

Buildings and structures for agriculture —

**Part 80: Code of practice for design and
construction of workshops,
maintenance and inspection facilities**

Confirmed December 2009

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Farm and Horticultural Buildings Standards Policy Committee (FHB/-) to Technical Committee FHB/1, upon which the following bodies were represented:

- AFRC Institute of Engineering Research
- Aggregate Concrete Block Association
- Brick Development Association
- British Cement Association
- British Commercial Glasshouse Manufacturers' Association
- British Constructional Steelwork Association Ltd.
- British Poultry Federation Limited
- British Precast Concrete Federation Ltd.
- British Veterinary Association
- British Wood Preserving Association
- British Woodworking Federation
- Cold Rolled Sections Association
- Department of Agriculture and Fisheries for Scotland
- Department of Agriculture Northern Ireland
- Electricity Supply Industry in England and Wales
- Farm and Rural Buildings Centre
- Farm Buildings Association
- Fibre Cement Manufacturers' Association Limited
- Health and Safety Executive
- Institution of Civil Engineers
- Local Authority Organizations
- Ministry of Agriculture, Fisheries and Food
- National Farmers' Union
- Royal Institute of British Architects
- Royal Institution of Chartered Surveyors
- Steel Construction Institute
- Timber Research and Development Association

This British Standard, having been prepared under the direction of the Farm and Horticultural Buildings Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 30 September 1990

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Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Workshops and implement sheds	1
4 Working platforms	3
5 Stairways, ladders and catwalks	4
6 Doorways and hatches	4
7 Protection to pits and tanks	5
8 Machinery	5
9 Warning signs and safety	5
Appendix A Anthropometric dimensions (average adult male) for working operations	6
Appendix B Anthropometric dimensions (average adult male) for stairways, ladders and catwalks	7
Appendix C Anthropometric dimensions (average adult male) doorways, hatches and maintenance operations	8
Index	9
Figure 1 — Example of a typical working platform	3
Figure 2 — Body clearance: working operations	6
Figure 3 — Dimensions of ladders and stairs	7
Figure 4 — Dimensions for doorways, hatches and maintenance operations	8
Table 1 — Maximum overall heights of farm vehicles and equipment	1
Table 2 — Minimum levels of lighting for workshops and maintenance areas	2
Publications referred to	Inside back cover

Foreword

This Part of this BS 5502 has been prepared under the direction of the Farm and Horticultural Buildings Standards Policy Committee and comprises a revision of BS 5502-1.6 and BS 5502-3.6., which are withdrawn.

While BS 5502 is being revised and added to, the opportunity is being taken to restructure the standard into the following broad subject areas:

- *Part 0: Introduction and consolidated index;*
- *Parts 10 to 19: Reference information and legislation;*
- *Parts 20 to 39: General design;*
- *Parts 40 to 59: Livestock buildings;*
- *Parts 60 to 79: Crop buildings;*
- *Parts 80 to 99: Ancillary buildings.*

More specifically, the ancillary building series will comprise:

- *Part 80: Code of practice for design and construction of workshops, maintenance and inspection facilities;*
- *Part 81: Code of practice for design and construction of chemical stores;*
- *Part 82: Code of practice for design of amenity buildings.*

A more detailed description of the new structure of BS 5502 is given in Part 0.

The object of introducing the new structure is to allow subject areas to be broadly characterized, and related subject matter, whether in the form of recommendations, guidance or supporting data, to be rationalized and brought together. It will also allow sufficient flexibility to allow the standard to be expanded and developed in a logical way in the future.

It has been assumed in the drafting of this British Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people, for whose guidance it has been prepared.

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 Part of BS 5502 gives recommendations on the design and construction of buildings for use in agriculture as workshops and implement sheds and for working areas and facilities used for access for the purposes of repair, maintenance and inspection.

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 standard, the definitions given in BS 6100 apply.

NOTE Work has commenced on a further Part of BS 5502 (Part 10) which will be a glossary of terms for buildings and structures for agriculture.

3 Workshops and implement sheds

3.1 Siting

Workshops and implement sheds should, where possible, be sited away from the public highway and clear of other buildings, trees, etc. to minimize the risk of fire spread.

Hard standings and a paved access road with adequate vehicle turning space should be provided.

3.2 Design and construction

3.2.1 General

Workshops required for the repair and maintenance of vehicles, implements and machinery used for agricultural purposes should be designed and constructed in accordance with the general design series of this British Standard (see BS 5502-20 to BS 5502-25 inclusive).

NOTE Attention is drawn to the provisions of the building regulations (see also BS 5502-11¹⁾).

3.2.2 Dimensions and space

3.2.2.1 Dimensions

Workshops and implement sheds should be designed to give good working access for vehicles and equipment and for the personnel servicing them. Doorway openings should be wide enough and high enough to allow easy access to the largest implements. A guide to the overall heights of some farm vehicles and equipment is given in Table 1. The clear height inside the building should also be sufficient to allow the use of lifting-gear, ramps and other equipment for servicing the largest vehicle and equipment anticipated.

Table 1 — Maximum overall heights of farm vehicles and equipment

Vehicle	Height
	m
Combine harvester	4
Forage harvester	3.5
Pea combine	4
Irrigation equipment	7
Tractor	3
Industrial shovel loader	4.5
Tractor with fore-end loader	6
Rough terrain fork lift truck	5.5
Rough terrain fork lift triple mast	9
Elevator	7
Trailer (tipped)	7.5
Lorry	4
Lorry (tipped)	11

3.2.2.2 Layout of working areas

Consideration should be given to the area required for the safety of the operator at work, bearing in mind the following factors:

- the operator's physical dimensions (see Appendix A);
- the placing of plant and machinery so that the operator can watch it operating;
- the accessibility of controls and equipment for safe manipulation;
- the avoidance of hazards which may be caused by the wearing of protective clothing or by handling equipment.

3.2.3 Floors

Floors should be designed and constructed to withstand the maximum loading from vehicles and equipment and to avoid slippery, dangerous or uneven surfaces. Surfaces should also be hard wearing and finished to facilitate easy cleaning and removal of accumulations of dirt and grease and to minimize dusting.

3.2.4 Walls and roof

Foundations and walls should be designed to support loads from overhead lifting beams and gantries when needed.

Consideration should be given to thermal insulation of the walls and roof to improve operator comfort and minimize the freezing of equipment.

¹⁾ In preparation.