U.S.C. §119 (e) of co-pending provisional application Ser. No. 60/500,897, filed 23 Jul. 2004. Application Ser. No. 60/500,897 is hereby incorporated by reference.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not applicable.

REFERENCE TO A MICROFICHE APPENDIX, IF ANY

[0003] Not applicable.

BACKGROUND OF THE INVENTION

[0004] 1. Field of the Invention

[0005] The present invention relates to a bracket device for mounting a satellite dish and, more particularly, to a base mounting bracket device for mounting a satellite dish to a roof structure, and most particularly, to a base mounting bracket device secured to a roof or sidewall structure without producing visible holes in the roof shingles or the wall siding of a structure.

[0006] 2. Background Information

[0007] With the recent increase in popularity of high speed digital communications, an ever increasing need for mounting satellite dishes has developed. Many residences and business buildings have satellite dishes mounted at elevated locations for receiving digital television signals, digital telephone signals, as well as broad band, high speed internet service. The satellite dishes presently employed have a diameter of 18-24 inches, allowing them to be located in fairly close proximity to each other.

[0008] Where the installation of a satellite dish is for a new building, there are a number of mounting devices which can be incorporated into the roof or wall structure and sealed to prevent water leakage through the roof or wall structure where the mounting device is located. However, many times the installation of a satellite dish is on an existing building with a standard shingled roof covering or wall siding. Homeowners and some installers are reluctant to disrupt the integrity of the shingled roof covering or wall siding by cutting into the structure to secure a suitable device for attaching the satellite dish mounting base that is common for nearly all satellite dishes. One reason for this reluctance is the concern that visible holes, or similar damage to the shingled roof covering or wall siding, would result, should the homeowner decide to relocate or even remove the mounting device for the satellite dish.

[0009] Some examples of devices for mounting antennae or similar devices to a roof or wall structure for which patents have been granted include the following.

[0010] Agner, in U.S. Pat. No. 2,465,565, describes a fishpole holder that includes a bolt carrying a hemispherical head, associated with a centrally positioned, slotted cup. The cup is provided with arms terminating with horizontally disposed offset upper and lower forks, whereby the vertical angle of a pole seated in the forks may be varied indefinitely. The armed cup may also be horizontally swiveled in a complete circle to position the line end of a pole at a desired fishing point, it being understood that the equipment is to be attached to either the gunwale or seats of a boat. The hemispherical head has depending therefrom, a rectangular shank that is carried by an anchored bracket, the same being attached to a boat, and under general conditions, the shank is pivoted within a socket of the bracket and adjustably secured to the bracket socket irrespective of the particular means for securing the bracket to a selected part of a boat.

[0011] In U.S. Pat. No. 2,681,195, Bradt et al. disclose an antenna bracket, including a principal supporting member which is U-shaped, having a vertically extending leg and an arm extending at right angles to the leg. Secured to the upper portion of the leg is the right portion of an U-shaped member which has depending therefrom screws for working engagement into the tile, shingle, or other pitch type or equivalent roof forming a part of the building. Also welded to the leg are vertically spaced rings, which have fitted therein screws which, in combination with lock nuts, provide means for securely holding the mast of the antenna in an adjusted position relative thereto. Threaded engaged in a nut, welded to the arm, is a threaded jack screw which is provided with a handle at one end. The upper end of the screw is provided with a swivel joint, for pivotally mounting an angular end thrust plate, which when the arms of the U-shaped member are positioned at either side of the fixed roof and when the handle is turned actuating the clamping screw, will engage the gable of the building in a secure manner without digging into the wood.

[0012] Chabot, in U.S. Pat. No. 2,695,149, describes a bracket for mounting an antenna mast to the roof of a building without necessitating the use of nails, screws or other fasteners which penetrate the roof or other parts of the building to thus avoid damage thereto. The invention provides a mounting bracket for an antenna mast embodying an upper clamp adapted to overlie the edge of a roof and a lower clamp positioned under the edge of the roof with means for adjusting and tightening the clamp and providing means for supporting the lower end of an antenna mast on the upper and lower clamps.

