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Specification for

**Pressure —  
sensitive adhesive  
identification tape**

Confirmed  
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## Committees responsible for this British Standard

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Adhesive Tape Manufacturers' Association  
British Aerospace plc  
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## Foreword

This British Standard, prepared under the direction of the Aerospace Standards Policy Committee, is one of a series for pressure-sensitive adhesive tapes of a quality suitable for aerospace purposes and is a revision of BS 2J 12, which is withdrawn. This revision includes guidance on information to be supplied by the purchaser, and deletes reference to a toluene bath for the cleaning of samples. Alternative cleaning methods are specified.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

## 1 Scope

This British Standard specifies requirements for pressure-sensitive adhesive identification tape for aerospace purposes, such as the identification marking of aircraft parts.

NOTE 1 The tape, which may be coloured or printed with a legend, is suitable for application to pipelines, and is resistant to moisture. It is not suitable for use in situations where the temperature exceeds 70 °C and its use where it may be exposed to severe climatic conditions for other than brief periods is not recommended.

NOTE 2 The tape is not resistant to certain aircraft fluids, but it may be possible to protect it from such fluids by coating with a suitable lacquer.

NOTE 3 The information to be supplied by the purchaser in the contract or order is listed in Appendix A.

NOTE 4 The titles of the publications referred to in this standard are listed on the inside back cover.

NOTE 5 The latest revision of an Aerospace Series standard is indicated by a prefix number.

## 2 Construction

**2.1** The tape shall consist of a water-resistant film base material, such as unplasticized polyvinyl chloride, polypropylene or polyethylene terephthalate film, of maximum thickness 0.065 mm, uniformly coated on one side with a pressure-sensitive adhesive.

**2.2** The tape shall be supplied in roll form, with the adhesive side innermost, on a suitable core of the same width as the tape.

**2.3** The tape shall be opaque.

NOTE Colouring may be achieved by the incorporation of pigments in the adhesive, by the use of a pigmented film or dyed film base, or by a combination of these methods.

**2.4** If a legend is required it shall be clearly and uniformly printed in fast colours.

NOTE The purchaser should state in the contract or order the legend required and whether or not the legend is required (see Appendix A).

## 3 Dimensions

The tolerances on the width of the finished tape shall be one of the following:

- a)  $\pm 1.0$  mm for tapes up to and including 19 mm;
- b)  $\pm 1.5$  mm for tapes over 19 mm.

NOTE The length and width of the finished tape should be stated by the purchaser in the contract or order (see Appendix A). The finished tape is usually supplied in lengths of 33 m and in one of the following widths:

- a) 12 mm;
- b) 15 mm;
- c) 19 mm;
- d) 22 mm;
- e) 25 mm;
- f) 38 mm;
- g) 50 mm.

## 4 Colour

The base colour of the tape shall be one of the following colours given in BS 6746C:

- a) blue;
- b) brown;
- c) green;
- d) orange;
- e) red;
- f) yellow;
- g) grey.

NOTE The colour should be stated by the purchaser in the contract or order (see Appendix A).

## 5 Freedom from defects

**5.1** When the tape is unrolled there shall be no tearing of the base material.

**5.2** Each roll shall be reasonably free from telescoping, gapping or other forms of distortion. When unrolled the tape shall show negligible transference of the adhesive to the backing of the underlying turn.

NOTE Care should be taken not to unwind tapes rapidly at temperatures below 10 °C.

## 6 Samples for testing

**6.1** The test samples shall be conditioned in accordance with Appendix B.

**6.2** A batch of tape shall consist of a number of rolls designated as a batch by the manufacturer and substantially uniform in quality.

**6.3** From each batch at least one roll shall be examined for compliance with clauses 2 to 5 inclusive and tested for compliance with clauses 7 to 13 inclusive.

## 7 Breaking strength

When determined in accordance with Appendix C, the breaking strength of the tape shall be not less than 18 N per 10 mm width.

## 8 Adhesive strength to steel

When determined in accordance with Appendix D, the adhesive strength of the tape shall be not less than 1.8 N per 10 mm width. The tape shall separate from the plate without visible off-setting of the adhesive.

## 9 Flagging characteristics

When determined in accordance with Appendix E, the amount unwound shall not exceed 2 mm.

