A window-mounted pet litter housing is described. The housing is equipped with a left front door, a right front door, a transparent rear panel, a ceiling, a floor, and at least one window anchor mount. The front left door and front right door are configured to open outward from the housing. The front left door is equipped with a flap door configured for use by the pet to enter and exit the housing. The interior of the housing provides adequate space for the pet litter box, as well as space for the pet to lie down and peer through the transparent rear panel. Vented louvers are disposed in the left wall and right wall which provide ventilation while preventing rain and snow from entering the housing.
100 The customer acquires the present invention via purchase from a retailer or e-retailer.

110 The customer unpacks the present invention from the packaging.

120 The customer opens the window for installation.

130 The customer lifts the housing and slides it directly into the window.

140 The housing is centered within the open window frame.

150 The window is closed until it comes into contact with the top of the housing.

160 Extend the expandable extension panels on each side of the front of the housing to meet the sides of the window frame.

170 Screw the anchor screws to the anchor screw mounts located at the bottom and sides of the housing and into the window sill.

180 Mount the expandable extension panels into position with ½ inch mounting screws screwed into the window frame, locking the housing and expanding extension panels into place within the window.
WINDOW MOUNTED PET LITTER HOUSING
AND PET SHELTER DEVICE

[0001] This application is a non-provisional application of provisional patent application No. 62/132,816, filed on Mar. 13, 2015, and priority is claimed thereto.

FIELD OF THE PRESENT INVENTION

[0002] The present invention relates generally to pet litter housings and pet shelters, and more specifically relates to a window mounted housing and litter box for use by pets.

BACKGROUND OF THE PRESENT INVENTION

[0003] It is known that indoor animals such as cats, ferrets, chinchillas, dogs, and other small pets are prone to employ a litter box filled with pet litter after being trained to use them to use the bathroom. In such scenarios, at least one litter box is conventionally located on the floor in a user-selected location within the home or other structure. Unfortunately, once the litter box has become soiled, there is little the homeowner can do to prevent the creation of odor.

[0004] While odor-eliminating sprays can be helpful to temporarily cover the odor, the smell will inevitably return as the pet subsequently uses the litter box. A variety of litter box heights have been invented

[0005] Numerous other types of pet litter housings and shelters have been invented in the past. One problem encountered with these designs is that the owner generally does not have access to the housing from the inside of the dwelling. For example, in U.S. Pat. No. 5,165,366, granted to Harvey, one can access the litter box for emptying from outside of the housing, on the ground floor only. Another problem is that the litter housings and shelters have to be mounted on the exterior of the dwelling, which makes installation impossible, unless the dwelling is on the ground floor.

[0006] In contrast, the pet housing of the present invention may fit into any window, vertical or horizontal as well, but is installed from the inside of the dwelling and can be done from any floor, from the ground floor to high rise buildings. Furthermore, the present invention differs from Harvey's design, in which the litter tray may only be emptied from the exterior of the dwelling. With the present invention, one may access the litter box from the inside of the dwelling, through the unique triple-door design.

[0007] Another comparison is choice of materials. Harvey constructs the entire pet litter housing out of acrylic and metal, not realizing just how hot this will make the inside of the housing in the summer. There is practically no shade on the inside of the box, except for the tin roof. This is yet another flaw of Harvey as well, as this too acts as even more of a heat conducting material. This is like putting a cat in a sauna or under a magnifying glass, which is obviously not conducive to the health of the cat, and may even discourage the cat from using the housing. Continuing on, Harvey places many open holes to be used for ventilation. This is conducive to air circulation, but when its very cold out, or raining, those two elements could enter the pet litter housing. Rain can cause the pet litter to become prematurely soiled. Combine this with a completely open floor, and there is basically no protection from the elements.

[0008] Similarly, U.S. Pat. No. 5,842,438 granted to Messmer is for a window mounted litterbox. Messmer varies from the present invention in that the landing taught by Messmer is far too small to adequately function as a comfortable access point for a pet. This is in contrast to the present invention, which is equipped with a larger, ample landing to facilitate access to the housing by a pet.

