

Portakabin Ltd

York YO32 9PT

Tel: 01904 611655 Fax: 01904 611644

e-mail: solutions@portakabin.com

website: www.portakabin.com

Building System
Agrément Certificate
03/S033
Product Sheet 1

PORTAKABIN SOLUS BUILDINGS

PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate replaces Certificate No 94/S020 and relates to Portakabin Solus Buildings, which are self-contained, relocatable and factory finished. They can be used as single-storey office and similar accommodation or two- and three-storey office and similar accommodation. In all cases the buildings can be in single or multiple configurations.

AGRÉMENT CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.

KEY FACTORS ASSESSED

Strength and stability — Structural testing has been used to verify the relevant aspects of the design outside the scope of the codes, including resistance of panels to racking, fastening characteristics, interaction of components and effects of thermal cycling. See section 4.

Behaviour in relation to fire — It can be shown by tests and assessment that the buildings will meet Building Regulations' requirements for fire rating as given in section 5.

Thermal insulation — Roofs, walls and floors, and their connecting junctions, meet the limit case U value and ACD psi (ψ) values specified for a 'notional' building. See section 6.

Weathertightness and damp-proofing — The steel supporting columns raise the building clear of the ground, giving the buildings an inherent resistance to ground moisture. See section 9.

Durability — The steel structure has a design life of 60 years and the design life of the external envelope and internal finishes is between 25 and 60 years. See section 12.

The BBA has awarded this Agrément Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

B C Chamberlain

Greg Cooper

Date of First issue: 9 December 2008

Brian Chamberlain

Greg Cooper

Originally certificated on 30 November 1994

Head of Approvals — Engineering

Chief Executive

The BBA is a UKAS accredited certification body — Number 113. The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.

British Board of Agrément
Bucknalls Lane
Garston, Watford
Herts WD25 9BA

©2008

tel: 01923 665300
fax: 01923 665301
e-mail: mail@bba.star.co.uk
website: www.bbacerts.co.uk

Regulations

In the opinion of the BBA, Portakabin Solus Buildings, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements of the following Building Regulations:



The Building Regulations 2000 (as amended) (England and Wales)

Requirement:	A1	Loading
Comment:		The buildings will have adequate strength and stability. See sections 4.1 to 4.6 of this Certificate.
Requirements:	B2	Internal fire spread (linings)
	B3	Internal fire spread (structure)
	B4	External fire spread
Comment:		The buildings will meet the relevant requirements within the limitations set out in this Certificate. See sections 5.1 to 5.5 of this Certificate.
Requirement:	C2(a)(b)(c)	Resistance to weather and ground moisture
Comment:		The buildings are acceptable.
Requirement:	L1(a)(i)	Conservation of fuel and power
Comment:		The buildings are acceptable. See section 6.1 of this Certificate.
Requirement:	Regulation 7	Materials and workmanship
Comment:		The buildings are acceptable. See sections 12.1 to 12.5 and the <i>Installation</i> part of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Fitness and durability of materials and workmanship
Comment:		The buildings are acceptable. See sections 11.1 to 11.4 and 12.1 to 12.5 and the <i>Installation</i> part of this Certificate.
Standard:	1.1(a)(b)	Structure
Comment:		The buildings will have adequate strength and stability. See sections 4.1 to 4.6 of this Certificate.
Standards:	2.1	Compartmentation
	2.2	Separation
	2.3	Structural protection
	2.4	Cavities
	2.5	Internal linings
	2.6	Spread to neighbouring buildings
	2.7	Spread on external walls
	2.8	Spread from neighbouring buildings
Comment:		The buildings will meet the relevant Standards within the limitations set out in this Certificate. See sections 5.1 to 5.5 of this Certificate.
Standards:	3.4	Moisture from the ground
	3.10	Precipitation
	3.15	Condensation
Comment:		The buildings are acceptable. See sections 7.1 to 7.4 and 10.1 to 10.5 of this Certificate.
Standards:	6.1	Carbon dioxide emissions
	6.2	Building insulation envelope
Comment:		The buildings are acceptable. See section 6.1 of this Certificate.