[0013] In U.S. Pat. No. 3,094,303, Belger discloses an antenna bracket that is designed to be mounted on the eave, rather than on or near the peak of the roof as are most conventional antenna-supporting devices. The bracket assembly includes a lower horizontal leg, which is formed of an inverted U-shaped metal channel, and of a length to underlie a substantial portion of the eave and projects outwardly there beyond. On roofs wherein the cornice depends slightly below the underside of the eave, the lower bracket leg may have an elongated filler member secured on its upper surface and positioned between the leg and the undersurface of the eave, the filler abutting the depending end of the cornice to promote the rigidity of the bracket. Alternatively, it is contemplated that the lower bracket leg is bent or deflected around the depending edge of the cornice and positioned directly against the undersurface of the eave, thus eliminating the necessity for the filler.

[0014] As best-appears in FIGS. 3 and 4, the outer end of the lower bracket leg is prodded with a pair of spaced,
upstanding arms which are welded or otherwise rigidly and permanently secured thereon, and which arms are provided with a series of vertically spaced, aligned apertures. The upper leg of the bracket assembly is also formed of a metal channel and includes a straight, horizontal section which is spaced above and parallel to the lower leg, and a rigid inner section which is angled upward to conform generally to the slope of a conventional gable-type house roof. Welded or otherwise pertinently rigidly secured to the outer end of the upper bracket leg is a pair of spaced depending arms which are adapted to fit with the aforementioned upright arms on the lower bracket leg, and which depending arms are provided with vertically-spaced, aligned apertures.

[0015] Seppeleffrick, in U.S. Pat. No. 4,181,284, describes an improved antenna bracket for mounting masts for antennas to the exterior wall of buildings having various roof and overhang dimensions. The mounting bracket can be made of parts having standard dimensions and can support an antenna, mast, and rotor, without guy wires or additional support against the roof of the building.

[0016] In U.S. Pat. No. 4,510,502, Howland et al. disclose a lightweight mounting structure combination for small dish antennas. The structure includes an upright mast for supporting the dish antennas. The mast has an upper end for attachment to said dish and a lower end for anchoring to a rigid-type structure. The structure also has a bent strut having a lower end for anchoring to a rigid-type structure and an upper end for attachment to said mast. In addition, a second strut is provided having a lower end for anchoring to a rigid-type structure and an upper end for attachment to said mast. Further included is means for anchoring the respective lower ends of the mast, bent strut and second strut to the rigid-type structure and for anchoring the respective upper ends of the bent and second struts to the mast. The means includes a bracket, a threaded bolt having a shank portion for extending through the bracket and respective end, and a nut threaded on said bolt for drawing the bracket and respective end tightly together. The bolt, nut, bracket and respective end cooperate to indicate to one tightening the nut and bolt when a predetermined extent of tightness is attained, the predetermined extent of tightness being characterized by the respective end having undergone a predetermined extent of deformation such that relative movement between the bracket and respective end is minimized.

[0017] Klingensmith et al., in U.S. Pat. No. 4,595,165, describe a mounting structure for satellite dish antenna and method and means for anchoring the structure to the roof or sidewalk of a typical residential building, such as a house, as disclosed. The mounting structure includes a mast for supporting the dish antenna. The anchoring means includes a bar having a back portion and sides which define an opened-ended channel. The sides of the bar are further provided with integral adjoining lips which extend the length of the bar. Also included in the assembly is a clamp provided with holes through which bolt means may be inserted to tighten and secure the clamp about the mounting structure’s mast to the bar’s lips. When so tightened, the clamp tightly engages the external surface of the mast to prevent it from torsional movement relative to the clamp.

[0018] In U.S. Pat. No. 4,649,675, Moldovan et al. disclose an apparatus for mounting an antenna on a flat roof without penetrating the waterproof membrane of the roof. The apparatus comprises a rigid base having a planar lower surface adapted to overlie the flat roof, ballast means carried by the base to stabilize the base, and antenna support means connected to and extending upwardly from the base.

