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THE E-Z SPACER

FIELD OF THE INVENTION

This invention relates to an apparatus used largely for the assistance of installing flooring systems. This apparatus is mainly used to provide adequate spacing between the walls and the floorboards or planks being installed to allow for proper expansion gap.

BACKGROUND OF THE INVENTION

This invention is mainly used for, but not restricted to, the assistance of installing flooring systems including, but not limited to, subfloor systems, hardwood flooring, laminate flooring and other types of engineered flooring. Flooring systems generally involve floorboards, planks or panels to be joined or locked into each other, usually with some variation of a tongue-and-groove system. The manufacturers of these flooring systems all recommend an expansion gap between the floorboards and the walls, pipes and other various obstacles to allow for the expansion and contraction of the material being installed.

One of the existing spacers is comprised of plastic formed in the shape of a wedge, 2¼ inches in height and 1 3/8 inch in width. The spacer has a thickness of 3/8 inch at one end and tapers down and slopes down to the other end, which is only 1/8 inch thick. There are ridges found on the sloped surface to allow for two spacers to be combined together, to create a larger expansion gap. The problem with this design is that the spacer can get wedged or jammed between the floorboards and the wall, making it extremely difficult to remove and can damage the walls and the planks when attempting to pull it out. The force exerted when joining the floorboards together can also cause the edge of the floorboard to cut into the plastic spacer, making it even more difficult to remove. The small awkward shape of the spacer does not give the user enough to hold onto with their fingers while trying to wiggle or force it out and often requires a significant amount of force to remove it. It would obviously be desirable to eliminate the difficulties of trying to pull out a wedged spacer and avoiding damaging the planks and the walls as well as avoiding injury to the user's fingers.

The second spacer that is available is made of wood and cut into rectangular pieces, $2\frac{1}{4}$ inches in height, $1\frac{1}{2}$ inch in width and approximately $\frac{3}{8}$ inch thick. The problem with this spacer is that the wood conforms to the edge of the plank from the force exerted to install the floorboards causing it to stay jammed making it problematic to pull out.

The third spacer that is available, is made of plastic in a C-shape that is $\frac{3}{8}$ inches thick on one end of the C and $\frac{1}{4}$ inches thick on the opposite end of the C. This unique C-shape is designed to allow the user either a $\frac{1}{4}$ inch expansion gap or a $\frac{3}{8}$ inch expansion gap while allowing the user to easily pull the spacer out if it wedges between the floorboard and the wall. The problem with this design is that the C-shape falls over before the board is put in place, forcing the user to constantly go back to try to keep the C-shaped spacer upright while attempting to install the floorboards. It would be preferred that the spacer be able to stand upright while installing the floorboards to prevent the spacer from falling over before the floorboards are installed in place.

DESCRIPTION OF THE INVENTION

The general objective of the present invention is to provide an improved spacer for the installation of flooring systems with unique features to allow for adequate expansion gap for the flooring system, greater control during installation and easy removal of the spacers once the installation is complete.

In accordance with the invention, this objective is attained with a rectangular spacer made of rigid PVC plastic, $3\frac{1}{4}$ inches in height, $1\frac{1}{2}$ inches in width, and $\frac{1}{4}$ inch thick with two key features. The extra height allows for better leverage when removing the spacers after installation while also providing enough space for a circular opening, $\frac{7}{8}$ inches in diameter, on the top portion of the spacer. The circular opening allows for better stability and grip when removing the spacer and the diameter is large enough to accommodate the user to easily remove the spacer by placing their finger or fingertip into the circular opening and lifting it out with minimal effort. This eliminates the need to wiggle or force out the wedged spacer possibly damaging the walls or injuring the fingers.

The circular opening also provides easy storage since the user can loop together with a rope, string, a clamp or other fastening system. This eliminates the possibility of losing the spacers after installations as well as creating a neat and organized way of putting them away and taking them out when needed.

The second feature to the spacer is its 45° beveled edges that occur along the 3¼ inch upright height of the spacer along the corners. Typically, spacers have a 90° edge, which protrudes out sharply at the corners, causing the spacer to get jammed from the force exerted on the spacers from the installation of the floorboards, making it very difficult to remove. This beveled edge does not allow for the flooring material to get stuck into the edges from the force exerted on the spacers since the edges are at a 45° versus the typical 90°. The beveled edge allows the spacer to be pulled out much easier since it reduces the chance of the floorboard cutting into the corners of the spacers.

This invention is easy to use as complicated instructions or directions are not required, just grab the spacer, place the spacer with the circular opening above the level of the floor, install the floors and remove with ease by lifting out the spacer with the finger.

This invention can be manufactured in plastic, metal and other materials that can withstand the exerted force without breaking or chipping. This invention can also be made in various lengths, widths, thickness and shape. The opening for the finger can be round, square or other numerous geometrical shapes and the beveled angle can vary, even rounded if desired.