The Building Regulations (Northern Ireland) 2000 (as amended)

Regulation:	B2	Fitness of materials and workmanship
Comment:		The buildings are acceptable. See sections 12.1 to 12.5 and the <i>Installation</i> part of this Certificate.
Regulation:	B3(2)	Suitability of certain materials
Comment:		The buildings are acceptable. See section 11.1 to 11.4 of this Certificate.
Regulation:	C4	Resistance to ground moisture and weather
Comment:		The buildings are acceptable. See sections 9.1 to 9.5 of this Certificate.
Regulation:	C5	Condensation
Comment:		The buildings using the system are acceptable. See sections 7.1 to 7.4 of this Certificate.
Regulation:	D1	Stability
Comment:		The buildings will have adequate strength and stability. See sections 4.1 to 4.6 of this Certificate.
Regulations:	E3	Internal fire spread — Linings
	E4	Internal fire spread — Structure
	E5	External fire spread
Comment:		The buildings will meet the relevant Regulations within the limitations set out in this Certificate. See sections 5.1 to 5.5 of this Certificate.
Regulation:	F2(a)(i)	Conservation measures
Comment:		The buildings are acceptable. See section 6.1 of this Certificate.

Information in this Certificate may assist the client, CDM co-ordinator, designer and contractors to address their obligations under these Regulations.

See sections: 2 *Delivery and site handling* (2.2).

Non-regulatory Information

Zurich Building Guarantee Technical Manual 2007

In the opinion of the BBA, Portakabin Solus Buildings, when installed and used in accordance with this Certificate, satisfies the requirements of the *Zurich Building Guarantee Technical Manual*, Section 3 *Substructure*, Sub-section *Floors* and Section 4 *Superstructure*, Sub-sections *External walls – steel frame* and *Flat roofs*.

General

This assessment covers the loadbearing adequacy of the structural steel frame, durability, fire resistance, condensation, ventilation, weathertightness and maintenance. Other aspects of performance have not been assessed. However, the completed building must be designed and constructed to satisfy all of the relevant requirements of the national Building Regulations.

The steel structure has a minimum design life of 60 years and the external envelope and internal finishes a minimum design life is between 25 and 60 years.

Technical Specification

1 Description

General

- 1.1 Portakabin Solus Buildings are based on a structural steel framework and composite wall panels (see Figure 1).
- 1.2 The buildings are available in the range of sizes given in Table 1. The internal height is 2.3 m.
- 1.3 The full specification and drawings for the materials and components covered by this Certificate have been examined and are retained by the BBA. This section gives only general details of the system. Typical details are shown in Figure 2.

Figure 1 General arrangement of components

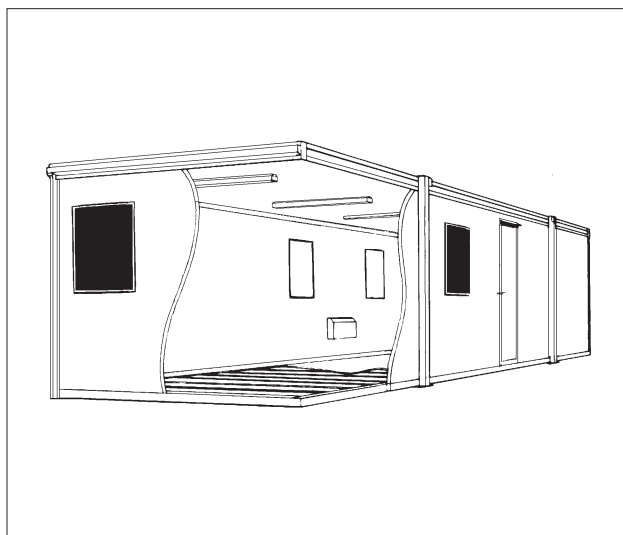
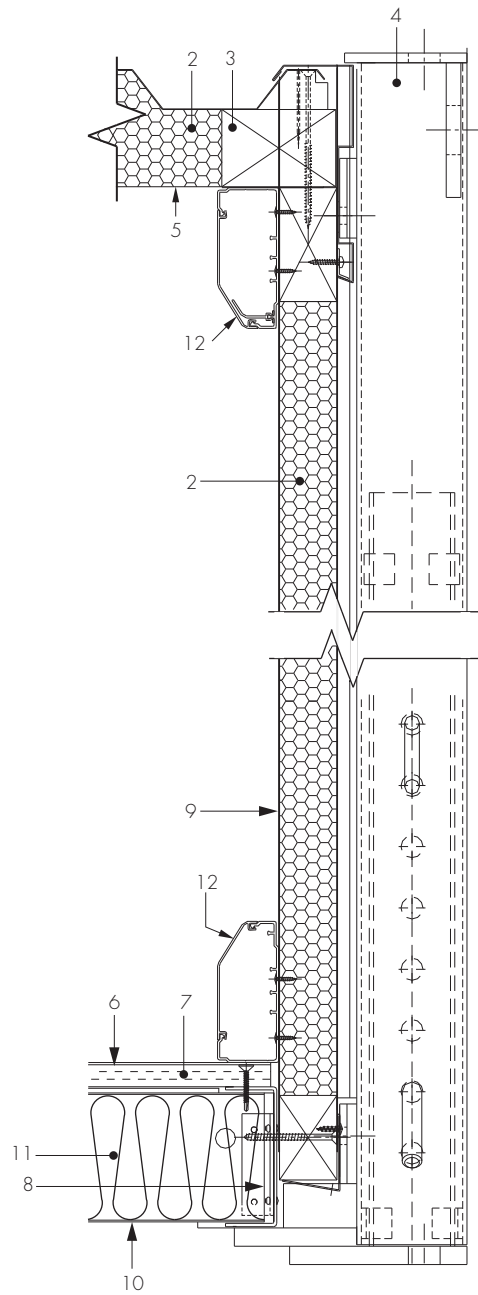


