

# APPLICATION OF SAFETY WALK AND WALKWAY COATING COMPOUND

(This EO replaces EO 05-1-3J dated 7 Jun 63)

## PURPOSE

1 Safety walk and walkway coating compounds are used in accordance with specific Engineering Orders in areas where it is necessary to carry out operations that could cause an accident or loss of life through the slippage of individuals' feet. The use of safety walk and walkway coating is not restricted to aircraft. They may be used on stands, MSE vehicles and marine craft or wherever secure footing is of paramount importance.

## DEFINITIONS

2 The definitions are:

- (a) Safety walk, Ref. 32B/7220-21-804-9917 (MIL-W-5044A) is type 3 tread, non-metallic, non-skid, grade fine. It is available in rolls and is applied with adhesive.
- (b) Walkway compound non-slip Ref. 33A/492, type 1 smooth, (or Ref. 33A/493, type 2 rough) MIL-W-5044A. These are available in the form of paint and are applied with brushes.

## APPLICATION OF SAFETY WALK

### TOOLS AND MATERIAL REQUIRED AND THEIR FUNCTIONS

3 The following tools and material are required:

- (a) One 7-1/2" roller paint mohair (1T/3557) to be purchased locally and reworked in accordance with Figure 1. A paint brush may be used in lieu of a roller.

### NOTE

Frequent roller replacement will be necessary, as benzol or any solution strong enough to dissolve the adhesive Ref. 33G/8040-21-805-9846 (Spec. 20-GP-18A) also loosens the felt on the roller.

- (b) One contact roller (washing machine wringer roller or equivalent) to "roll down" the safety walk.
- (c) One can oil, lubricating Ref. 1T/536.
- (d) One pair shears tinmens combination Ref. 1T/5110-21-639-3158 for trimming safety walk.
- (e) Safety walk coarse Ref. 32B/7220-21-804-9917. (Spec. MIL-W-5044A).
- (f) Adhesive general purpose Ref. 33G/8040-21-805-9846 (Spec. 20-GP-18A).