[0009] Additionally, U.S. Pat. No. 7,530,331 granted to Malachowski on May 12, 2009 is for a window-mounted litter enclosure having interior and exterior housing sections. Malachowski is similar to the present invention in that it window mounted, however Malachowski teaches a housing that can only be accessed for cleaning from the outside. Additionally, Malachowski extends within the dwelling, and therefore is not space-saving, unlike the present invention.

[0010] In addition, none of the other described inventions, or any product of similar design to the present invention exist in either past or present markets. The main idea behind the present invention is to be marketed to the general public for purposes of improving the quality of life. For example, if someone lives in a tiny or relatively small dwelling, space is of the utmost importance. This is relevant to housing in cities and places like New York City, Europe, Russia, Asian countries, and any other situations where housing is often small, cramped, and compacted. It is known that most of the housing in cities exist in mid-rise and high-rise dwellings.

[0011] The present invention is made entirely of high density plastic, with only an acrylic material for the rear window. This allows adequate shade, and does not allow the elements to enter the housing. The side louver vents allow air to ventilate the entire box, but due to their downward slope, allow rain to drip off, but not enter the box. Harvey’s patent is similar to the present invention only in the essence of its use, however, it contains all of the flaws mentioned above.

[0012] The present invention not only provides a space saving alternative, but also eliminates the odor problems that occur from pet litter housings being in a confined space, with or without adequate ventilation and windows. Additionally, the housings can be provided in different colors, thereby not only saving space, and eliminating odors, but also adding or blending into the existing decor of any dwelling. As such, it should be understood that the present invention is space-saving, odorless, safe, and effectively contains litter spread. The present invention is also preferably ADA compliant.

[0013] Another feature of the present invention is to serve as a cat haven and resting place. Due to the width of the housing, enough room is allocated to give an extra ten inches of space inside the housing to be used as a resting place for the pet. The present invention may also be used as a window perch by simply removing the litter pan, left front door, and right front door. The vertical design of the present invention adds a shelf above the litter pan for the same purpose, and is the entire width of the housing. The rear of the housing is preferably equipped with a clear plastic window allowing sunlight to enter and warm the housing, in addition to allowing the cat the ability to view the outside. This again incorporates new features, as well as all the features that other inventions have done individually.

[0014] Attempts have been made to provide an adequate swinging door for access, but none compares with the triple-door design of the present invention that not only allows the cat access into the housing, but also to the owner to facilitate litter changing and cleaning. The vertical design utilizes a double-door design that works in the same way. This allows the owner to have 100% access to the litter tray in a normal standing position. Great for anyone who has back problems, unable to bend or stoop over, and any other related problems due to poor health. This also includes anyone confined to an
ADA compliant wheelchair, to have full and easy access to the interior of the housing. Therefore the present invention contains many facets within its design related to improving the quality of life.

Another advantage to the present invention’s design is that of safety, in many aspects. No longer is the housing sitting on the floor, where someone could trip over it. Also, with the housing design of the present invention, it can fit inside of a housing designed set of burglar bars, as would a normal window air conditioning unit that is installed on the ground floor or above. Therefore, these are all primary reasons why the present invention is the provision for a new and improved pet litter housing and shelter.

Thus, there is a need for a window-mounted pet housing apparatus configured for installation from within a dwelling, rather than solely from the outside, that has adequate ventilation while protecting from the elements during rain and winter.

SUMMARY OF THE PRESENT INVENTION

The present invention is a four-sided shelter equipped with two solid walls, a rear window made of a transparent material within a frame, and a combination of a triple-door design that comprises the fourth and front wall. The front wall consists of a top (horizontally) hinged swinging flap door, mounted and centered inside a left front door equipped with hinges disposed vertically along the left side of the left front door. The left front door and the right front door that swing out from the housing, providing access to the litter pan inside for cleaning. The flap door allows the cat to enter and leave the housing as it pleases.

A second embodiment of the present invention exhibits a vertical housing that also utilizes a double-door design that is narrower than the horizontal embodiment due to the narrow design of the vertical window. It consists of one top (horizontally) hinged swinging flap door, mounted and centered inside of another (horizontally) hinged door that opens up inside the top of the housing. This allows 100% access to the litter pan inside. The entire housing mounts securely into any standard horizontal or vertical window, with only a few screws. The extension panels and the rest of the window up in both the horizontal and vertical applications.