Table 1 Size range

Type	Internal length (m)	Internal width (m)	Floor area (m ²)
SL 031	2.808	2.592	7.28
SL 051	4.808	2.592	12.46
SL 062	5.808	2.958	17.18
SL 071	7.208	2.592	18.68
SL 072	7.208	2.958	21.32
SL 082	8.408	2.958	24.87
SL 102	10.008	2.958	29.60
SL 122	12.008	2.958	35.52

Figure 2 Section through long wall



- 1 profiled plastisol-coated galvanized steel outer skin
- 2 injected, CFC-free, polymer insulation
- 3 timber frame
- 4 steel hollow section column
- 5 polyester-coated galvanized steel lining
- 6 vinyl floor covering
- 7 moisture-resistant structural particle board floor deck
- 8 galvanized steel floor side channel
- 9 plastisol-coated galvanized steel outer skin
- 10 aluminium-zinc coated steel sheet
- 11 mineral wool insulation
- 12 PVC trunking

Structural frame

1.4 The steel frame for each building comprises four steel hollow section columns, bolted to cold-formed galvanized steel side beams, with lifting points for crane handling at the top of each column or a patented lifting arrangement permitting crane connection without the need for the operative to leave the ground. Cold-formed galvanized steel floor joists are mechanically fixed to the side beams. Cold-formed galvanized steel roof joists span each building from side to side. Longitudinal steel floor runners are mechanically fixed to the steel floor joists to assist in the transportation of the module.

Floors

1.5 Floors comprise an 18 mm thick, moisture-resistant, structural particle board Type P5 to BS EN 312 : 2003, bonded and fixed to the galvanized steel joists with adhesive and zinc-coated screws.

1.6 The floor is underdrawn with lightly profiled aluminium-zinc coated steel sheet to BS EN 10327 : 2004, bonded and fixed to the joists and side channels with adhesive and zinc-coated screws.

1.7 Thermal insulation is provided by a layer of mineral wool insulation laid on top of the floor underdrawing and packed full length between the floor frame sections. Alternatively, rigid polyurethane recycled from the wall manufacturing process will be used when available, providing the same level of thermal insulation

External walls

1.8 External walls are of composite construction having an external skin of plastisol-coated galvanized steel sheet (the subject of a BBA Certificate), timber studs and peripheral frame and an internal lining of 0.6 mm thick polyester-coated galvanized steel. The void between the external skin and internal lining is filled with injected, CFC-free polymer insulation.

1.9 Walls are fixed to the steel frame at floor level using zinc-plated self-drilling screws into the floor frame, and at the wall-to-wall corner joint and roof level using zinc-plated wood screws.

Roof and ceiling

1.10 The roof is of composite construction having an external profiled (trapezoidal) skin of plastisol-coated galvanized steel sheet (the subject of a BBA Certificate), rigid polymer inserts, timber peripheral frame, cold-formed steel joists and a ceiling of polyester-coated galvanized steel. The void between the external skin and ceiling is filled with injected CFC-free polymer insulation.

