RESILIENT TRIM CORNERING SYSTEM AND METHOD

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ABSTRACT

An apparatus and method for covering a corner with trim includes a trim section. The trim section includes a resilient corner section having, a first and second generally-planar surfaces intersecting at an angle on the back of the resilient corner section and first and second tabs having a cross-sectional thickness less than a cross-sectional thickness of the corner section. The method for installing a molding system includes mounting the corner piece of trim to a wall corner defined by two walls intersecting at an angle with respect to each other and mounting a tab associated with the corner piece or trim to the wall, wherein an angled corner defined by the walls is covered by the corner piece of trim, and the angled corner is fitted to a surface on the corner piece of trim complementing the angled corner.
RESILIENT TRIM CORNERING SYSTEM AND METHOD

FIELD OF THE INVENTION

[0001] The present invention relates generally to molding (often referred to as trim or wall base) that is located at the base of interior walls. More particularly, the present invention relates to a corner section of trim and a method for attaching it to a corner defined by two interior walls, the corner section may be used in accordance many types of wall base as well as a stackable trim molding system where the molding is made of a resilient man-made material.

BACKGROUND OF THE INVENTION

[0002] Molding (or trim) is often placed at a base section of a wall, where the wall meets the floor. The molding receiving proposed modifications and improvements is commonly referred to as wall base, cove base, base board, base molding, mop board, trim, and/or skirting. Molding is used whether a floor be hardwood, carpet, or resilient flooring to provide a transition between the wall and the flooring. The trim can provide several useful functions. For example, if the wall is painted, the painting can extend to nearly the floor and then be covered by trim creating a clean, crisp line between the trim and the paint. The same can be true for when the wall is wallpapered. However, if a wall is to be repainted, to achieve a crisp line between the end of the wall, the trim must be taped prior to painting, a slow and steady approach to carefully painting the wall but not contacting the trim must be adopted or the trim must be removed before the paint is applied. These methods are laborious. In the case of removing the trim, often the act of removing the trim causes it to be destroyed, and new trim must be applied after the wall is repainted. These methods can be time-consuming and costly.

[0003] Other problems with existing trim is that the trim is susceptible to damage. For example, often trim is made of wood, which can crack or break, or be gouged which necessitates the trim being repaired or replaced. Another problem associated with trim is that if a floor surface is to be replaced, whether it be replacing the carpet, or adding carpet over an uncarpeted floor, or any other type of floor replacement, often the trim must be replaced. The trim often needs replacement because the new flooring will have a different height than the old flooring, or the act of removing the flooring will cause the trim to crack and break. Wood trim can be expensive and labor intensive to be treated whether by painting or being stained, or otherwise given a surface treatment in order to preserve the wood. Further, wood trim must be machined in order to give the trim contours such as beveled edges or other contours that are often desirable. The need to work the wood trim of course, can increase its costs.

[0004] Another problem encountered when installing trim systems is how to apply a wall base to a corner defined by the intersection of two walls. The problem is compounded by the fact that corners can be inside or outside corners, and each type of corner must be dealt with differently.

[0005] Currently, when wall base or other trim is installed at a location having a corner, a variety of methods are employed. Some methods require cutting and fitting on site where the installers, giving the primary responsibility of altering some of the existing base material to create the corner. This usually ends up with mixed results, depending upon the experience and ability of the particular installer.

[0006] In some of these cases, the wall base material is grooved on the back and wrapped around the corner where the point of the corner coincides with the groove. In this instance, some portions of the wall base may be permanently distorted and sometimes discolored at the apex of the corner due to stress on the wall base material.

[0007] In many cases, the resilient wall base inherently is biased to return to a straight position. This biasing feature of the wall base may result in the base pulling away from the wall when bent around a corner and, leaving an unsightly gap.

[0008] Recently, the marketplace has seen an increase of resilient base material that is too thick for either of these installation methods. In such an instance, an installer is required to miter cut and fit the wall base on site. In many cases, this requires the abilities that may be outside the realm of many flooring and trim installers.

[0009] In some instances, corner blocks or other factory-produced materials are used to cover corners. This approach can result in a dissimilar material used at the corner that does not match the wall base material. The corner blocks may be rigid and may be prone to be knocked loose by pedestrian traffic or floor maintenance equipment.

[0010] Accordingly, it is desirable to provide a trim molding system and method that can overcome some of the problems associated with traditional trim systems. For example, it would be desirable to provide corner pieces for use in a trim system to alleviate the need for installers to spend significant time and effort to customize wall base or other types of trim at corners. Further, it would be desirable to provide corner pieces of trim to give a finished, good workmanship type appearance at corner installations.

