

Specification for

**Painters' and
decorators' brushes for
local authorities and
public institutions
(excluding quality of
fillings)**

Confirmed November 2008

Co-operating organizations

The Brooms and Brushes Committee, under whose supervision this British Standard was prepared, consists of representatives from the following organizations:

- Association of Hospital and Welfare Administrators
- Association of Municipal Corporations*
- British Brush Manufacturers Association*
- British Brush Manufacturers Research Association*
- British Railways Board*
- Crown Agents for Oversea Governments and Administrations*
- Greater London Council*
- Institute of Public Cleansing
- Institute of Purchasing and Supply*
- London Transport Executive
- Ministry of Defence, Army Department*
- Ministry of Defence, Navy Department*
- Ministry of Public Building and Works*

The organizations marked with an asterisk in the above list were directly represented on the committee entrusted with the preparation of this British Standard.

This British Standard, having been approved by the Brooms and Brushes Committee, was published under the authority of the Executive Board on 10 September 1970

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First published July 1958
First revision August 1966
Second revision September 1970

The following BSI references relate to the work on this standard:
Committee reference M/19 and M/19/1
Draft for comment D69/25140

ISBN 580 06492 1

Amendments issued since publication

Amd. No.	Date of issue	Comments
3055	December 1979	Indicated by a sideline in the margin

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Foreword

This standard makes references to the following British Standard:

BS 509, *Acetone*.

This British Standard, first published in 1958, was based on recommendations prepared by the Local Authorities Standards Advisory Committee and the Hospital Equipment Standards Advisory Committee, and developed in collaboration with brush manufacturers.

In drafting the requirements the technical committee concerned also took account as far as possible of the needs of Government departments and the Services.

The changes made in this revision of the standard are intended to bring the requirements into line with the changeover to metric measurements.

A method for determining the weight of filling material is described in Appendix A.

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 40, 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 dimensional requirements for a range of painters' and decorators' brushes for use by Government departments, local authorities and other large-scale users. It includes requirements for the weight of filling materials, but does not specify the quality of those materials. The items dealt with are:

- Distemper brushes
- Washdown and lime-wash brushes
- Paint brushes
- Round and flat fitches and lining tools
- Glue brushes
- Sash tools
- Tar brushes
- Varnish brushes
- Paper-hangers' smoothing brushes
- Jamb dusters
- Flat distemper brushes
- Stencil brushes
- Squirrel hair lacquer brushes.

NOTE Some typical patterns which may be supplied against these specifications are illustrated in the text for guidance in checking dimensions. They do not constitute part of the standard requirements.

2 Definitions

For the purposes of this British Standard the following definitions apply:

2.1 hair

the hair of any animal

2.2 bristle

the hair of the hog, pig or boar only

3 Manufacture

Brushes shall be manufactured in accordance with the requirements given in the tables.

4 Fillings

4.1 Weight of fillings

4.1.1 The weights of fillings shown in the tables are minimum values.

4.1.2 Tests to determine the weight of filling shall be in accordance with the procedure described in Appendix A. All the brushes tested shall comply with the requirements given in the tables in respect of filling weight. Where weight is specified per dozen brushes there shall be no unreasonable variation between individual brushes.

4.2 Length of fillings

4.2.1 Fillings shall be of sufficient length to allow them to be securely held in the ferrule or other specified fixing and to meet the requirements given in the tables.

4.2.2 The proportion of filaments of a shorter length than is specified shall be the minimum necessary to achieve a brush of satisfactory taper and solidity. Brushes shall contain no greater proportion of short filaments than is present in the approved sample (see Clause 5).

4.3 **Mixture fillings.** In all cases where an unspecified mixture filling is prescribed in the tables, the nature and proportions of its constituents shall be the subject of agreement between the supplier and the purchaser.

4.4 **Disinfection.** All filling materials shall be disinfected as required by and in accordance with Home Office Regulations, S.R.O. obtainable from H.M. Stationery Office.

5 Approved sample

A sample submitted by the supplier and approved by the purchaser shall constitute the standard in respect of quality and composition of filling material, solidity of dressing (percentage of filaments of any lengths less than the top length) and any other properties not defined in this specification.