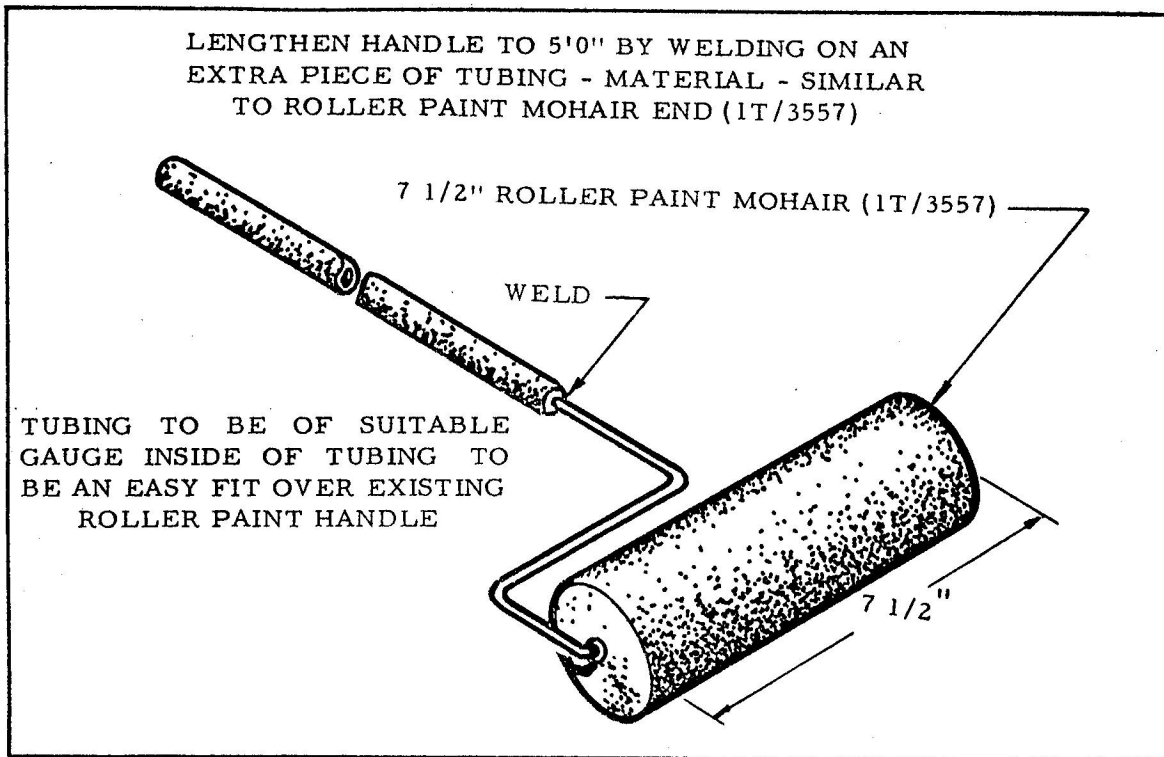


Figure 1

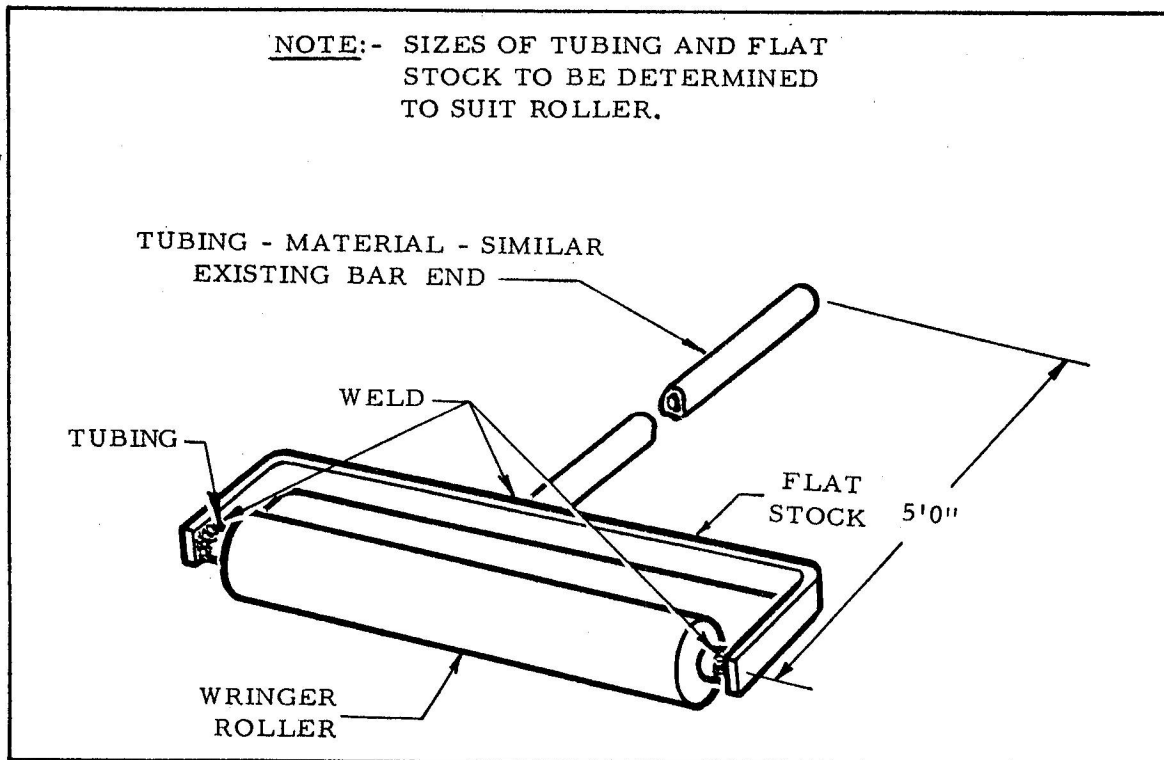


Figure 2

## APPLICATION

4 In order to ensure the correct application of safety walk, the following instructions are to be followed:

- (a) Surfaces are to be thoroughly cleaned. Several applications of paint remover Ref. 33A/456 (Spec. 1-GP-78A) may be required to remove paint or layers of safety walk previously applied. After removal of old surfaces a final cleaning down is to be given with either toluene Ref. 33A/467 (Spec. TT-T-548A) or thinners zinc chromate.
- (b) The adhesive is to be applied by dipping the roller in the adhesive (used in the pan supplied with the paint roller) and applying an even coat over the entire area to be covered with safety walk. Fifteen or twenty minutes are required to obtain a "tacky" surface.
- (c) When the surface is "tacky" the safety walk is to be applied and well-rolled down to ensure that no air bubbles are present and that a good contact is made.
- (d) Three to twelve hours later a bead of adhesive is to be applied around the edges using the oil can.
- (e) Installations may be opened to traffic as soon as the adhesive beading is dry.

NOTE

Due to the composition of the wing walk materials, they are to be installed up to, but not beneath the wing root fillets, or the skin of the aircraft.

## APPLICATION OF WALKWAY COATING COMPOUND

## DESCRIPTION OF MATERIAL AND USES

5 Walkway compound, non-slip, type 1, smooth, provides a medium non-slip surface of glasslike smoothness. This coating serves two requirements of high speed aircraft:

- (a) A relatively safe walkway surface for the wings.
- (b) An aerodynamically smooth surface for leading edges and adjacent areas.

6 Walkway compound, non-slip, type 2, rough, contains grit and provides a maximum non-slip surface. This coating may be used for the following requirements:

- (a) A safe walkway on wings of other than high speed aircraft. This material is however not acceptable for use on areas from which the grit, if dislodged, may enter and foul aircraft engine or other equipment.
- (b) A non-slip surface for the interior of cargo aircraft. The potential hazard of loose grit to the vision and breathing of the pilot precludes the use of this coating in cockpit areas of fighter aircraft.
- (c) A non-slip surface for aircraft stands and for other miscellaneous requirements for such a surface.