[0019] Gasque, Jr., in U.S. Pat. No. 4,723,128, describes a roof mount for securely attaching dish antennas to roofs of houses supported by a plurality of spaced rafters having a two-piece frame attached to a selected portion of a roof, with one piece on top of the roof supporting the dish and its adjusting mechanism and the other piece of the frame underlying the first frame beneath the roof. A plurality of fasteners penetrates the roof and both frames and draws the frames toward each other to clamp them about the selected portion of the roof and provide steady support for the antenna.

[0020] In U.S. Pat. No. 5,142,293, Ross discloses a satellite antenna assembly that includes a nonpenetrating roof mount having a pair of rectangular ballast trays for respective placement on portions of a pitched roof forward and rearward of the crown of the roof. A hinge structure interconnects the ballast trays and overlies the crown of the roof. The ballast on the trays is concealed by covers that simulate a skylight. A satellite antenna is mounted, at one of the four corners of the ballast tray located on the rear portion of the pitched roof, on a simplified antenna support and adjustment structure that facilitates variation of the polar orientation and elevation of the antenna.

[0021] Burns et al., in U.S. Pat. No. 5,456,433, describe an antenna roof mounting, comprising a substantially solid planar foundation that may be secured to a roof substrate; a substantially closed geometric superstructure affixed to and vertically raised upon the foundation; and a mast for an antenna affixed to the superstructure.

[0022] In U.S. Pat. No. 5,617,680, Beatty discloses a satellite dish, mounted on a bracket, which in turn is mounted over an uneven surface of a roof or a wall of a house. The bracket has an elevated bridge portion for supporting a mounting foot of the satellite dish. The bridge portion is integrally connected to and supported by two narrow leg portions which in turn are integrally connected to and supported by two narrow foot portions. The bridge portion is elevated from two foot portions by the leg portions in order to clear the uneven surface of the roof or wall of the house.

[0023] Pugh, Jr., et al., in U.S. Pat. No. 5,647,567, describe an adjustable satellite antenna mounting bracket that reinforces the eaves of a building roof. The antenna mounting bracket has a telescoping support having a rigid tubular form. The telescoping support has a back plate on one end that is secured to the sidewalk of the building adjacent to the eave of the building. On the other end of the telescoping support is a base mount plate having a generally rectangular form adapted for accepting the base of a satellite antenna. The base mount plate that protrudes past the outer edge of the eave permits unobstructed reception of satellite signals. The telescoping support is braced by a brace. The brace cradles the telescoping support in normal conditions, but in the event of severe weather, the brace maintains the position of the support. An extension lock fixes the length of the telescoping support and acts to reinforce the eave.

[0024] In U.S. Pat. No. 5,829,724, Duncan discloses an antenna-mounting structure for mounting an antenna to a
vertical wall or on a sloped, peaked, or horizontal roof. A primary strut, which is tubular, has a straight, upper portion, a straight, intermediate portion, and a straight, lower portion. The upper portion has an outer, cylindrical surface, circular in cross-section, and is bent at an upper juncture between the upper and intermediate portions and at a lower juncture between the intermediate and lower portions. The upper and intermediate portions generally define an acute angle. A secondary strut has a proximal end, and a distal end is clamped at the proximal end of the secondary strut to the outer, cylindrical surface of the upper portion of the primary strut, above the upper juncture, so that the secondary strut can be adjustably oriented to project in any direction from the upper portion of the primary strut, and so that the secondary strut can be pivoted adjusted to any angle within a range so that the distal end can be higher than, level with, or lower than the proximal end.

[0025] Fey, in U.S. Pat. No. 5,873,201, describes a device supported by a roof structure utilizing a platform having first and second surfaces, where the second surface bears on the roof. The platform includes a slot between the first and second surfaces which accepts a slidable element. An element is formed with a flange and extending legs which form a chamber within the slot of the platform. The flange portion of the element is provided with an opening to accept a fastener which extends through the chamber into the roof. A filler material occupies the chamber and protects the fastener within the chamber.