6 Setting media

Brushes set in vulcanized rubber or synthetic resin shall be capable of withstanding immersion for 48 hours in acetone to BS 509¹⁾, without loosening of the heads and without the development of softening or other defects in the setting such as to impair their general serviceability. For the purposes of this requirement the brushes shall be suspended in the solvent with the filling and one quarter of the ferrule immersed.

¹⁾ BS 509, "Acetone".

7 Other materials

Handles shall be made of either wood or polypropylene.

Wood used for handles, stocks and other parts shall be suitably seasoned and free from decay, splits and other defects. The grain shall run parallel to the length of the handle or part. Where ramon is used, it shall be sanded to a smooth finish.

NOTE Polypropylene handles may be of the structural foam type and should contain no more than 30 % of fillers.

8 Ferrule dimensions

The ferrule dimensions specified in the tables are internal, measured as the diameter for round ferrules, and thickness at the point where the radius of the ends meet the parallel sides for flat sided ferrules, together with the overall distance between end circumferences. The dimensions shall be subject to the following tolerances:

Diameter or width:	6 mm brushes	0.35 mm
	12 mm brushes	0.70 mm
	18 mm brushes	1.05 mm
	Other sizes	+ 5 % – 0
Thickness:		+ 2½ % – 0

The specified gauges and depths of ferrules are minima.

9 Identification

Brushes complying with this British Standard shall be identified by the following statement, either in the contract of sale or on the invoice, and in no other way:

“This brush complies/these brushes comply with BS 2992, which lays down requirements for dimensions and weight of fillings only, and not for the quality of fillings.”

Manufacturers identifying their products by reference to the British Standard shall satisfy themselves that the brushes comply with all the requirements, including the approval of a sample in accordance with Clause 5.

Table 1 — Requirements for distemper brushes

Item No.	Description	Handles			
		Wood	Approximate measurements		
			Length out of binding or ferrule <i>A</i>	Breadth under binding or ferrule <i>B</i>	Thickness under binding or ferrule
			mm	mm	mm
1/1	Distemper brush, 2-knot 280 g (tied)	Beech or sycamore	225	110	14
1/1A	Distemper brush, 2-knot 280 g (ferruled)	Beech or sycamore	225	120	14
1/2	Distemper brush, 2-knot 250 g (tied)	Beech or sycamore	225	105	14
1/2A	Distemper brush, 2-knot 250 g (ferruled)	Beech or sycamore	225	110	14

^a See Clause 5: Approved sample.

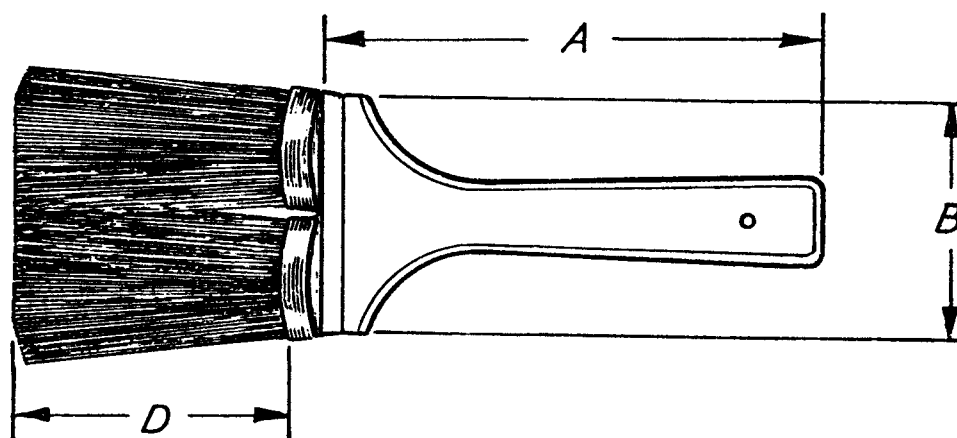


Figure 1 — Tied distemper/washdown brush

Table 1 — Requirements for distemper brushes

Binding wire of ferrule	Details of fillings			Finish etc.
	Description ^a	Weight per brush finished	Minimum length above binding or ferrule <i>D</i>	
		g	mm	
Copper shouldered: bound 12 rounds 1 mm diameter copper wire	100 % bristle	280	135	—
Half-hard copper solid-drawn 1 mm thick	100 % bristle	280	135	Ferrule turned in over bristle: set in vulcanized rubber (see Clause 6)
Copper shouldered 1 mm diameter bound 12 rounds copper wire soldered	100 % bristle	250	135	—
Half-hard copper solid-drawn 1 mm thick	100 % bristle	250	135	Ferrule turned in over bristle; set in vulcanized rubber (see Clause 6)