SUMMARY OF THE INVENTION

[0011] The foregoing needs are met, to a great extent, by the present invention, wherein in one aspect an apparatus and method is provided to provide corner pieces for use in a trim system to alleviate the need for installers to spend significant time and effort to customize wall base or other types of trim at corners. An aspect of some embodiments of the invention is to provide corner pieces of trim to give a finished, good workmanship type appearance at corner installations.

[0012] In accordance with one embodiment of the present invention, a trim section is provided. The trim section includes: a resilient corner section having a front and back; a first and second generally planar surfaces intersecting at an angle on the back of the resilient corner section; and first and second tabs connecting to the resilient corner section having a cross sectional thickness less than a cross sectional thickness of the corner section.

[0013] In accordance with another embodiment of the present invention, a method for installing a molding system is provided. In some embodiments of the invention, the method includes: mounting the corner piece of trim to a wall corner defined by two wall intersecting at an angle with respect to each other; and mounting a tab associated with the corner piece of trim to a wall, wherein an angled corner
defined by the walls is covered by the corner piece of trim and the angled corner is fitted to a surface on the corner piece of trim complementing the angled corner.

[0014] In accordance with yet another embodiment of the present invention, a trim section is provided. The trim section includes a resilient corner section; a first and second generally planar surfaces intersecting at an angle on the corner section; and means for securing the resilient corner section to a wall, wherein the means for securing the resilient corner section to a wall forms a substantially planar surface with the at least one of the first and second generally planar surfaces.

[0015] There has thus been outlined, rather broadly, certain embodiments of the invention in order that the detailed description thereof herein may be better understood, and in order that the present contribution to the art may be better appreciated. There are, of course, additional embodiments of the invention that will be described below and which will form the subject matter of the claims appended hereto.

[0016] In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of embodiments in addition to those described and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein, as well as the abstract, are for the purpose of description and should not be regarded as limiting.

[0017] As such, those skilled in the art will appreciate that the conception upon which this disclosure is based may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] FIG. 1 is a perspective view illustrating a resilient trim system and covering apparatus for an inside corner according to an embodiment of the invention.

[0019] FIG. 2 is a top view of a resilient corner section.

[0020] FIG. 3 is a side view of the resilient corner section shown in FIG. 2.

[0021] FIG. 4 is a rear view of the resilient corner section shown in FIG. 2.

[0022] FIG. 5 is a perspective view illustrating a resilient trim system and cornering apparatus for an outside corner, according to an embodiment of the invention.

[0023] FIG. 6 is a top view of a resilient corner section for an outside corner.

[0024] FIG. 7 is a side view of the resilient corner section shown in FIG. 6.

[0025] FIG. 8 is a rear view of the resilient corner section shown in FIG. 6.

DETAILED DESCRIPTION

[0026] The many features and advantages of the invention are apparent from the detailed specification, and thus, it is intended by the appended claims to cover all such features and advantages of the invention which fall within the true spirit and scope of the invention. Further, since numerous modifications and variations will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation illustrated and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

[0027] The invention will now be described with reference to the drawing figures, in which like reference numerals refer to like parts throughout. An embodiment in accordance with the present invention provides an apparatus and method for covering a corner with a resilient base (trim) using a corner piece of wall base. Some embodiments of the invention may be useful for covering an outside corner and other embodiments of the invention may be useful for covering an inside corner.

[0028] FIGS. 1-4 illustrate one embodiment of the invention that includes a corner piece 12 configured for attaching to an inside-type corner. The term, "inside", refers to the fact that corner piece 12 is fit inside a space defined by the corner as shown in FIG. 1. FIGS. 5-8 will illustrate another embodiment of the invention where a corner piece 12 is fit to an outside corner. The term, "outside corner", refers to the fact that the corner piece 12 is placed in a space outside of the corner defined by the walls 20, 22 as shown in FIG. 5. In addition, corners having angles of less than equal to and greater than 90° may be covered using apparatus described herein. FIGS. 1-4 will be explained first and then FIGS. 5-8 will be explained.

[0029] An embodiment of the present inventive apparatus is illustrated in FIG. 1. FIG. 1 illustrates a resilient (flexible) molding system 10. A flexible molding system 10 shown in FIG. 1 includes a corner piece 12, a wall base 14, a base shoe 16, and a top trim piece 18. The flexible molding system also includes an adhesive 19 which adheres the flexible molding system to walls 20, 22. The flexible molding system 10 is attached to the base of the walls 20, 22, and is adjacent to and sits upon a floor 24.