The present invention is made entirely of high density plastic, with only an acrylic material for the rear window. This allows adequate shade, and does not allow the elements to enter the housing. The side louver vents allow air to ventilate the entire box, but due to their downward slope, allow rain to drip off, but not enter the box, unlike the prior art. The top of the housing of the present invention is preferably sloped to allow rain to drip off easily.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be better understood with reference to the appended drawing sheets, wherein:

FIG. 1 is an isometric rear view of the present invention, illustrating the three-door design and housing.

FIG. 2 is an isometric front view of the present invention, illustrating the three-door design and the landing.

FIG. 3 is an isometric exterior rear view of the present invention, illustrating how the housing mounts into a vertically-oriented window, slider, or casement, and how it varies slightly from FIG. 1.

FIG. 4 is a front interior view of the vertical window embodiment of the present invention, illustrating how the housing sits in a vertically-oriented window.

FIG. 5 exhibits a view of the present invention from the front, equipped with the ramp.

FIG. 6 displays a view of the front of the present invention, shown equipped with access steps.

FIG. 7 displays a cross-sectional view of the present invention from the left side.

FIG. 8 is a front view of the present invention disposed in a standard horizontally-oriented window.

FIG. 9 exhibits a flow chart detailing the process of installation of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is a pet litter housing and pet shelter configured for use by pets living within a dwelling such as a home, apartment, condo, high-rise, townhouse, or other similar dwelling. The present invention is equipped with a housing (10), which consists of side panels (35), a roof (33), a floor (34), a left front door (16) and a right front door (17). The left front door (16) and right front door (17) comprise the front of the housing (10). A flap door (18) is disposed on said left front door (16).

FIG. 1 is a rear exterior view of the present invention that illustrates the housing (10) assembled for use on any standard sized horizontally mounted window. The housing (10) itself is similar to an air conditioning window unit, and is inserted in the very same way. Once placed into a window (12), and secured with the provided screws placed into mounting holes (50), the expandable extension panels (14) may be extended to close in any gap left between the housing (10) and the window frame.

Once the entire housing (10) is fully installed, one can see how the front panel, consisting of the left door (16) and the right door (17), allows one to access the inside. The left front door (16) is equipped with at least one hinge (20) disposed on the left side, so that the left front door (16) opens out, away from the housing (10) when opened. The at least one hinge (20) is preferably disposed at the top and the bottom of the left front door (16) and the right front door (17). The left front door (16) is equipped with the flap door (18) which itself can be removed from its top mounted horizontal hinges (22) as well. At least one conventional magnetic latch is preferably employed to help keep the left front door (16) and right front door (17) closed. The left front door (16) and the right front door (17) meet together when closed, offset near the center of the housing, and are configured to snap closed via the magnetic latch. The present invention is also preferably equipped with a landing (26) for the cat to jump on to for entry and exit to and from the housing (10). The landing (26) is preferably eight inches deep to provide ample space for the cat. It can also be used as a resting place, or as a secured scratching post as well. As such, the landing (26) is equipped with replaceable carpet or a similar scratching material to aid the pet’s grip, and act as a scratching post.

FIG. 1 exhibits a view of the exterior of the housing (10). The transparent rear panel (28) of the housing (10) is made of a transparent plastic material such as acrylic, Lexan®, etc., and is preferably set into a double reinforced frame (30) for both security and stability. The transparent real panel (28) allows the cat to see outside, and the housing (10) itself is large enough for the cat to lie in as well. The strong
exterior of the housing (10) is not only weather resistant, but is also durable to withstand years of sun, rain, cold, snow, etc. The side panels (35) of the housing (10) are equipped with vented louvers (32) to allow airflow throughout the entire housing (10). The vented louvers (32) allow the housing (10) to continually remove waste odors. The vented louvers (32) also keep the odors from traveling into the house as well.