[0026] In U.S. Pat. No. 6,237,888, Coll discloses an antenna mounting system for mounting an antenna mast to a building with a roof having a plurality of exposed rafters extending in spaced-apart parallel relationship, comprising a support member for holding the mast vertically at a predetermined distance from an edge of the roof. A torsion-resistant attachment member attaches the support member to one of the rafters, and first and second mast stabilizing arms maintain the mast in a stable, generally vertical position so as to resist wind effects. The first mast stabilizing arm is adapted for attachment to the one rafter by the attachment member, and the second mast stabilizing arm is adapted for attachment to another rafter spaced from the one rafter. The first and second mast stabilizing arms cooperate with the support member to provide a structurally rigid antenna mounting system. The antenna mast mounted to rafters with such a system can withstand a wind load of up to about 100 mph.

[0027] Kruse, in U.S. Pat. No. 6,276,649, describes a triangular planar member that defines, through its thickness, four generally circular screw holes. The four holes may be disposed in relative relation to one another so as to generally define the corners of a rectangle. At the corners of the triangular planar member are corner couplers such as suction cups. The suction cups attach to the adapter to smooth surface. The holes in the adapter are utilized to accept screws in order to adapt, via the triangular planar member, a screw-mounted device to the smooth surface onto which it is either not possible or not desirable to screw-mount the device directly. In an optional embodiment of the present invention, the triangular planar member defines one hole and three slots for greater adaptability in terms of the types of devices it may receive.

[0028] In U.S. Pat. No. 6,460,821, Rhudy et al. disclose a DSS Uni-Mount, which is a ¼" aluminum plate that is designed to mount a standard DSS (small dish) mounting arm to the gable end or hip edge of most residences or structures. The device virtually eliminates the need for roof penetrations in order to mount a DSS satellite dish. The top of the DSS Uni-Mount is fabricated at a roof angle of 5 on 12 and is designed for application to the gable end of a structure. It accommodates roof pitches from 4 on 12 thru 8 on 12. The bottom is cut at 90 degrees to the sides thus enabling mounting to a flat or hip portion of the roof line by inversion of the unit. A total of eight ¼" diameter holes are drilled thru the Uni-Mount in strategic places to allow the installer to match the DSS mounting arm holes with the DSS Uni-Mount plate. Lag bolts and machine bolts are then screwed thru and to the DSS Uni-Mount in order to secure the DSS mounting arm to the gable or eaves of the roof line. The plate also accommodates the mounting of a dual ground block, which enables electrical grounding of both the satellite antenna/mounting arm bracket and coax cable at a common junction point.

[0029] Applicants have devised a base mounting device that can be secured to a shingled roof structure, or sidewalk structure, with little or no disruption to the integrity of the shingled roof or wall siding. The mounting device provides an extremely stable structure suitable for securing a mounting base of a satellite dish mounting unit. The base mounting device is readily moved from one location to another or completely removed from the roof structure or sidewalk structure with minimal impact on the integrity of the shingled roof covering or the sidewalk structure covering.

SUMMARY OF THE INVENTION

[0030] The invention is directed to a base mounting device, adapted for receiving and securing the mounting base of a satellite dish to a roof or sidewalk structure. The device comprises an elevated platform section with a plurality of apertures therein adapted for securing a mounting base of a satellite dish. The platform section has first and second opposed sidewalls and first and second opposed open sides. The platform section’s first opposed sidewalk has an outer mounting tab secured at a sidewalk edge opposite the elevated platform section, with the outer mounting tab extending exterior the elevated platform section. The outer mounting tab includes a plurality of apertures therein. The platform section’s second opposed sidewalk has an inner mounting tab secured at a sidewalk edge opposite the elevated platform section, with the inner mounting tab extending beneath the elevated platform section. The inner mounting tab includes a plurality of apertures therein. The device is secured to a shingled roof structure or sidewalk structure by locating the inner mounting tab and the outer mounting tab beneath a shingle tab of adjacent rows of shingles, inserting threaded fasteners through the apertures in each mounting tab into the roof or sidewalk structure, and securing a mounting base of a satellite dish to the elevated platform section via threaded fasteners inserted through the apertures in the platform section.