[0030] The corner piece 12 is suited to be used with elements of a flexible molding system and method as shown and described in U.S. patent application Ser. No. 10/591, 502, titled Stackable Trim Molding System and Method, filed Nov. 19, 2004, which is incorporated herein by reference in its entirety. However, the corner piece 12, or other apparatus and methods in accordance with the invention are suitable for use with other trim systems, molding systems and wall base systems and are in no way limited to specific systems described in the application mentioned above.

[0031] As shown in FIG. 2, the corner piece 12 includes a main section 26. The main section 26 has a front 28 and a back 30. For the purposes of this document, the term "front" 28 refers to the part of the corner piece 12 that will be exposed when the corner piece 12 is installed at a corner, and the back 30 is the part of the corner piece 12 that will be butted up against and adhered to the walls 20, 22, defining the corner.

[0032] On the back 30 of the corner piece 12, is a first surface 32 and a second surface 34. The first and second
surfaces 34 intersect with each other in some embodiments at substantially a right angle. Because the corner piece 12 is flexible and resilient, it may accommodate corners where the walls 20 and 22 do not meet to form a right angle. However, if the angle varies too far from a 90° angle, then corner pieces 12 may be manufactured where the first 32 and second surface 34 come together at a different angle to accommodate a corner having an obverse or acute angle defined by the walls 20, 22.

[0033] The first surface 32 and the second surface 34 are generally flat although they may include ridges or grooves, be scored, or have other type of surface phenomena in order to provide a desired surface for facilitating adhesion of an adhesive 19 between the corner piece 12 and the walls 20, 22.

[0034] A first tab 36 and second tab 38 are located on and attached to the corner piece 12. The first tab 36 is attached to the main section 26 of the corner piece 12 to provide a generally continuous surface with the first surface 32. Likewise, the second tab 38 is attached to the main section 26 of the corner piece 12 to provide a generally continuous surface with the second surface 34. Again, the tabs 36 and 38 may include grooves or ridges, scoring any other surface phenomena in order to facilitate adhesion to the walls 20, 22.

[0035] The front 28 of the main section 26 may be contoured in a decorative manner in order to enhance the visual appearance of the corner piece 12.

[0036] FIG. 3 is a side view of the corner piece 12 shown in FIGS. 1-4. FIG. 3 illustrates the back 30 and front 28 sides of the corner piece 12. Tabs 36 and 38 and the bottom surface 42 of the corner piece 12 are also visible in FIG. 3.

[0037] In some embodiments of the invention, in order to size the corner piece 12 to a desired height, an installer may cut with a saw or other suitable means, the corner piece 12 near the bottom end 42.

[0038] Some embodiments of the invention include angled portions 40 of the tabs 38 and 36 as seen in FIGS. 1, 3 and 4. In some embodiments of the invention, angled portions 40 are used on the tabs 38, 36 to help in reducing the likelihood of a gap forming between a walls 20, 22 and a top piece 18 (or wall base 16 when top trim is not used) due to the tab 36 or 38 existing between top piece of trim 18 or wall base 16 and the walls 20, 22. An unsightly gap may be avoided by connecting the top trim 18 directly to the walls 20, 22 without having, or at least minimally having a portion of the tab 36 in between the top trim 18 and the walls 20, 22.

[0039] Thus, the angled portions 40 are incorporated in some embodiments to reduce the likelihood of creating a gap between the top trim 18 (or wall base 14) and the walls 20, 22.

[0040] With reference now to FIG. 4, the back side 30 of the corner piece 12 is shown. As shown in FIG. 4, the first surface 32, including a back surface of the tab 36, creates a generally planar surface, and is ready for application of an adhesive 19.

[0041] In some embodiments of the invention, the adhesive 19 may be a latex adhesive, similar to adhesives commonly used for installing other types of trim. Other ways of installing the corner piece 12 to a wall 20, 22 can include glue (perhaps factory applied) that can be applied to the back 30 of the corner piece 12. The glue may be protected until installation by a removable release paper that is removed to expose the glue prior to installation. In other embodiments of the invention, a double-faced scrim-reinforced tape is used. The tape is carried on a release paper. It is attached to the back 30 of the corner piece 12, then the paper is removed, and the corner piece 12 is placed where desired.