## 10 Resistance to water

When determined in accordance with Appendix F, the tape shall comply with clause 8 and there shall be no loss of definition or clarity in the printing of the legend if present, and no substantial alteration in the colour.

## 11 Water vapour permeability

When determined in accordance with Appendix G, the water vapour permeability of the tape shall be not more than 65 g/m<sup>2</sup> per 24 h.

## 12 Freedom from water-soluble corrosive impurities

12.1 When determined in accordance with Appendix J, the pH value of the aqueous extract shall be not less than 5.5 and not more than 8.0.

12.2 When determined in accordance with Appendix K, the conductivity of the aqueous extract shall be not more than 2.5 mS/m.

## 13 Heat ageing

When tested in accordance with Appendix L, the material shall remain firmly adhered to the surfaces to which it is applied, the edges of the test specimens shall not show any significant signs of lifting from position and the colour and/or legend, if present, shall be substantially unchanged.

## 14 Packaging

The rolls of tape shall be packed in such a manner that:

- a) they are protected from moisture, dust and sunlight;
- b) they can be easily separated;
- c) they are reasonably protected from damage in normal transit conditions;
- d) they are all packed flat on their cut edges.

## 15 Storage

When stored flat on their cut edges, in the original unopened packing, at temperatures between 10 °C and 30 °C and between 45 % and 75 % r.h., the rolls of tape shall comply with this British Standard after a period of 12 months.

NOTE Higher temperatures and more humid conditions accelerate deterioration of the tape. It is recommended that stored material is used in the chronological order in which it is received.

## 16 Identification

The tape shall be identified by the number of this British Standard, together with the width and colour required.

For example, blue 50 mm wide tape shall be identified as “BS 3J 12/50 mm/blue”.

NOTE The number of this British Standard, together with the width and colour required should be stated by the purchaser in the contract or order (see Appendix A).

## 17 Marking

17.1 All markings shall be neat and indelible. Each transit carton within a complete package shall be marked with at least the following:

- a) the batch identification code number;
- b) a brief description and the number of this British Standard, i.e. Identification tape: BS 3J 12<sup>1)</sup>;
- c) the colour and/or the legend;
- d) the width of the tape;
- e) the length of a coil;
- f) the quantity of contents;
- g) the contractor's initials or recognized trade marks;
- h) the words, “THIS SIDE UP” and/or a suitable pictogram to ensure that packages are properly stacked in store.

17.2 If a transit carton within a complete package is to be marked with additional information it shall be as follows:

- a) the date of manufacture, i.e. the month and year;
- b) the date of despatch;
- c) the contract or order number.

NOTE 1 The purchaser may request additional markings.

NOTE 2 The request for any additional markings should be stated by the purchaser in the contract or order (see Appendix A).

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<sup>1)</sup> Marking BS 3J 12 on or in relation to a product represents a manufacturer's declaration of conformity, i.e. a claim by or on behalf of the manufacturer that the product meets the requirements of the standard. The accuracy of the claim is therefore solely the responsibility of the person making the claim. Such a declaration is not to be confused with third party certification of conformity, which may also be desirable.

## Appendix A Information to be supplied by the purchaser

The following information should be stated by the purchaser in the contract or order:

- a) the number of this British Standard, i.e. BS 3J 12 (see clause 16);
- b) the legend required (see 2.4);
- c) the length required (see clause 3);
- d) the width required (see clauses 3 and 16);
- e) the colour required (see clauses 4 and 16);
- f) whether any additional markings are required (see note 2 to 17.2).

## Appendix B Conditioning of test samples and test pieces

**B.1** Immediately before pieces for testing are taken, condition each sample roll for at least 24 h at  $23 \pm 2$  °C and  $50 \pm 5$  % r.h. Remove and discard the three outer turns before cutting the test pieces from the conditioned roll.

**B.2** Condition all individual test pieces in accordance with the relevant appendix and test, preferably in the same atmosphere. If testing is not conducted in the same atmosphere, commence the test within 3 min of removal of each test specimen from the atmosphere described in B.1.