## EQUIPMENT AND MATERIALS

7 The following equipment and materials are recommended:

- (a) Dispensing Container - Equipped with cover to minimize loss of solvents by evaporation.
- (b) Brushes.
- (c) Spray Equipment - For primers.
- (d) Walkway Compound Non-slip - Spec. MIL-W-5044A, type 1, smooth, Ref.33A/492, type 2, rough, Ref.33A/493.
- (e) Primer, zinc chromate - Spec.1-GP-132A, Ref.33A/529.
- (f) Primer, pretreatment - Spec. 1-GP-121B, Ref.33A/505.
- (g) Toluene (toluol) - Spec. TT-T-548A, Ref.33A/467.

#### PREPARATION AND PRETREATMENT OF THE SURFACE

- 8 The surface to which the walkway compound is to be applied should be clean, free from dirt, oil, grease and other foreign matter including former coatings.
- 9 The surface to be coated shall be marked off in accordance with the marking drawings or instructions for the equipment.
- 10 Metal surfaces shall be prime coated with one fog spray coat primer, pretreatment and two coats of primer, zinc chromate. In accordance with EO 05-1-3/20, para.24.

#### PROCEDURE

- 11 Proceed as follows:
  - (a) Stir the walkway compound thoroughly to ensure a homogeneous mixture EACH TIME before placing a portion in a small dispensing container. Otherwise a uniform coating will not be obtained.
  - (b) Thinning is not normally required, however, if the walkway compound becomes too thick it may be thinned with toluene.
  - (c) Apply the coating in successive coats sufficient to produce a dry weight of 15-20 ounces per square yard or a thickness of 20 to 30 mils for type 1, smooth, and 20-25 ounces per square yard for type 2, rough. The initial coat shall be brushed on as a thin uniform coat. Successive coats shall be applied in liberal quantities brushing the material out quickly over a relatively small area at a time. Avoid brushing over the same wet area after it has once been brushed out.
  - (d) Each coat shall be allowed to dry for at least one half hour before application of the succeeding coat. The required thickness may be built up with four or five normal brush coats. After the final coat, the surface is touch dry after one hour and is suitable for light traffic after 24 hours. Maximum hardness is reached after about seven days drying.

#### NOTE

Hardened walking compound should be removed frequently from the brushes using toluene and scrapers.