[0042] In other embodiments of the invention, the corner piece 12 may be adhered to the walls 20, 22 by use of any suitable adhesive or fastener in accordance with the present invention. As shown in FIGS. 1 and 5, mechanical fasteners 39 may also be used. Mechanical fasteners can include nails, screws, staples or other mechanical-type fastener. Mechanical fasteners 39 may extend through the tabs 36, 38 and through the walls 20, 22 to attach the corner piece 12 to the walls 20, 22. Some embodiments of the invention may include adhesives and mechanical fasteners. Optionally, the corner piece may be fastened to the floor 24 (see FIG. 1) by adhesive and/or mechanical fastener.

[0043] FIG. 5 is an illustration of an apparatus in accordance with one embodiment of the present invention where a corner piece 12 is fitted to an outside corner defined by walls 20, 22. The corner piece 12 has a front side 28 and a back side 30. The back side 30 attaches to a corner defined by two walls 20, 22, as shown.

[0044] Attached to the corner piece 12 are a first tab 36 and a second tab 38. The tabs 36 and 38 are connected to walls 20, 22, respectively. The tabs 36, 38 may be connected to the walls 20, 22, by an adhesive 19 as those described above, or by mechanical fasteners 39 as previously described. An adhesive may also be applied to the main section 26 of the corner piece 12 as well as the tabs 36, 38. A wall base 14 is adhered to a wall 20 and butts up against the main section 26 of the corner piece 12. Optionally, a base shoe 16 is located below the wall base 14.

[0045] In some embodiments of the invention, the base shoe 16 may include a carpet notch 46 which permits carpet to be placed in the notch 46 in order to provide a smooth transition between carpet and the base shoe 16. An optional trim piece 18 is mounted above the wall base 14. The top trim piece 18 abuts against the main section 26 of the corner piece 12. The wall base 14, the base shoe 16 and the corner piece 12 may be the same or different colors and have different contours in order to improve the aesthetic view of the trim system. The corner piece 12 may also be decoratively contoured and/or colored.

[0046] The surface finish on the corner piece 12 wall base 14, base shoe 16 and top trim 18 may be one that will permit paint to be applied to it.

[0047] In some embodiments of the invention, the corner piece 12 is also equipped with a carpet notch 44 in order to allow carpet to be placed in the notch 44 to provide a smooth transition between carpet and the corner piece 12. While the carpet notches 44, 46 are illustrated in embodiments where the corner piece 12 is adjusted to fit an outside corner, certainly carpet notches 44, 46 are not limited to such embodiments but may be also used in or be found in embodiments adapted for inside corners as well.

[0048] FIG. 6 is a top view of the corner piece 12 according to an embodiment of the invention used for
outside corners. The corner piece 12 includes a front side 28 that is rounded to soften the edges of the corner defined by the walls 20, 22. On the back 30 side of the corner piece 12, there is a first surface 32 and a second surface 34, which are extended from the 26 by the first tab 36 and the second tab 38.

[0049] FIG. 7 is a side view of the corner piece 12 illustrated in FIG. 6. The front side 28 is visible in FIG. 7, and the front side of tab 36 is also illustrated. The angle portion 40 of tab 36 is shown descending from the main section 26 of the corner piece 12 to the end of tab 36. The bottom surface 42 is substantially flat and configured to rest on a floor 24, shown in FIG. 5.

[0050] FIG. 8 is a rear view of the corner piece 12, shown in FIG. 6. In the rear view, tabs 36, 38 are shown. The first surface 32 is shown to be substantially flat and contiguous with the back surface of tab 36. Tab 38 is also illustrated and shows a substantially flat surface contiguous with the second surface 34.

[0051] The installation of a corner piece 12 will now be described according to some embodiments of the invention. In some embodiments of the invention, corner piece 12 is used as part of the system that includes a wall base 14, an optional base shoe 16, and an optional top trim piece 18, as illustrated in FIGS. 1 and 5. An adhesive is applied to the back 30 of the corner piece 12, particularly to the first and second surfaces 32, 34 (including back of the first and second tabs, 36, 38). Alternatively, the adhesive can be applied to the walls 20, 22, and then the corner piece 12 can be fitted so that a corner defined by the walls 20, 22 is formed around a corner defined by the intersection of the first and second surfaces 32, 34, on the corner piece 12. In some optional embodiments of the invention, mechanical fasteners may be used to secure the corner piece 12 in place. Any suitable method of securing the corner piece 12 in place is within the scope of the invention.

[0052] In some embodiments of the invention, the corner piece 12 may be trimmed by cutting the corner piece to a desired size before its installation. In some embodiments of the invention, the corner piece 12 may be trimmed by cutting the bottom 42 of the corner piece 12. In other embodiments of the invention, the corner piece can be trimmed at the top, and then the corner piece 12 can be applied to the walls 20, 22, as described.