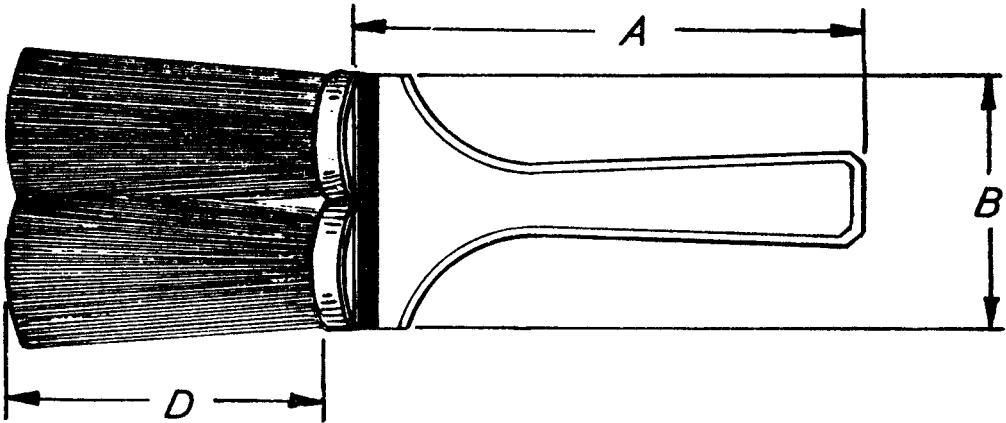


Figure 2 — Ferruled distemper/washdown brush

Table 2 — Requirements for washdown and lime-wash brushes

Item No.	Description	Handles			
		Wood	Approximate measurements		
			Length out of binding or ferrule <i>A</i>	Breadth under binding or ferrule <i>B</i>	Thickness under binding or ferrule
			mm	mm	mm
2/1	Washdown brush, 2-knot, 225 g (tied)	Beech or sycamore	210	115	14
2/1A	Washdown brush, 2-knot 225 g (oval ferruled)	Beech or sycamore	210	115	14
2/2	Limewash brush, 2-knot, 280 g (tied)	Beech or sycamore	225	115	14

^a See Clause 5: Approved sample.
^b See 4.3: Mixture fillings.

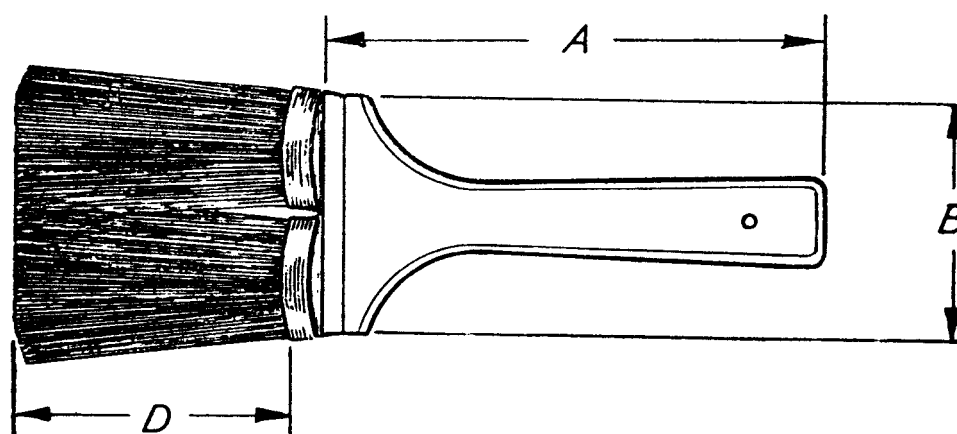


Figure 1 — Tied distemper/washdown brush

Table 2 — Requirements for washdown and lime-wash brushes

Binding wire of ferrule	Details of fillings			Finish etc.
	Description ^a	Weight per brush finished	Minimum length above binding or ferrule <i>D</i>	
Copper shouldered: 1 mm diameter bound 12 rounds copper wire soldered	Mixture ^b	g 225	mm 110	—
Half-hard copper, solid-drawn 1 mm	Mixture ^b	225	115	Ferrule turned in over filling: set in vulcanized rubber (see Clause 6)
Bound 12 rounds 1 mm diameter copper wire soldered	Istle (White mex fibre)	280	135	—