Protection of steelwork against corrosion

1.11 The side beams and joists are produced from galvanized steel sheet to BS EN 10326 : 2004, having a Z600 coating.

1.12 The steel columns are shot-blasted, coated with anti-corrosive primer and finished with a goosewing grey gloss paint. Adjustable inner legs and feet are hot-dip galvanized.

1.13 The external skin of the building is protected by a 200 µm coating of PVC plastisol applied over a Z275 zinc coating to BS EN 10326 : 2004.

Finishes

1.14 The external faces of wall panels have a plastisol coating, goosewing grey in colour with a leathergrain finish.

1.15 The external face of the roof panel has a plastisol coating, white in colour with a satin embossed finish.

1.16 The ceiling and internal walls have a silk white polyester finish.

1.17 The columns have a goosewing grey finish.

1.18 The fascias and corner trims have a plastisol coating, goosewing grey in colour and with a leathergrain finish.

1.19 The bottom wall trims have a plastisol coating, goosewing grey in colour with a leathergrain finish.

1.20 In applications where water will be present, vinyl flooring is provided with welded joints and sealed upstands at floor/wall interfaces. The vinyl floor covering is specified to BS EN 649 : 1997 and is classified 23, 24 and 35 in accordance with BS EN 685 : 2005 and G5ws in accordance with MOAT No 36 : 1987.

Manufacture

1.21 Bought-in materials and components are to agreed specifications or in accordance with British Standards or Agrément Certificates.

1.22 Steel-framed components of the building are constructed using conventional metalworking techniques.

1.23 Quality checks are made on the sub-assemblies, such as wall and roof panels and the steel frame, and on the final assembly of the building. Quality control carried out during manufacture includes checks on dimensions, squareness and welding.

2 Delivery and site handling

2.1 The buildings are transported to site on a flat-bed lorry or trailer.

2.2 The buildings can be unloaded using either the telescopic legs or by crane. Handling must be in accordance with the instructions given in the manufacturer's handbook.

2.3 The buildings are normally positioned on the day of delivery, thus site storage is not required.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Portakabin Solus Buildings.

Design Considerations

3 Practicability of installation

The Certificate holder is responsible for delivery and installation.

4 Strength and stability



4.1 With certain exceptions described in this section, the design of the Portakabin Solus Building is in accordance with:

- BS 5268-2 : 2002
- BS 5950-1 : 2000
- BS 5950-5 : 1998
- BS 6399-1 : 1996
- BS 6399-2 : 1997
- BS 6399-3 : 1988
- BS 6767-1 : 1999.

4.2 Where required, structural testing has been used to verify the relevant aspects of the design outside the scope of the codes, including resistance of panels to racking, fastening characteristics, interaction of components and effects of thermal cycling.

4.3 One-, two- or three-storey buildings will have adequate resistance to wind loads in areas within the 25 ms^{-1} basic wind contour in accordance with BS 6399-2 : 1997. Three-storey buildings must be side to side linked or braced to an existing structure in agreement with the Certificate holder. Competent professional advice should be sought to ensure the adequacy of the existing structure.

4.4 The roof is designed to support a uniformly distributed imposed load of 0.75 kNm^{-2} or a concentrated load of 0.9 kN , in accordance with BS 6399-3 : 1988, and therefore is acceptable where access is not provided, other than that necessary for cleaning or repair.

4.5 The floor is designed to support a uniformly distributed imposed load of 3 kNm^{-2} or a concentrated load of 2.7 kN , in accordance with BS 6399-1 : 1996, and therefore is acceptable, for example, in classrooms and offices for general use.

4.6 Foundations must be designed in accordance with BS 8004 : 1986.

5 Behaviour in relation to fire



5.1 Buildings subject to Building Regulations in England and Wales, Scotland or Northern Ireland must not be erected within one metre of a boundary. Due regard must be taken of all 'unprotected areas'.

5.2 It can be shown by tests and assessment that the buildings will meet Building Regulations' requirements for fire rating thus:

roof ceiling (ground floor) one hour (from underside).

5.3 The various exposed surfaces of the buildings assessed as having a Class O ('low risk' in Scotland)⁽¹⁾ rating are:

- steel floor underdrawing
- plastisol-coated steel external wall, roof and trim surfaces
- polyester-coated steel ceiling surface and internal wall surfaces.