FIG. 3 exhibits a rear view of the present invention, and shows the housing (10) assembled and installed into a standard-sized slider or casement window. The main housing (10) itself is similar to a vertically mounted window air conditioning unit, and is installed in the same way a window-mounted air conditioning unit would be. Once placed in a window (12) and mounted with the provided screws secured through anchor screw mounts (50) as shown in FIG. 1 and FIG. 2, the expandable extension panel (14) is to be extended to close the gap between the housing (10) and the window frame. The expandable extension panels (14) are equipped with anchor screw mounts (50) as well. Once the entire housing (10) is fully installed, the left front door (16) and right front door (17) may be opened to allow the owner to access the inside. The front door (16) is equipped with hinges (20) on the top side, so that it opens away from the housing (10). The front door (16) also houses the flap door (18) which itelf can be removed from its top mounted horizontal hinges (22) as well.

FIG. 4 is a straight-on inside view, illustrating how the housing (10) is assembled and installed into a standard sized slider or casement window. The housing (10) itself is similar to a vertical air conditioning window unit, and is inserted in the same way. Once placed into a window (12), and secured with the provided screws, the expandable extension panel (14) allows one to close in the gap between the housing and the window frame. A second level floor (40) may be present in embodiments of the present invention designed for a vertically mounted window, as seen in FIG. 3 and FIG. 4. The present invention is also preferably equipped with a landing (26) for the cat to jump onto for easy entry and exit to the housing (10). The landing (26) can also be used as a resting-place or secured scratching post, and is preferably eight inches deep. Access steps (65) may be bundled with the present invention for mounting on an adjacent wall to facilitate access to the housing (10) of the present invention by the pet, as shown in FIG. 6. A ramp (55) may also be bundled with the present invention to facilitate access by pets, as shown in FIG. 5.

Installation of the present invention preferably requires two people, however it can be accomplished individually. The process of use of the present invention, as depicted in FIG. 9, is preferably as follows:

1. The customer acquires the present invention via purchase from a retailer or e-retailer. (100)
2. The customer unpacks the present invention from the packaging. (110)
3. The customer opens the window for installation. (120)
4. The customer lifts the housing (10) and slides it directly into the window. (130)
5. The housing (10) is centered within the open window frame. (140)
6. The window is closed until it comes into contact with the top of the housing (10). (150)

7. Extend the expandable extension panels (14) on each side of the front of the housing (10) to meet the sides of the window frame. (160)
8. Screw in the anchor screws to the anchor screw mounts (50) located at the bottom and sides of the housing (10) and into the window sill. (170) Use of a drill is preferred.
9. Mount the expandable extension panels (14) into position with ½ inch screws screwed into the window frame through anchor screw mounts (50), locking the housing (10) and expandable extension panels (14) into place within the window. (180)
10. Alternate embodiments of the present invention include variations on the color, texture, and material composition of the housing (10). Additionally, some alternate embodiments of the present invention are preferably equipped with a ramp (55), which enables the present invention to be used by dogs, ferrets, rabbits, chinchillas, other small pets, as well as elderly or disabled cats who may not be able to jump up to the landing (26) on their own. The ramp (55) is preferably configured to attach to the landing (26), and extend down below the window to the floor of the dwelling, as shown in FIG. 5. It is envisioned that the ramp (55) may be mounted on either the left side or the right side of the landing (26), or attached at any location along the front of the landing (26).

Having illustrated the present invention, it should be understood that various adjustments and versions might be implemented without venturing away from the essence of the present invention. Further, it should be understood that the present invention is not solely limited to the invention as described in the embodiments above, but further comprises any and all embodiments within the scope of this application.

The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the present invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The exemplary embodiment was chosen and described in order to best explain the principles of the present invention and its practical application, to thereby enable others skilled in the art to best utilize the present invention and various embodiments with various modifications as are suited to the particular use contemplated.