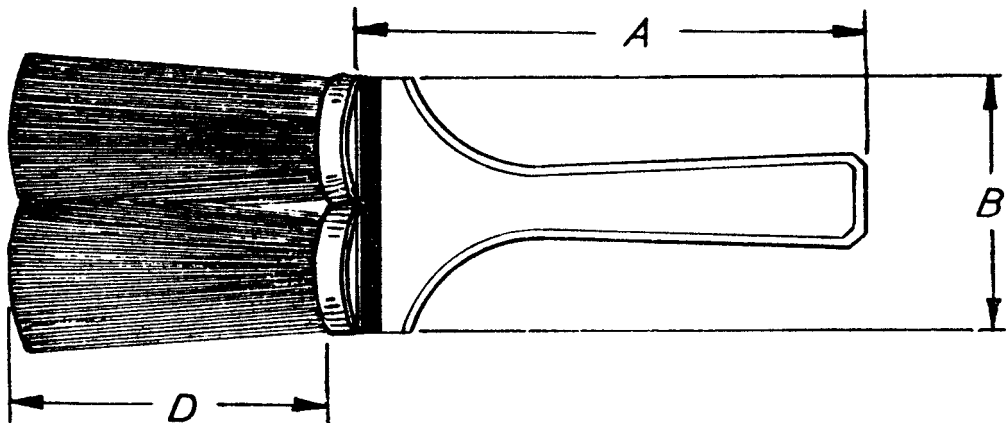


Figure 2 — Ferruled distemper/washdown brush

Table 3 — Requirements for one-knot paint brushes

Item No.	Description	Handles			
		Wood	Approximate measurements		
			Length out of binding or ferrule <i>A</i>	Breadth under binding or ferrule <i>B</i>	Thickness under binding or ferrule
			mm	mm	mm
3/1	Paint brush 8/0 (tied)	Beech or sycamore	200	68	15
3/1A	Paint brush 8/0 (oval-ferruled)	Beech or sycamore	200	68	15
3/2	Paint brush 6/0 (tied)	Beech or sycamore	195	65	15
3/2A	Paint brush 6/0 (oval-ferruled)	Beech or sycamore	195	65	15

^a See Clause 5: Approved sample.

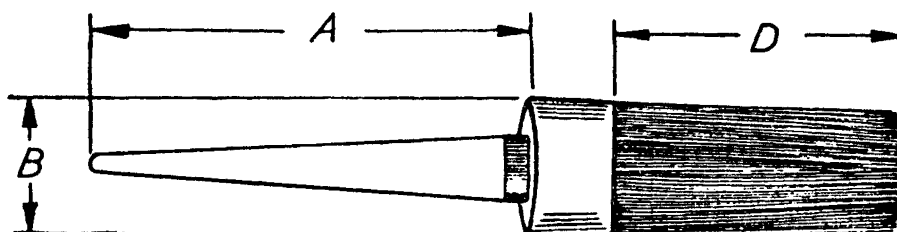


Figure 3 — Oval-ferruled one-knot paint brush

Table 3 — Requirements for one-knot paint brushes

Binding wire of ferrule	Details of fillings			Finish etc.
	Description ^a	Weight per brush finished	Minimum length above binding or ferrule <i>D</i>	
		g	mm	
Copper shouldered: 1 mm diameter 12 rounds copper wire soldered	100 % bristle	160	120	Fillings to be ground if specified by the purchaser
Half-hard copper, solid-drawn 1 mm	100 % bristle	155	120	Fillings to be ground if specified by the purchaser. Ferrule turned in over bristle: set in vulcanized rubber (see Clause 6)
Copper shouldered: 1 mm diameter 12 rounds copper wire soldered	100 % bristle	155	110	Fillings to be ground if specified by the purchaser
Half-hard copper, solid-drawn 1 mm	100 % bristle	145	110	Fillings to be ground if specified by the purchaser. Ferrule turned in over bristle: set in vulcanized rubber (see Clause 6)

