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COMPOSITE MASKING AND TRIM TAPE

Filed Aug. 7, 1964

Fig. 1

Fig. 2

Fig. 3

Fig. 4

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ABSTRACT OF THE DISCLOSURE

A composite decorative tape useful for presenting a trim uniform width bolderine between two areas to be coated such as the bottom and sides of a boat. The long length of tape can be made up in roll form with the decorative surface of the trim tape protected by a strip of masking tape which overlies the length and width of the decorative surface. A removable bonding adhesive is used between the masking tape and the trim tape to seal the decorative surface excluding entry of paint or other liquids between the tapes. A more permanent bonding adhesive bonds the trim tape to the supporting surface such that after the composite tape is in place and the areas adjacent to its have been coated, the masking tape portion can be removed without removing the trim tape portion.

This invention relates to improved means for applying decorative trim strips to receiving surfaces which are to be painted or otherwise coated in areas contiguous to one or both edges of the trim strip, and to a means which facilitates the combined operations of applying the trim and contiguous surface coatings and which also improves the end result. The invention is herein illustratively described by reference to the presently preferred embodiment thereof; however, it will be recognized that minor changes in detail may be made without departing from the essential features involved.

While there are many applications for the invention, a highly useful one is in the painting and trimming of boat hulls. To an increasing extent plastic trim tape is being used in the finishing of boat hulls to function as a permanent trim or feature line visually separating painted or otherwise coated areas which are often of respectively different colors or materials. For example, it is now common to apply bottom paint to the water line, then apply side paint to the overlying area and finally apply a permanent plastic trim strip in tape form over and along the water line so as to hide imperfections in the brush work to the extent that the painter was unable to avoid some overlap of one painted area into the contiguous area.

Plastic tape such as that used for electric wiring applications is a very satisfactory material for this permanent trim strip or feature line application inasmuch as the tape itself is durable and attractive and the adhesive customarily used therein provides a permanent bond to the receiving surface. Such tape is and should be relatively thin so that it will not be easily caught by sharp objects and abraded off to despoil the appearance of the finished hull. Even then there is a tendency for the projecting edges of the tape to be caught by external objects rubbing against the hull and since the edges are unsealed there is the possibility of progressive deterioration of the adhesive starting at the edges due to the access of fluids thereto. Also in the prior practice the application of paint, usually by brush or roller, to the contiguous hull surfaces required conventional masking procedures, with attendant delays caused by the necessity of waiting for the paint or other coating material applied to one area to dry before it could be masked to the boundary line in order to paint the adjacent area.

In accordance with this invention there is provided an improved composite masking and trim tape which overcomes the aforementioned and related difficulties with prior techniques and materials. An object hereof is to provide a composite masking and trim tape which permits the trim to be applied before any of the painting is done in adjoining areas so as to serve a masking function which facilitates application of the paint to both of the adjacent surface areas, and which thereby avoids the necessity of waiting for the paint to dry on one area before the adjacent area can be painted.

Still another object is to provide a plastic trim tape or feature line element which can be applied in such a manner that the paint or other surface coating material applied to the receiving surface areas contiguous to opposite edges of the trim strip butt against, seal and protect those edges. In accordance herewith, the trim strip becomes recessed into the finished surface by reason of its application to the receiving surface prior to application of the paint to other coatings and by further reason of the fact that the tape is or may be quite thin relatively and the paint or other coating material is caused to flow against the trim strip edges. By removal of the masking tape overlayer thereafter the trim tape is exposed, free of paint, yet the paint contacts and seals the edges of the trim tape as desired.

These and other features, objects and advantages of the invention will become more fully evident from the following description thereof by reference to the accompanying drawings.

FIGURE 1 is a perspective sectional view of a length of composite masking and trim tape according to this invention.

FIGURE 2 is a partial perspective view of the bow section of a boat hull showing method aspects of the invention with the composite tape made up in rolled form for convenient application to the hull.

FIGURE 3 is a sectional view through a surface to which the composite tape has been applied and the paint coatings or the like applied, illustrating the condition thereof immediately prior to removal of the masking tape overlayer.

FIGURE 4 is a view similar to FIGURE 3 in which the masking tape overlayer has been removed to leave the permanent trim tape and painted surface areas in their final condition.

Referring to FIGURE 1, the illustrated composite masking and trim tape of this invention comprises a length or strip of decorative plastic tape and which may be of polyvinyl chloride or any other suitable durable material having the requisite degree of flexibility, ability to withstand exposure to the elements, etc., and to the undersurface of which is applied a permanent bonding adhesive coating of the usual type such as that used in plastic tape for electrical wiring applications and the like. The composite tape further comprises a masking tape overlayer comprising the strip of conventional or other suitable masking tape material having on its underside the adhesive coating.

The masking tape strip and the plastic tape strip have the same width and their edges are in coincidence or registry. The bonding strength of the masking tape adhesive should be effectively less than that of the
plastic trim tape adhesive 14, so that when the latter is applied to a receiving surface it will remain tenaciously in bonded contact with the surface while the masking tape 12 is being peeled off the underlying trim tape. Typically the masking tape layer 12 comprises a suitably impregnated fibrous webbing which is impervious to penetration of paints, solvents and usual surface finish liquids. While the masking tape layer has a certain amount of body, it also has a degree of elasticity or stretchability permitting it to be applied not only in straight lines but to be curved in a given plane if desired, and the plastic tape 10, also having a certain degree of elasticity although usually considerably less thickness than the masking tape layer, is likewise flexible to a degree permitting such curvature in the line of application.