[0031] In a preferred embodiment of the invention, the base mounting device is fabricated as two separate pieces. The platform section’s second opposed sidewalk and associated inner mounting tab is detachable from the elevated platform section. Most preferably, the platform section’s
second opposed sidewall comprises overlapping sidewall sections secured together with threaded fasteners, allowing each mounting tab to be individually secured to the shingled roof or sidewall structure, then fastening the second sidewall’s overlapping sidewall sections together with threaded fasteners.

In another embodiment of the invention, the device includes a hinge member joining the platform section’s second opposed sidewall to the elevated platform section. Alternatively, the hinge member joins the second opposed sidewall to the inner mounting tab. These embodiments allow the inner tab to be secured beneath a shingle tab, with the elevated platform section and attached outer tab rotated out of the way. Then the outer mounting tab is positioned beneath an adjacent shingle tab and fastened to the roof structure.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the base mounting device of the present invention.

FIG. 2 is a perspective view of a preferred embodiment of the base mounting device of the present invention.

FIG. 3 is a perspective view of an alternative embodiment of the base mounting device of the present invention.

FIG. 4 is a perspective view of an alternative embodiment of the base mounting device of the present invention.

FIG. 5 is a perspective view of a satellite dish mounting assembly secured to a preferred embodiment of the base mounting device of the present invention.

FIG. 6 is a perspective view of a satellite dish mounting assembly secured to an alternative embodiment of the base mounting device of the present invention.

DESCRIPTION OF THE EMBODIMENTS

Nomenclature

Base Mounting Device
Planar Elevated Platform Section
Apertures in Platform Section
First Sidewall of Platform Section
Second Sidewall of Platform Section
Upper Sidewall Section
Lower Sidewall Section
First Open Side of Platform Section
Planar Outer Mounting Tab
Apertures in Outer Mounting Tab
Second Open Side of Platform Section
Planar Inner Mounting Tab
Apertures in Inner Mounting Tab
Apertures in Overlapping Sidewall Section of Second Sidewall
Threaded Fasteners

Hinge Member Attached to Second Sidewall
Base of Satellite Dish Mount
Pipe of Satellite Dish Mount

The invention is a base mounting device adapted for receiving and securing the mounting base of a satellite dish to a roof or sidewall structure. The device comprises an elevated platform section with a plurality of apertures therein adapted for securing a mounting base of a satellite dish. The platform section has first and second opposed sidewalls and first and second opposed open sides. The platform section’s first opposed sidewall has an outer mounting tab secured at a sidewall edge opposite the elevated platform section, with the outer mounting tab extending exterior the elevated platform section. The outer mounting tab includes a plurality of apertures therein. The platform section’s second opposed sidewall has an inner mounting tab secured at a sidewall edge opposite the elevated platform section, with the inner mounting tab extending beneath the elevated platform section. The inner mounting tab includes a plurality of apertures therein. The device is secured to a shingled roof or sidewall structure by locating the inner mounting tab and the outer mounting tab beneath a shingle tab of adjacent rows of shingles, inserting threaded fasteners through the apertures in each mounting tab into the roof or sidewall structure, and securing a mounting base of a satellite dish to the elevated platform section via threaded fasteners inserted through the apertures in the platform section.

Referring to FIG. 1, the base mounting device of the present invention is shown. The mounting device comprises a planar, elevated platform section with a plurality of apertures therein, adapted for securing a mounting base B of a satellite dish. The apertures are positioned to match corresponding apertures in the mounting base B with the mounting base B secured to the elevated platform section with threaded fasteners, as illustrated in FIGS. 5 and 6. The elevated platform section has a first opposed sidewall and a second opposed sidewall. The elevated platform section also has a first open side and a second open side located in opposition to each other. The opposed, open sides and allow access to the underside of the planar, elevated platform section. The elevation of the platform section prevents the threaded fasteners securing the mounting base B to the platform section from damaging the shingled roof or sidewall structure to which the base mounting device is secured.