**B.3** A suitable chamber and the methods of obtaining the required conditioning atmosphere are given in BS 3718.

## Appendix C Method for determination of breaking strength

### C.1 Apparatus

**C.1.1** *Power driven tensile testing machine*, equipped with a continuous indicating device calibrated at intervals of 0.2 N or less and with a rate of movement of the driven jaw of  $300 \pm 30$  mm/min.

In cases of dispute, a low inertia type of machine shall be used.

### C.2 Preconditioning

Condition the sample roll in accordance with B.1.

### C.3 Test pieces

Take three strips of tape, each of sufficient length to give an initial test length of 100 mm, from the sample roll at intervals of not less than 300 mm.

### C.4 Conditioning

Condition the test pieces by freely suspending them at  $23 \pm 2$  °C and  $50 \pm 5$  % r.h. for at least 2 h immediately before testing.

## C.5 Procedure

Insert the test piece into the grips or jaws of the machine so that the load is applied evenly across the width and the initial test length is 100 mm.

Elongate the test piece until it breaks and record the maximum force during the test. Make three valid determinations, disregarding any test in which the break occurs within 5 mm of either grip or jaw.

Ensure that during the test the tape does not slip in the grips or jaws of the testing machine.

## C.6 Result

From the central value of the three recorded maximum forces, calculate and report the breaking strength in newtons per 10 mm width.

## Appendix D Method for determination of adhesive strength to steel

### D.1 Solvents

**D.1.1** *One of the following solvents* is required:

- a) methanol;
- b) butanone (ethyl methyl ketone);
- c) acetone;
- d) sulphur free toluene.

NOTE All the above solvents should be of general purpose chemical grade.

### D.2 Apparatus

**D.2.1** *Five rectangular test plates of stainless steel*, within the following compositional limits:

- a) carbon 0.16 % max.;
- b) silicon 0.20 % min.;
- c) manganese 2.00 % max.;
- d) nickel 8 % to 14 %;
- e) chromium 11 % to 19 %.

A convenient size of plate is 200 mm × 50 mm; the thickness shall be not less than 2 mm. The plate is marked at equidistant intervals of 12.5 mm, along both of the longer edges, the first mark being made at 50 mm from end A (see Figure 1). The central 40 mm width of the test plate shall be free from marks.

The test surface of the plate shall be polished to give an abrasive satin finish (180 grit), the direction of gritting being parallel to the longer side of the plate. The surface roughness shall be determined from the mean line of the profile in accordance with BS 1134-1 and shall comply with the following:

$$0.05 \mu\text{m} < R_a < 0.4 \mu\text{m}$$

$$R_{\text{max}} < 3 \mu\text{m}$$

where

$R_a$  is the arithmetical mean deviation;

$R_{\text{max}}$  is the maximum height of irregularities.

**D.2.2** *Solid brass roller*, 80 mm in diameter and 44 mm in width, covered with rubber approximately 6 mm thick having an IRHD (International Rubber Hardness Degree) of  $60 \pm 5$ ; the mass of the roller shall be approximately 2 kg.

**D.2.3** *Power driven tensile testing machine*, as described in **C.1.1** but with the back stop or ratchet pawl removed in the case of a pendulum test machine.

**D.2.4** *Cleaning materials*

**D.2.4.1** *4-hydroxy-4-methylpentan-2-one* (diacetone alcohol).

**D.2.4.2** *Pharmaceutical quality, lint free cotton wool or Paper tissue.*

### D.3 Preconditioning

Condition the sample roll in accordance with **B.1**.

### D.4 Test pieces

Take five strips of tape 450 mm long, unwound radially from the roll at intervals of 300 mm at a rate of approximately 300 mm/s. Avoid contamination of the adhesive surface and do not allow it to touch the fingers. If the tape is wider than 38 mm, cut a test piece 25 mm wide from it, using a sharp tool to produce clean cut edges. If the tape is 38 mm wide or less, use the tape in the width received.

### D.5 Procedure

#### D.5.1 General

Test each strip on a separate plate as described in **D.5.2**, **D.5.3** and **D.5.4**.

#### D.5.2 Cleaning of the plate

Wipe the test surface of the plate with a fresh piece of lint free cotton wool saturated with 4-hydroxy-4-methyl-pentan-2-one (diacetone alcohol). Dry the plate with fresh cotton wool, then wipe the test surface with a fresh piece of cotton wool saturated with one of the solvents listed in **D.1**. Dry the plate with fresh cotton wool, then repeat for a total of three cleaning operations with this solvent. Maintain the plate at a temperature of  $23 \pm 2$  °C for at least 5 min before proceeding with the adhesion test procedure.