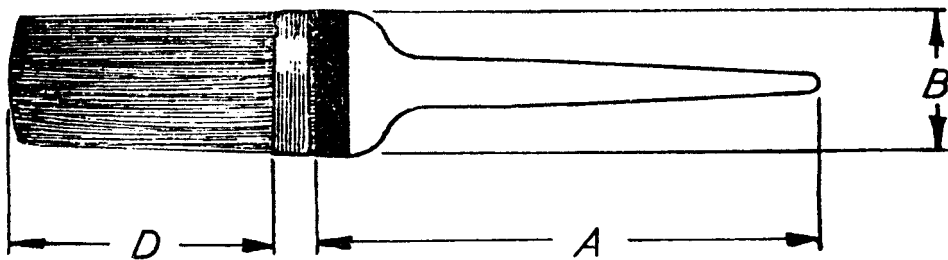


Figure 4 — Tied one-knot paint brush

Table 3 — Requirements for one-knot paint brushes

Item No.	Description	Handles			
		Wood	Approximate measurements		
			Length out of binding or ferrule <i>A</i>	Breadth under binding or ferrule <i>B</i>	Thickness under binding or ferrule
			mm	mm	mm
3/3	Paint brush 4/0 (tied)	Beech or sycamore	185	60	15
3/3A	Paint brush 4/0 (over-ferruled)	Beech or sycamore	185	60	15
3/4	Paint brush 3/0 (tied)	Beech or sycamore	185	60	15
3/4A	Paint brush 3/0 (oval-ferruled)	Beech or sycamore	185	60	15

^a See Clause 5: Approved sample.

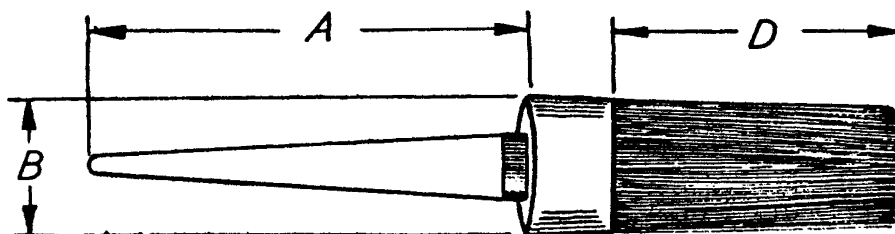


Figure 3 — Oval-ferruled one-knot paint brush

Table 3 — Requirements for one-knot paint brushes

Binding wire of ferrule	Details of fillings			Finish etc.
	Description ^a	Weight per brush finished	Minimum length above binding or ferrule <i>D</i>	
Copper shouldered 1 mm diameter bound 12 rounds copper wire soldered	100 % bristle	g 140	mm 110	Fillings to be ground if specified by the purchaser
Half-hard copper, solid-drawn 1 mm	100 % bristle	135	110	Fillings to be ground if specified by the purchaser. Ferrule turned in over bristle: set in vulcanized rubber (see Clause 6)
Copper shouldered: 1 mm diameter bound copper wire soldered	100 % bristle	125	100	Fillings to be ground if specified by the purchaser
Half-hard copper, solid-drawn 1 mm	100 % bristle	120	100	Fillings to be ground if specified by the purchaser. Ferrule turned in over bristle: set in vulcanized rubber (see Clause 6)

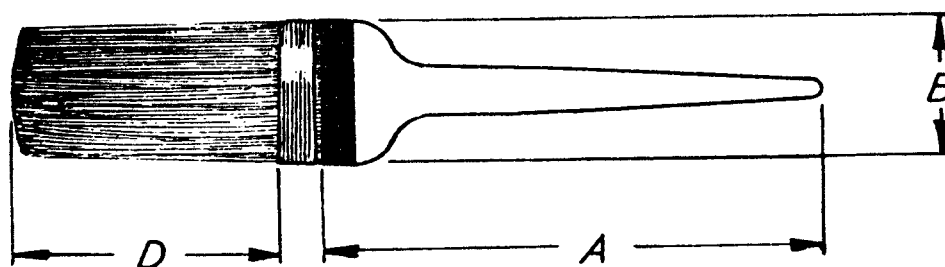


Figure 4 — Tied one-knot paint brush