(1) As defined in the national Building Regulations thus:

England and Wales — Approved Document B, Appendix A, paragraph 13

Scotland — Technical Handbook (Non-Domestic), Annex 2.E

Northern Ireland — Technical Booklet E, paragraph 4.3 (see also Diagram 4.1).

5.4 The roof is designated AA in accordance with the Building Regulations:

England and Wales — Approved Document B, Section 10.4

Scotland — Technical Handbook (Non-Domestic), Annex 2.F

Northern Ireland — Technical Booklet E, Section 4.19.

5.5 Adequate provision must be made for escape in case of fire.

5.6 Where it is necessary for fittings, services or ducts to penetrate part of the fire-resisting construction the detailing must ensure that the relevant fire resistance is not impaired.

6 Thermal insulation



6.1 Temporary buildings with a planned use of less than two years (less than and including two years in England and Wales) are exempt from the national Building Regulation requirements for energy efficiency.

6.2 Where more than 70% of the external envelope is created from sub-assemblies (or disassembly of existing buildings) manufactured before the following dates, compliance with the guidance in *Energy Performance Standards for Modular and Portable Buildings* (MPBA) 2006, would demonstrate reasonable provision for energy efficiency:

England and Wales 6 April 2006
Scotland 1 May 2007
Northern Ireland 30 November 2006.

6.3 Buildings not covered by sections 6.1 or 6.2, all have floor areas of less than 50 m² and, therefore, are exempt from requirements for carbon emissions calculations. However, the following provisions also apply:

England and Wales

The buildings all have floor areas less than 50 m² and, therefore, are not subject to Requirement L1(a)(i).

Scotland

Buildings with floor areas greater than 8 m² are subject to Mandatory Standard 6.2, and window and door specifications and areas must be selected such that the heat loss, based on the element U values (see Table 2) and areas, is no more than for a 'notional' building having the U values specified for an extension and the same element areas, as described in the Technical Handbook (Non-Domestic), clause 6.0.3 and Annex 6.B.2.

Table 2 Element U values (Wm⁻²K⁻¹)

Element	U value
Floor	0.35
Wall	0.45
Roof	0.34

Northern Ireland

Buildings with floor areas greater than 30 m² will not meet Regulation F2(a)(i).

7 Condensation



7.1 The buildings are not suitable for use where the internal relative humidity is expected to exceed 70% for any significant length of time, as condensation may occur. Assuming normal internal conditions of temperature and humidity, and appropriate ventilation (see section 8), it is considered that the amount and duration of condensation will be insufficient to significantly affect the structural or thermal properties of the building.

7.2 If the floor is penetrated by services, eg soil pipes, the joints between the services and the floor deck and floor insulation must be adequately sealed to prevent the ingress of water and water vapour.

7.3 Equipment producing large quantities of water vapour, for example flueless heaters, must not be used.

7.4 Adequate underfloor ventilation is provided to ensure that any condensation on the steelwork or insulation is effectively dispersed (see section 8).

8 Ventilation

The design of the windows should allow adequate ventilation and is an important factor in reducing the incidence of surface condensation. The windows should be designed so that the amount of openable window ventilation is a minimum of 5% of the floor area, or provision of mechanical ventilation should be considered. The Certificate holder should be consulted with regard to the requirements for background ventilation.

9 Weathertightness and damp-proofing



9.1 The steel supporting columns raise the building clear of the ground, giving it an inherent resistance to ground moisture.

9.2 The ground beneath the building, as a minimum, should be effectively cleared of turf and other vegetable matter and be treated with a chemical weedkiller.

9.3 The roof and external wall surfaces will provide adequate weather resistance.

9.4 The buildings are provided with suitable rainwater gutters and downpipes.

9.5 The performance of windows and doors is not covered by this Certificate. However, the perimeter joints between windows and doors and the wall panels have been assessed and are adequate to ensure that water penetration will not occur at these positions.

10 Services

Electrical and plumbing services are outside the scope of this Certificate. However, in designing and installing these services, precautions must be taken to avoid the possible risk of long-term damage to the structure or the services by, for example, the ingress of water, water vapour or condensate from cold water service pipes.

11 Maintenance



11.1 External cladding requires an occasional washing down with water containing a mild detergent. Where a high aesthetic standard is required, maintenance painting may be required after a period from 10 to 30 years, depending on colour and environmental conditions, using a paint recommended by the Certificate holder.

11.2 The ceiling and internal surfaces can be cleaned using water containing a mild detergent. These surfaces can be decorated using a paint recommended by the Certificate holder.