NOTE 1 Paper tissue may be substituted for cotton wool.

NOTE 2 Cleaning should be carried out in an area with good fume extraction.

#### D.5.3 Application of a test piece

Apply the test piece as follows.

- a) Place the plate, with the prepared surface upwards, at the edge of a bench with end B nearer the operator (see Figure 1).

- b) Immediately after obtaining the test piece, apply it, adhesive surface downwards, to the plate with one pass of the roller, allowing approximately 250 mm to overhang end B. Ensure that the tape lies centrally on the plate and parallel to the longer sides and also that no air bubbles are trapped between the tape and the plate.

- c) Place the roller centrally across the test piece on one end of the plate and, taking care not to apply any additional pressure with the hand, pass the roller at constant speed three more times over the test piece (making a total of twice in each direction) so that each traverse takes from 10 s to 12 s, ensuring that it travels in the exact line of the test piece.

- d) Cut off the excess tape overhanging end A.

### D.5.4 Stripping of a test piece

**D.5.4.1** Allow the plate with the applied test piece to remain undisturbed for 5 min in the conditions given in Appendix B and complete the test without removal from those conditions.

**D.5.4.2** Double back the free end of the test piece and strip 25 mm to 50 mm from the plate at end B.

**D.5.4.3** Attach end B of the plate to the moving jaw on the testing machine and grip the free end of the test piece in the fixed jaw, ensuring, by inserting packing in the moving jaw (see Figure 2), that the free tape is parallel in both planes to the applied tape.

**D.5.4.4** Set the traversing jaw in motion and record the readings at five consecutive 12.5 mm interval marks.

### D.6 Results

Record the five readings for each of the five tests. Arrange in ascending order the five readings for each test and take the central value of each group. Arrange the five central values so obtained in ascending order and take the central value and divide it by the width of the test sample measured in centimetres. This figure is the adhesion strength to steel measured in newtons per 10 mm width.

## Appendix E Method for determination of flagging characteristics

### E.1 Apparatus

**E.1.1** *A simple winding jig*, designed to hold a rod at each end with a means for rotating the rod so that the test piece may be wound thereon. The winding jig is attached to a rigid support with the rod held in a horizontal position.

**E.1.2** *Rods*, of any suitable material of  $25 \pm 1$  mm diameter.

**E.1.3** *Attachable weights*



**E.1.4** A steel rule, graduated to 0.5 mm.

## **E.2 Preconditioning**

Condition the sample roll in accordance with **B.1**.

## **E.3 Test pieces**

**E.3.1** Take every precaution to avoid contaminating the tape during handling, cutting and subsequent operations.

**E.3.2** Cut two strips of tape, each at least 150 mm long, from the sample roll at intervals of 300 mm. If the tape is wider than 25 mm, cut a test piece 25 mm wide from it using a sharp tool to produce clean cut edges. If the tape is 25 mm wide or less, use the tape in the width received.

## **E.4 Conditioning**

**E.4.1** Condition the test pieces by freely suspending them at  $23 \pm 2$  °C and  $50 \pm 5$  % r.h. for at least 48 h immediately before testing.

## **E.5 Procedure**

**E.5.1** Mount the rod in the jig in a horizontal position. To one end of the strip of tape attach a weight in the ratio of 800 g to 25 mm tape width. Hold the other end of the tape and drape it on the rod with the adhesive side against the rod so that the initial contact is at point A [see Figure 3(a)]. Rotate the rod so that the contact is at the top [see Figure 3(b)] of the rod and use a sharp blade to trim the leading edge of the tape strip flush with the rod, and parallel to the axis of the rod. Rotate the rod in a clockwise direction such that the tape winds on one complete turn and continue turning a further  $\frac{1}{4}$  to  $\frac{1}{2}$  a revolution. Remove the weight and cut the tape at point D by tearing against a razor blade edge held tangentially against the rod [see Figure 3(c)].

**E.5.2** Prepare two test pieces and condition them in the vertical position under the test conditions given in **E.6**.

