

Specification for

Wooden axilla crutches

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Health Care Standards Policy Committee (HCC/-) to Technical Committee HCC/38, upon which the following bodies were represented:

- Association of National Health Service Supplies Officers
- British Investment Casting Trade Association
- British Medical Association
- British Surgical Trades Association
- Chartered Society of Physiotherapy
- College of Occupational Therapists
- Consumer Policy Committee of BSI
- Department of Health
- Disabled Living Foundation
- Disablement Services Authority
- Royal Association for Disability and Rehabilitation
- Royal College of Nursing and National Council for Nurses of the United Kingdom
- Coopted members

This British Standard, having been prepared under the direction of the Health Care Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 29 March 1991

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Foreword

This British Standard has been prepared under the direction of the Health Care Standards Policy Committee and supersedes BS 4997:1973, which is withdrawn. BS 4997 was first published in 1973 and gave requirements for four sizes of wooden axilla crutches. A number of minor changes to dimensions and methods of test were introduced by the publication of AMD 4585 in 1984.

This edition of BS 4997 incorporates the published amendment and introduces technical changes to bring the standard up-to-date but it does not reflect a full review of the standard, which will be undertaken in due course. This edition introduces the use of Ramin (*Gonystylus spp*) as an additional wood for the manufacture of crutches, and allows a greater range of length adjustment.

Attention is drawn to the Manufacturer's Registration Scheme administered by the Department of Health.

Product certification. Users of this British Standard are advised to consider the desirability of third party certification of product conformity with this British Standard based on testing and continuing surveillance, which may be coupled with assessment of a supplier's quality systems against the appropriate Part of BS 5750.

Enquiries as to the availability of third party certification schemes will be forwarded by BSI to the Association of Certification Bodies. If a third party certification scheme does not already exist, users should consider approaching an appropriate body from the list of Association members.

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 10, 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 and performance tests for wooden axilla crutches in four sizes, each adjustable in length¹⁾, namely:

large	from not less than 1 530 mm to not more than 1 220 mm;
medium	from not less than 1 220 mm to not more than 965 mm;
small	from not less than 940 mm to not more than 760 mm;
infants	from not less than 760 mm to not more than 610 mm.

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

2 Definitions

For the purposes of this British Standard, the following definitions apply.

NOTE Crutch components are shown in Figure 1 and Figure 2.

2.1 head

the crosspiece of the crutch which rests under the axilla

2.2 headcover

the pad that fits over the head

2.3 side bows

that part of the crutch that joins the head to the adjustable footpiece and contains the adjustable handle

2.4 handle

that part of the crutch which is normally held in the hand when the crutch is in use

2.5 footpiece

the central member which is adjustable on the lower end of the bows

2.6 wedges

the locating pieces which lie between the footpiece and the bows

2.7 foot rubber (or rubber ferrule)

the rubber tip at the end of the footpiece

2.8 datum line

a line occupying a defined position in relation to a feature, with reference to which some associated dimensions are required to be within specified limits of size

in this case the datum line is the horizontal line passing through the lowest point at the centre of the top of the head as shown in Figure 1

3 General

The crutches shall comply with the dimensions given in Table 1.

4 Materials

4.1 Timber

4.1.1 Side bows and footpieces

4.1.1.1 General

Timber used in the manufacture of side bows and footpieces shall comply with 4.1.1.2 to 4.1.1.9 inclusive.

4.1.1.2 Solid timber

If solid timber is used, it shall be European Ash (*Fraxinus excelsior L.*) cut from butts having a moisture content of approximately 16 % when determined as described in Appendix A, or Ramin (*Gonystylus spp*) as defined in BS 881, cut from butts having a moisture content of approximately 22 % when determined as described in Appendix A.

NOTE Timber may be air-dried or kiln-dried. It is recommended that the timber be dried in accordance with the guidance given in "The Timber Drying Manual, 1986" available from Her Majesty's Stationery Office. At no time during drying should the temperature exceed 75 °C.

4.1.1.3 Timber laminates

4.1.1.3.1 Where timber laminates are used, the laminations shall be rotary cut from beech or hardwood having similar properties of a consistent quality and dried to approximately 16 % moisture content determined as described in Appendix A.

4.1.1.3.2 The density of the laminations measured at a moisture content of 12 % shall be not less than 575 kg/m³.

4.1.1.3.3 All laminates shall be laid up with the grain along the length of the component.

4.1.1.3.4 The preparation of laminations and the manufacturing procedures shall be in accordance with the recommendations of BS 4169.

¹⁾ Excluding headcover and foot rubber.