In a preferred embodiment of the invention, the platform section’s first opposed sidewall is oriented at about a 45-degree angle to the planar, elevated platform section, and the platform section’s second opposed sidewall is preferably perpendicular to the planar, elevated platform section, as illustrated in FIG. 1.

The platform section’s first opposed sidewall has a planar, outer mounting tab secured at a sidewall edge opposite the elevated platform section with the planar, outer mounting tab extending exterior the planar, elevated platform section and, preferably, parallel thereto. The planar, outer mounting tab includes a plurality of apertures therein for securing the outer mounting tab to the shingled roof or sidewall structure with
threaded fasteners 70. The platform section’s second opposed sidewall 30 has a planar, inner mounting tab 55 secured at a sidewall edge opposite the elevated platform section 15, with the planar, inner mounting tab 55 extending beneath the elevated platform section 15 and, preferably, parallel thereto. The planar, inner mounting tab 55 likewise includes a plurality of apertures 60 therein for securing the mounting tab 55 to the shingled roof or sidewall structure with threaded fasteners 70. Preferably, the inner mounting tab 55 and the outer mounting tab 40 are coplanar and sized to be inserted beneath the shingle tabs of adjacent rows of shingles on a roof structure or adjacent rows of siding material on a sidewall structure. The term “adjacent row” is intended to include shingle or siding rows separated by zero to five intervening rows of shingles or siding. The inner mounting tab 55 and the outer mounting tab 40 are secured to the roof or wall structure with threaded fasteners 70 to hold the base mounting device 10 in place, with the mounting tabs 40, 55 and associated fasteners out of sight, as illustrated in FIGS. 5 and 6.

[0061] Although the base mounting device 10 is shown as a unitary structure in FIG. 1, there can be difficulty in securing the threaded fasteners 70 in the apertures 60 of the inner mounting tab 55 due to the overlying elevated platform section 15. The location of the apertures 60 in the elevated platform section 15 is dictated by the mounting apertures of the base B of the satellite dish mount, as seen in FIGS. 5 and 6. At least a portion of the apertures 60 in the inner mounting tab 55 can coincide with the platform section’s apertures 20, thus providing access to the threaded fasteners 70 positioned in the mounting tab apertures 60. Such an arrangement makes difficult both the driving of the threaded fasteners 70 into the support structure and securing the dish mount base B to the elevated platform section 15 with threaded fasteners 70.

[0062] To overcome these difficulties, a preferred embodiment of the base mounting device 10 is shown in FIGS. 2 and 5. Referring now to FIG. 2, the base mounting device 10 comprises two separable parts. In this preferred embodiment, the platform section’s second sidewall 30 comprises overlapping sidewall sections 30a, 30b with an upper sidewall section 30a secured to the elevated platform section 15 and a lower sidewall section 30b secured to the inner mounting tab 55. Each of the sidewall sections 30a, 30b of the second sidewall 30 includes a plurality of apertures 65, in register, allowing the sidewall sections 30a, 30b to be joined with threaded fasteners 70, as illustrated in FIG. 5. Thus, the inner mounting tab 55 and associated lower sidewall section 30b is first installed under a shingle tab, then the outer mounting tab 40, secured to the elevated platform section 15 and associated first sidewall 25, is installed under a shingle tab of an adjacent row of shingles, and finally the upper and lower sidewall sections 30a, 30b are joined with threaded fasteners 70 to form a unitary structure for the base mounting device 10. The satellite mounting base B, associated pipe C, and the satellite dish itself, are then secured to the elevated platform section 15 to complete the installation. In some cases, it may be preferable to secure the satellite mounting base B to the planar, elevated platform section 15 before installing the outer mounting tab 40 under the shingle tab, and then joining the upper and lower sidewall sections 30a, 30b in a final step.