## **E.6 Test conditions**

Maintain the test pieces for 48 h at  $23 \pm 2$  °C and  $50 \pm 5$  % r.h.

## **E.7 Results**

Measure the flag, i.e. the length of tape unwound to the nearest 1 mm [see Figure 3(d)]. Take the mean value of the two readings as the flagging. If uneven flagging occurs, record the greatest amount.

## **Appendix F Method for determination of resistance to water**

**F.1** Prepare test plates and test pieces in accordance with **D.1** to **D.5.3**.

**F.2** Immerse test plates with adhering tape in distilled water at  $23 \pm 2$  °C for 24 h.

**F.3** Strip the test pieces from the plates and determine the results in accordance with **D.5.4.2** to **D.6**.

## **Appendix G Method for determination of water vapour permeability**

### **G.1 Apparatus**

**G.1.1** A non-corrodible metal box, with external dimensions approximately 95 mm × 25 mm × 20 mm and weighing not more than 90 g when empty, which is closed completely except for a centrally placed rectangular 80 mm × 10 mm opening in the top, and the inside of which is coated with a suitable lacquer and stoved.

### **G.2 Preconditioning**

Condition the sample roll in accordance with **B.1**.

### **G.3 Test pieces**

Take a strip of tape, of sufficient length to cover the top of the apparatus (see **G.1.1** and **G.4.2**), from the sample roll.

### **G.4 Procedure**

**G.4.1** Place in the box approximately 5 g of granular anhydrous calcium chloride of such size that it just passes a mesh approximating to a 2.00 mm sieve and is retained on a 600 µm sieve, both complying with BS 410.

**G.4.2** Press the test piece down firmly over the top of the box so that the opening is completely covered. (If the tape under test is less in width than the top of the box, press on to the top thereof supplementary strips of the tape at each side of the first specimen so as to cover completely the top of the box and overlapping, for its length, the first specimen by 2 mm. Ensure sealing of the edges of the first specimen by running the fingernail along the supplementary strips on the line of the edges of the first specimen.) Trim off any tape overlapping the top of the box.

**G.4.3** Weigh the sealed box to  $\pm 0.005$  g, place it in a humidity cabinet and maintain it in an atmosphere of  $90 \pm 2$  % r.h. and at a temperature of  $38 \pm 0.5$  °C.

NOTE This condition is conveniently obtained in a humidity oven complying with BS 3718 over a saturated solution of potassium nitrate.

**G.4.4** After 24 h, remove the box from the cabinet, allow it to cool, wipe off any adherent moisture with a clean cloth and re-weigh.

### **G.5 Results**

From the water vapour permeability per 24 h per 800 mm<sup>2</sup> of tape thus determined, calculate and report the permeability in grams per square metre per 24 h.

## Appendix H Preparation of a water extract for pH and conductivity determinations

### H.1 Apparatus

**H.1.1** An extraction vessel, consisting of a borosilicate glass (high grade resistance glass) or quartz flask fitted with a reflux condenser of the same quality glass or quartz, having interchangeable ground glass joints complying with BS 572.

### H.2 Precautions

**H.2.1** Avoid contamination of the sample roll during storage, sampling, preparation of specimens and testing.

**H.2.2** Ensure that the sample roll and test pieces taken from the sample roll are not contaminated by the atmosphere, particularly the atmosphere of a chemical laboratory, or by contact with the bare hands and that the implements used for cutting or handling the specimen are chemically clean.

**H.2.3** Tape shall not be folded adhesive face to adhesive face.

### H.3 Test pieces

Cut strips of tape approximately 25 mm × 6 mm.

### H.4 Procedure

**H.4.1** Using low conductivity water having a conductivity not greater than 0.2 mS/m, make a blank test on the extraction vessel before each extraction and, if the resultant conductivity exceeds 0.2 mS/m, repeat the test with the same extraction vessel. Change the vessel if the second result also exceeds this value.

**H.4.2** Weigh the test pieces and put them and the water, in the ratio of 1 g of tape to 100 mL of water, into the extraction vessel.

**H.4.3** Boil the water gently for 60 min, taking care that the material is not charred. Allow it to cool as rapidly as possible, taking precautions against admission of carbon dioxide, i.e. use a carbon trap.