The added body or stiffness imparted by the masking tape 12 to the trim tape 14 facilitates application of the trim tape, however, by helping to avoid the usual problem with wrinkling and uneven stretching of the thin plastic trim tape as it is being drawn from a supply roll in the usual manner during application. As those familiar with conventional electric wiring plastic tape will attest, such material tends to become folded back upon itself and the adhesive surface areas on the same side of the folded tape often become stuck together so strongly as to be difficult to separate, in which case it is usually more convenient to cut out a section of the tape than to try to straighten it out for use. This is due to the thinness and stretchability of such plastic tape alone. Moreover, if such plastic tape alone is drawn from a roll under excessive tension, it will stretch out and the trim line for which it is used will diminish in width noticeably. The masking tape component of the composite masking-trim tape of this invention therefore serves an additional function in providing body or dimensional stability to the plastic tape and thereby facilitates handling the same for application to the receiving surface with greater speed and convenience and with a greater uniformity in the resulting width of the feature line thus to be produced.

Referring now to FIGURE 2, a boat hull B is shown which is to receive a trim strip or feature line 10. For this purpose, composite plastic trim tape and masking tape is applied to the roll R along the desired trim line as illustrated. After this composite tape is applied to the surface area P2 is painted and the surface area P1 is painted is without any intervening delay being necessary for either area to dry. As shown in FIGURE 3, the paint is applied to the very edges of the tape and in fact is usually caused to overlap the tape slightly in order to insulate the pocket made by the tape edges from the paint coatings. Since the masking tape 12 protectively covers the trim tape and the width of the composite tape is sufficient to protect against overlapping beyond into the opposing painted surface area, the work is done easily and quickly.

Upon completion of the painting operations the masking tape 12 is then or later peeled off as illustrated in FIGURE 2, leaving the trim tape 10 partially or wholly recessed into the exposed surface represented by the painted areas P1 and P2 (FIGURE 4) such that the paint itself serves as a protective adhesive which either eliminates or reduces the degree of exposure or projection of the side edges of the permanently applied trim tape 10.

Furthermore, by proceeding in the described manner, the paint extends into intimate contact with the edges of the plastic trim tape and thereby causes the paint against entry of moisture and air. Thus fluid elements are excluded which might otherwise tend to dissolve or weaken the trim tape adhesive adhered to the receiving surface.

It will be evident that composite masking and trim tape of this invention may be made in any desired range of sizes as to width and length, may be made in varying shapes (i.e., with curved edges having any of different design configurations), may be made with trim tape of any desired color or decorative effect and may otherwise be varied within the purview of the invention without loss of any of the significant advantages described. It will also be recognized that the invention may be practiced using readily available and known materials and that apparatus requirements for manufacturing the composite tape are few and simple. These and other aspects of the invention will be evident to those skilled in the art on the basis of the presently disclosed embodiment thereof.

I claim as my invention:

1. A roll of composite masking and trim tape comprising substantially congruent trim and masking tape strips each being relatively thin and flexible and each having upper and lower surfaces, an adhesive coating on the lower surface of the trim tape strip which is strongly and permanently adherable to a receiving surface and removably adherent to the upper surface of the masking tape in the roll, and an adhesive coating on the lower surface of the masking tape strip for sealing said upper surface of said trim tape to exclude entry of liquid between said tapes but removably bonding such masking tape strip to the upper surface of the trim tape strip with lesser adherence strength than that of the first-mentioned coating with respect to the receiving surface, the two strips being thin and flexible and having a full length and width of said trim tape with corresponding edges of said tapes in substantial registry.

2. Composite masking and trim tape comprising substantially congruent trim and masking tape strips each being relatively thin and flexible and each having upper and lower surfaces, an adhesive coating on the lower surface of the trim tape strip which is strongly and permanently adherable to a receiving surface, and an adhesive coating on the lower surface of the masking tape strip for sealing said upper surface of said trim tape to exclude entry of liquid between said tapes but removably bonding such masking tape strip to the upper surface of the trim tape strip with lesser adherence strength than that of the first-mentioned coating with respect to the receiving surface, the two strips being mutually superimposed with said masking tape strip being of substantially equal width with said trim tape strip overlying the full length and width of said trim tape with corresponding edges of said trim tape in substantial registry.

3. Composite masking and trim tape comprising a strip of masking tape, a strip of decorative plastic trim tape, said strips each being relatively thin and flexible and said each having upper and lower surfaces, said strips being of substantially equal width with said masking tape strip overlying the full length and width of said trim tape, an adhesive coating on the lower surface of the trim tape strip which is strongly and permanently adherable to a receiving surface, and an adhesive coating on the lower surface of the masking tape strip for sealing said upper surface of said trim tape strip to exclude entry of liquid between said tapes but removably bonding such masking tape strip to the upper surface of the trim tape strip with sufficient ease to permit peeling it from the trim tape strip readily with the latter adhered to the receiving surface.

4. A thin and flexible decorative adhesive tape having an adhesive coating applied to one face for bonding the tape permanently to a receiving surface, and having a decorative surface presented at its opposite face, said decorative surface being covered by a thin and flexible layer of masking of substantially the same width and length and with its ends and edges in substantial registry with those of the decorative tape, said masking tape having an adhesive coating thereon bonding it removably to said decorative surface and sealing the space between the tapes to exclude entry of liquid therebetween at the edges.

5. A thin and flexible decorative adhesive tape having an adhesive coating applied to one face for bonding the
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5 tape permanently to a receiving surface, and having a
decorative surface presented at its opposite face, said
decorative surface having a thin and flexible layer of mask-
ing tape adhered thereon with said masking tape overly-
ing the full length and width of said decorative tape,
said masking tape having an adhesive coating thereon
bonding it removably to said decorative surface and seal-
ing the space between the tapes to exclude entry of liquid
therebetween at the edges.

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