[0063] The base mounting device 10 of the present invention is preferably constructed from a heavy gauge galvanized iron alloy for strength and durability. Likewise, the threaded fastener 70 are fabricated from a corrosion resistant iron alloy to withstand exposure to the elements.

[0064] Referring now to FIGS. 3 and 6, an alternative embodiment of the base mounting device 10 is shown. In this embodiment, the platform section’s second sidewall 30 is secured to the elevated platform section 15 with a hinge member 75 that preferably spans the full width of both the elevated platform section 15 and the platform section’s second sidewall 30. The hinge member 75 allows the inner mounting tab 55 to be installed beneath one shingle tab with threaded fasteners 70 while the remainder of the base mounting device 10 is pivoted at least to a vertical position, out of the way of the inner mounting tab 55. The elevated platform section 15, first sidewall 25, and attached outer mounting tab 40 of the base mounting device 10 are then pivoted to bring the outer mounting tab 40 beneath the tab of a shingle in an adjacent row of shingles, and the outer mounting tab 40 is secured to the roof structure with threaded fasteners 70. The satellite mounting base B, associated pipe C, and the satellite dish itself are then secured to the elevated platform section 15 to complete the installation, similar to the assembly illustrated in FIG. 6. Again, it may be preferable to secure the satellite mounting base B to the planar, elevated platform section 15 before installing the outer mounting tab 40 under the shingle tab. The hinge member 75 is preferably fabricated from corrosion resistant material to maintain the structural integrity of the base mounting device 10 and withstand the elements.

[0065] Referring now to FIG. 4, another alternative embodiment of the base mounting device 10 is shown. In this embodiment, the platform section’s second sidewall 30 is secured to the inner mounting tab 55 with a hinge member 75 that preferably spans the full width of both the platform section’s second sidewall 30 and the inner mounting tab 55. The hinge member 75 allows the inner mounting tab 55 to be installed beneath one shingle tab with threaded fasteners 70 while the remainder of the base mounting device 10 is pivoted at least to a vertical position, out of the way of the inner mounting tab 55. The second sidewall 30, the attached elevated platform section 15, the first sidewall 25 and the attached outer mounting tab 40 of the base mounting device 10 are then pivoted to bring the outer mounting tab 40 beneath the tab of a shingle in an adjacent row of shingles, and the outer mounting tab 40 is secured to the roof structure with threaded fasteners 70. The satellite mounting base B, associated pipe C, and the satellite dish itself are then secured to the elevated platform section 15 to complete the installation, similar to the assembly illustrated in FIG. 6. Again, it may be preferable to secure the satellite mounting base B to the planar, elevated platform section 15 before installing the outer mounting tab 40 under the shingle tab. The hinge member 75 is preferably fabricated from corrosion resistant material to maintain the structural integrity of the base mounting device 10 and withstand the elements.

[0066] While the invention has been particularly shown and described with reference to preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention.
We claim:

1. A base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure, the base mounting device comprising:
   an elevated platform section with a plurality of apertures therein adapted for securing a mounting base of a satellite dish, the platform section having a first sidewall and a second opposed sidewall, the platform section having first and second opposed open sides;
   the platform section’s first opposed sidewall having an outer mounting tab secured at a sidewall edge opposite the elevated platform section, the outer mounting tab extending exterior the elevated platform section, the outer mounting tab including a plurality of apertures therein;
   the platform section’s second opposed sidewall having an inner mounting tab secured at a sidewall edge opposite the elevated platform section, the inner mounting tab extending beneath the elevated platform section, the inner mounting tab including a plurality of apertures therein;
   wherein the device is secured to a shingled roof or wall structure by locating the inner mounting tab and the outer mounting tab beneath shingle tabs of adjacent rows of shingles, inserting threaded fastener through the apertures in each mounting tab into the roof or wall structure, and securing a mounting base of a satellite dish to the elevated platform section via threaded fasteners inserted through the apertures in the platform section.

2. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 1, wherein the elevated platform section is planar and the inner and outer mounting tabs are planar and parallel to the planar platform section.

3. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 2, wherein the inner and outer mounting tabs are coplanar.

4. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 1, wherein at least one of the opposed sidewalls comprises overlapping sidewall sections secured together by threaded fasteners.

5. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 1, wherein the second opposed sidewall comprises overlapping sidewall sections secured together by threaded fasteners.

6. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 5, wherein the second opposed sidewall is perpendicular to the elevated platform section.

7. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 1, wherein at least one opposed sidewall is secured by a hinge to the elevated platform section.

8. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 1, wherein the second opposed sidewall is secured by a hinge to the elevated platform section.

9. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 1, wherein at least one mounting tab is secured by a hinge to an opposed sidewall.

10. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 1, wherein the inner mounting tab is secured by a hinge to the second opposed sidewall.

11. A base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure, the base mounting device comprising:
   a planar, elevated platform section with a plurality of apertures therein adapted for securing a mounting base of a satellite dish, the platform section having a first sidewall and a second opposed sidewall, the platform section having first and second opposed open sides;
   the platform section’s first opposed sidewall having a outer mounting tab secured at a sidewall edge opposite the elevated platform section, the outer mounting tab extending exterior the elevated platform section, the outer mounting tab including a plurality of apertures therein;
   the platform section’s second opposed sidewall having a inner mounting tab secured at a sidewall edge opposite the elevated platform section, the inner mounting tab extending beneath the elevated platform section, the inner mounting tab including a plurality of apertures therein;
   wherein the device is secured to a shingled roof structure by locating the inner mounting tab and the outer mounting tab beneath shingle tabs of adjacent rows of shingles, inserting threaded fastener through the apertures in each mounting tab into the roof or wall structure, and securing a mounting base of a satellite dish to the planar elevated platform section via threaded fasteners inserted through the apertures in the planar platform section.

12. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 11, wherein the inner and outer mounting tabs are coplanar.

13. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 11, wherein at least one of the opposed sidewalls comprises overlapping sidewall sections secured together by threaded fasteners.

14. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 11, wherein the second opposed sidewall comprises overlapping sidewall sections secured together by threaded fasteners.

15. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 14, wherein the second opposed sidewall is perpendicular to the elevated platform section.

16. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 11, wherein at least one opposed sidewall is secured by a hinge to the elevated platform section.

17. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 11, wherein the second opposed sidewall is secured by a hinge to the elevated platform section.
18. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 11, wherein at least one mounting tab is secured by a hinge to an opposed sidewall.

19. The base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure of claim 11, wherein the inner mounting tab is secured by a hinge to the second opposed sidewall.

20. A base mounting device adapted for receiving and securing a mounting base of a satellite dish to a roof or wall structure, the base mounting device comprising:

   a planar, elevated platform section with a plurality of apertures therein adapted for securing a mounting base of a satellite dish, the platform section having a first sidewall and a second opposed sidewall, the platform section having first and second opposed open sides;

   the platform section's first opposed sidewall having a planar, outer mounting tab secured at a sidewall edge opposite the elevated platform section, the planar, outer mounting tab extending exterior the planar, elevated platform section and parallel thereto, the planar, outer mounting tab including a plurality of apertures therein,

   the platform section's second opposed sidewall comprising overlapping sidewall sections secured together by threaded fasteners, the second opposed sidewall having a planar, inner mounting tab secured at a sidewall edge opposite the elevated platform section, the planar, inner mounting tab extending beneath the elevated platform section and parallel thereto, the planar, inner mounting tab including a plurality of apertures therein;

   wherein the device is secured to a shingled roof structure by locating the inner mounting tab and the outer mounting tab beneath shingle tabs of adjacent rows of shingles, inserting threaded fastener through the apertures in each mounting tab into the roof structure, and securing a mounting base of a satellite dish to the planar elevated platform section via threaded fasteners inserted through the apertures in the platform section.

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