[0053] Once the corner piece 12 is installed, an adhesive may be applied to the back part of the tabs 36, 38, and then a wall base 14 can be applied as well as a base shoe 16 and top trim piece 18 (optionally the adhesive may be applied to the back of the wall base 14, the optional base shoe 16 and optional top trim 18).

[0054] In some optional embodiments of the invention, a carpet notch 44 may be found in the corner piece 12. Carpet notches may also be found in some optional embodiments of the invention in the base shoe 16 or, alternatively, wall base 14. In embodiments of the invention, which include carpet notches 44, 46, the carpet notches provide a place for carpet to be located once the corner piece 12 and the base shoe 16 have been installed.

[0055] The many features and advantages of the invention are apparent from the detailed specification, and thus, it is intended by the appended claims to cover all such features and advantages of the invention which fall within the true spirit and scope of the invention. Further, since numerous modifications and variations will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation illustrated and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

What is claimed is:

1. A trim section comprising:
   a resilient corner section having a front and back;
   a first and second generally planar surfaces intersecting at an angle on the back of the resilient corner section; and
   first and second tabs connected to the resilient corner section having a cross sectional thickness less than a cross sectional thickness of the corner section.
2. The trim section of claim 1, wherein the first and second planar surfaces intersect at substantially a right angle.
3. The trim section of claim 1, wherein the first and second planar surfaces are configured to permit the trim section to attach to an outside corner wall.
4. The trim section of claim 1, wherein the first and second planar surfaces are configured to permit the trim section to attach to an inside corner wall.
5. The trim section of claim 1, wherein the back of the trim section is configured to adhere to an adhesive.
6. The trim section of claim 1, wherein the front of the trim section is configured to bond to paint.
7. The trim section of claim 1, wherein the front of the trim section is contoured with a decorative design.
8. The trim section of claim 1, wherein the trim section is made of at least one of the following substances: vulcanized rubber, thermoplastic rubber, and vinyl.
9. The trim section of claim 1, further comprising a notch in a bottom portion of the trim for inserting carpet in to the notch.
10. The trim section of claim 1, further comprising a sloped section defined by an edge of at least one of the tabs.
11. The trim section of claim 10, wherein the sloped section tapers from the corner section to an end of the tab.
12. The trim section of claim 10, wherein the trim section is at least one of extruded and molded.
13. The trim section of claim 10, further comprising:
   a molding system, the molding system comprising:
   a wall base mountable to a wall,
   wherein the trim section is configured to be adhered to a wall corner proximate to the intersection of the first and second planar surfaces with the first tab configured to be adhered to a first wall defining the corner, and the second tab configured to be adhered to a second wall defining the corner, and
   wherein the wall base configured to mount to both a wall and a front portion of at one of the first and second tabs.
14. The trim section of claim 13, further comprising a base shoe configured to adhere to at least one of the tabs and have the wall base stacked on top of the base shoe.
15. The trim section of claim 13, further comprising a top trim configured to be stacked on top of the wall trim and butt against the corner section.
16. The trim section of claim 13, wherein the corner section is dimensioned to create a substantially flush fit.
between the front portion of the corner section and a front portion of at least one of: the wall base, a base shoe, and a top trim.

17. The trim section of claim 13, further comprising mechanical fasteners for attaching at least one tab to a wall.

18. A method for installing a molding system comprising:

mounting a corner piece of trim to a wall corner defined by two wall intersecting at an angle with respect to each other; and

mounting a tab associated with the corner piece of trim to a wall,

wherein an angled corner defined by the walls is covered by the corner piece of trim and the angled corner is fitted to a surface on the corner piece of trim complimenting the angled corner.

19. The method of claim 18, further comprising cutting the piece of trim to a desired length.

20. The method of claim 18, further comprising attaching a mechanical fastener to the piece of trim and a wall.

21. The method of claim 18, further comprising covering a substantial portion of the tab with a wall base.

22. The method of claim 21, further comprising installing at least one of: a shoe base between the wall base and a floor, and a top trim on top of the wall base.

23. The method of claim 18, further including applying an adhesive to at least one of a wall and the corner piece of trim.

24. A trim section comprising:

a resilient corner section;

a first and second generally planar surfaces intersecting at an angle on the corner section; and

means for securing the resilient corner section to a wall,

wherein the means for securing the resilient corner section to a wall forms a substantially planar surface with the at least one of the first and second generally planar surfaces.

25. The trim section of claim 24, wherein at least part of the means for securing the resilient corner section to a wall is configured to be covered by a wall base when the trim section is installed in a trim system.

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