1 claim:
A window-mounted pet litter housing and pet shelter apparatus comprising:
a housing, said housing includes side panels, a roof, a transparent rear panel, and a floor;
a right front door, said right front door disposed on said housing, in communication with said side panels;
a left front door, said left front door disposed on said housing, in communication with said side panels;
wherein said right front door and said left front door are mounted to said side panels via hinges;
wherein said hinges are oriented vertically;
wherein said hinges are disposed at a top and a bottom of said right front door;
wherein said hinges are disposed at a top and a bottom of said left front door;
a flap door, said flap door disposed on said left front door;
wherein said flap door is mounted via a top-mounted horizontal hinge;
expandable extension panels, said expandable extension panels extend from said side panels of said housing;
vented louvers, said vented louvers disposed on said side panels;
mounting holes, said mounting holes disposed at corners of said expandable extension panels;
wherein said mounting holes are configured to accept mounting screws to secure said expandable extension panels to the frame of the window; and
a landing, said landing disposed at a base of said housing, adjacent to said left front door and said right front door, extending perpendicularly from the window.
2. The apparatus of claim 1, wherein said transparent rear panel is a plastic window; and
wherein said transparent rear panel is in communication with said side panels, said roof, and said floor.
3. The apparatus of claim 1, wherein said landing has a depth of eight inches.
4. The apparatus of claim 1, further comprising: access steps; and
wherein said access steps are disposed adjacent to said landing.
5. The apparatus of claim 1, further comprising: a ramp,
wherein said ramp is in communication with said landing; and
wherein said ramp extends from said landing to a dwelling floor.
6. The apparatus of claim 1, wherein said landing is equipped with carpet.
7. The apparatus of claim 1, further comprising: a litter pan, said litter pan disposed within said housing;
wherein said right front door and said left front door are configured to open outward, away from said housing, providing access to said litter pan; and
wherein said right front door and said left front door are removable.
8. The apparatus of claim 2, wherein said landing has a depth of eight inches.
9. The apparatus of claim 2, further comprising: access steps; and
wherein said access steps are disposed adjacent to said landing.
10. The apparatus of claim 2, further comprising: a ramp,
wherein said ramp is in communication with said landing; and
wherein said ramp extends from said landing to a dwelling floor.
11. The apparatus of claim 2, wherein said landing is equipped with carpet.
12. The apparatus of claim 2, further comprising: a litter pan, said litter pan disposed within said housing;
wherein said right front door and said left front door are configured to open outward, away from said housing, providing access to said litter pan; and
wherein said right front door and said left front door are removable.
13. The apparatus of claim 3, further comprising: access steps; and
wherein said access steps are disposed adjacent to said landing.
14. A window-mounted pet litter housing and pet shelter apparatus comprising:
a housing, said housing includes side panels, a roof, a transparent rear panel, and a floor;
a right front door, said right front door disposed on said housing, in communication with said side panels;
a left front door, said left front door disposed on said housing, in communication with said side panels;
wherein said right front door and said left front door are mounted to said side panels via hinges;
wherein said hinges are oriented vertically; wherein said hinges are disposed at a top and a bottom of said right front door;
wherein said hinges are disposed at a top and a bottom of said left front door;
a flap door, said flap door disposed on said left front door;
wherein said flap door is mounted via a top-mounted horizontal hinge;
expandable extension panels, said expandable extension panels extend from said side panels of said housing;
vented louvers, said vented louvers disposed on said side panels;
mounting holes, said mounting holes disposed at corners of said expandable extension panels;
wherein said mounting holes are configured to accept mounting screws to secure said expandable extension panels to the frame of the window;
a landing, said landing disposed at a base of said housing, adjacent to said left front door and said right front door, extending perpendicularly from the window;
wherein said transparent rear panel is a plastic window;
wherein said transparent rear panel is in communication with said side panels, said roof, and said floor;
wherein said landing has a depth of eight inches;
access steps;
wherein said access steps are disposed adjacent to said landing;
wherein said landing is equipped with carpet;
a litter pan, said litter pan disposed within said housing;
wherein said right front door and said left front door are configured to open outward, away from said housing, providing access to said litter pan;
wherein said right front door and said left front door are removable.
15. A window-mounted pet litter shelter apparatus comprising:
a housing;
window anchor mounts, said window anchor mounts disposed on said housing;
wherein said window anchor mounts have at least one door, disposed on said housing, in communication with said housing; and
wherein said landing disposed below said at least one door.
16. The apparatus of claim 15, further comprising a litter pan;
wherein said litter pan is disposed within said housing; and
wherein said litter pan is accessible via said at least one door.

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