## Appendix J Method for determination of pH value of a water extract

Prepare a water extract in accordance with Appendix H.

Determine the pH value by an electrometric method at a temperature of  $23 \pm 2$  °C immediately after the removal of the carbon dioxide trap.

## Appendix K Method for determination of conductivity of a water extract

### K.1 Apparatus

**K.1.1** A suitable conductivity cell. This may consist of two electrodes of inert metal, e.g. platinum, maintained at a fixed distance apart and insulated from each other.

**K.1.2** A measuring instrument. Capable of measuring conductance or admittance to a minimum reading of 1 µS with an accuracy of 5 % in the frequency range of 50 Hz to 3 000 Hz at a voltage not exceeding 100 V. As an alternative, resistance may be measured to the same accuracy.

NOTE 1 It is important that any insulation immersed in the test liquid should not be water absorbent or subject to contamination by aqueous electrolytes.

NOTE 2 The conductivity cell should be easy to clean and free from recesses where impurities can be retained.

### K.2 Preparation of the extract

Prepare a water extract in accordance with Appendix H.

### K.3 Determination of electrical conductivity

#### K.3.1 Determination of the conductivity cell constant

If not known, determine the conductivity cell constant  $k$  (in  $\text{m}^{-1}$ ) using the method specified in BS 5591.

#### K.3.2 Determination of the conductivity of the blank

After thoroughly cleaning the conductivity cell with water as described in H.4.1, fill it with water obtained as a result of the blank extraction test, and measure its conductance  $G_1$  in mS at  $23 \pm 2$  °C. The conductivity of the blank in mS/m is then  $kG_1$ .

#### K.3.3 Determination of the conductivity of the water extract

Thoroughly rinse the conductivity cell with some of the extract to be tested, and then fill with fresh extract. Adjust the temperature to  $23 \pm 2$  °C, maintain at the value for 15 min, and then measure the conductance  $G_2$  in mS at that temperature.

The conductivity of the water extract in mS/m is then calculated as  $kG_2 - kG_1$ .

NOTE For most purposes, where it is not convenient to test the water extract at  $23 \pm 2$  °C, it is sufficiently accurate to apply the following correction:

$$\text{conductance at } 23 \text{ °C} = \frac{G}{[1 + 0.02(t - 23)]}$$

where

$G$  is the conductance obtained when the measurement is made at  $t$  °C;

$t$  is the temperature at which the water extract is tested.

### K.4 Results

Express the conductivity in mS/m at a temperature of 23 °C.

## Appendix L Method of test for heat ageing

### L.1 Solvents

L.1.1 *Solvents*, as described in D.1.

### L.2 Apparatus

L.2.1 *Two rectangular test plates of stainless steel*, as described in D.2.1.

L.2.2 *Solid brass roller*, as described in D.2.2.

L.2.3 *Cleaning materials*, as described in D.2.4.

### L.3 Preconditioning

Condition the sample roll in accordance with B.1.

### L.4 Test pieces

Take three strips of tape, each 100 mm long, from the sample roll.

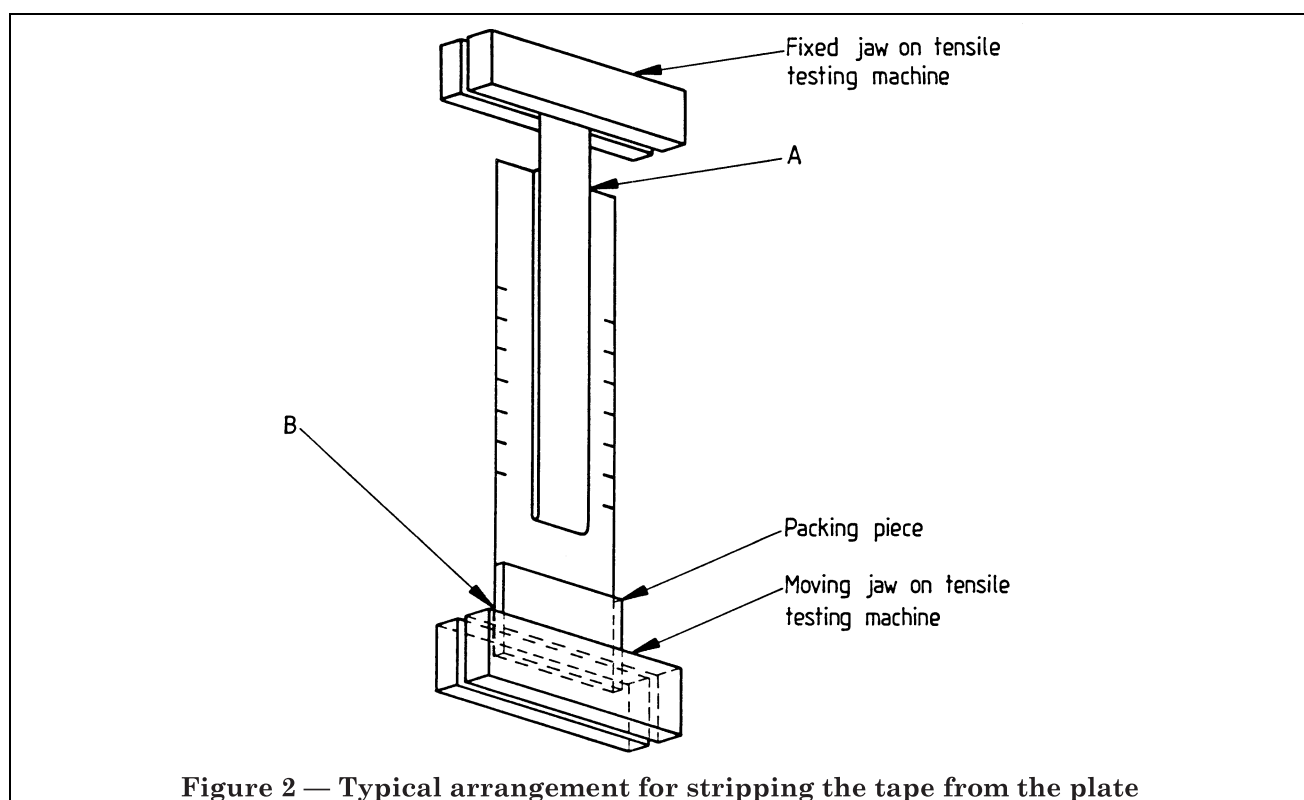
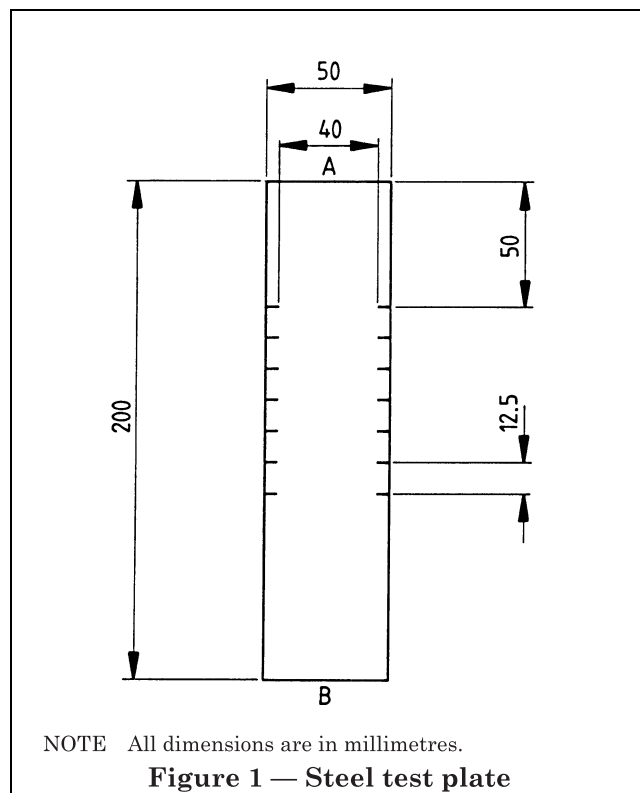
### L.5 Procedure

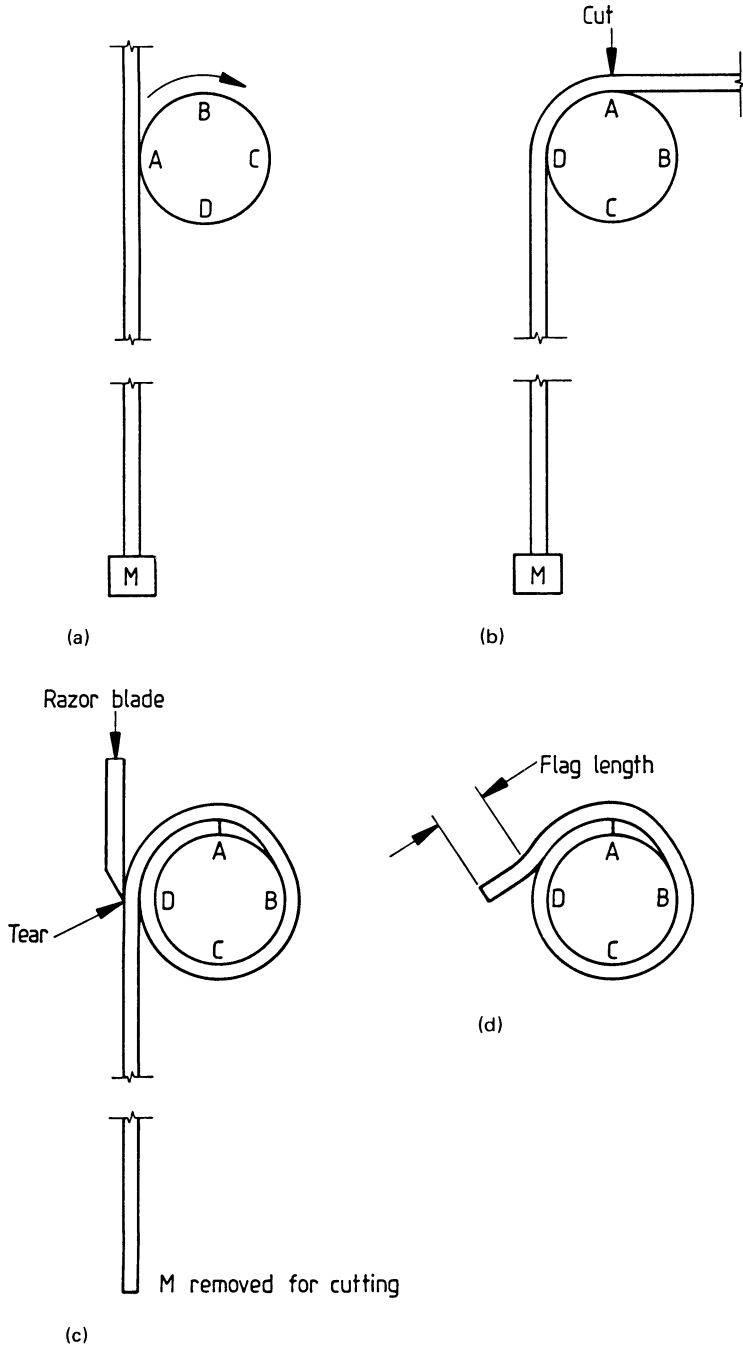
L.5.1 Clean the plates as described in D.5.2.

L.5.2 To each plate apply a test piece, using the method described in D.5.3 but without any material overhanging the underlying plate, and on one of these superimpose another test piece to the backing of the tape already on the plate, so the strips are precisely coincident, and roll it as described in item c) of D.5.3.

L.5.3 Suspend the assemblies for 48 h in an oven in which the temperature is maintained at  $70 \pm 2$  °C.

L.5.4 Remove the plates from the oven, allow to stand for 30 min at a temperature of  $23 \pm 2$  °C and then examine the test pieces.





NOTE This figure is not to scale.

Figure 3 — Flagging test

## Publications referred to

BS 410, *Specification for test sieves.*

BS 572, *Specification for interchangeable conical ground glass joints.*

BS 1134, *Assessment of surface texture.*

BS 1134-1, *Methods and instrumentation.*

BS 3718, *Specification for laboratory humidity ovens (non-injection type).*

BS 5591, *Methods of test for determination of ionic impurities in electrical insulating materials by extraction with liquids.*

BS 6746C, *Colour chart for insulation and sheath of electric cables.*

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