11.3 Should it be necessary to replace or repair the vinyl floor covering, all joints must be welded. Any replacement vinyl floor covering must be to an equivalent specification as the original.

11.4 In the event of impact or other damage to an external wall, a replacement plastisol-coated steel panel can be fitted over the original panel by the Certificate holder. If necessary, damage to the foam core of the wall can be made good before fitting the replacement panel. This will restore the appearance and ensure that the weathertightness and insulation are unaffected.

12 Durability



12.1 The main structural framework is assessed as capable of achieving a design life of 60 years. Other elements can achieve a design life of between 25 and 60 years depending on the use, environment and degree of maintenance. Reference may be made to BS 7543 : 2003, or relevant Agrément Certificate in this respect.

12.2 Foot traffic over the roof should be restricted to the purpose of maintenance and suitable precautions taken to avoid the risk of damaging the plastisol coating.

12.3 The plastisol coating and galvanizing will be effective for the building's envisaged life.

12.4 The ceiling and internal surfaces of the walls will remain effective for this period.

12.5 The vinyl floor covering may require replacement during this period, depending on the use.

13 Preparation

Clients/users are normally responsible for provision of suitable foundations and services and, therefore, the following aspects should be subject to adequate supervision and should be checked before the buildings are delivered to site:

- setting out and level of foundations
- setting out of service connections.

14 Siting

14.1 The arrangements for siting on prepared foundations have been assessed and found to be satisfactory.

14.2 Where specified, the buildings must be bolted to the foundations.

14.3 Buildings having the same leg centres can be multi-stacked. The telescopic legs must be fully retracted with the leg pin fitted through the outer leg. The lower building must be fixed to suitable foundations through the two holes in each leg base plate. The buildings are to be bolted together at the four leg points.

Technical Investigations

15 Tests

Test data and calculations were examined to determine:

- behaviour of floor panels under loading
- behaviour of roof panels under loading
- suitability of three-storey applications.

16 Investigations

16.1 An examination of existing data was made to assess:

- behaviour under loading of structural components and complete buildings
- physical properties of injected, CFC-free polymer insulation
- impact resistance of wall panels
- practicability of positioning using the telescopic legs and jacking equipment
- practicability of positioning by crane
- weathertightness
- durability
- maintenance requirements.

16.2 Calculations were undertaken and examined in conjunction with the aforementioned data to establish the structural strength and stability of the buildings.

16.3 Calculations were made and computer simulations carried out to determine the effectiveness of the thermal insulation arrangements and the risk of condensation.

16.4 The manufacturing process was examined, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

16.5 The behaviour of the buildings in fire have been assessed on the basis of test data and reports.

Additional Information

The management systems of Portakabin Ltd have been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2000 by SGS Yarsley International Certification Services Ltd (Certificate No Q444).

The Certificate holder's environmental management system for the offices and manufacturing plant has been assessed and registered as meeting the requirements of BS EN ISO 14001 : 2004 by the BSI (Certificate No EMS 515280).

Bibliography

BS 5268-2 : 2002 *Structural use of timber — Code of practice for permissible stress design, materials and workmanship*

BS 5950-1 : 2000 *Structural use of steelwork in building — Code of practice for design — Rolled and welded sections*

BS 5950-5 : 1998 *Structural use of steelwork in building — Code of practice for design of cold formed thin gauge sections*

BS 6399-1 : 1996 *Loading for buildings — Code of practice for dead and imposed loads*

BS 6399-2 : 1997 *Loading for buildings — Code of practice for wind loads*

BS 6399-3 : 1988 *Loading for buildings — Code of practice for imposed roof loads*

BS 7543 : 2003 *Guide to durability of buildings and building elements, products and components*

BS 8004 : 1986 *Code of practice for foundations*

BS EN 312 : 2003 *Particleboards — Specifications*

BS EN 649 : 1997 *Resilient floor coverings — Homogeneous and heterogeneous polyvinyl chloride floor coverings — Specification*

BS EN 685 : 2005 *Resilient, textile and laminate floor coverings — Classification*

BS EN 10326 : 2004 *Continuously hot-dip coated strip and sheet of structural steels — Technical delivery conditions*

BS EN 10327 : 2004 *Continuously hot-dip coated strip and sheet of low carbon steels for cold forming — Technical delivery conditions*

BS EN ISO 9001 : 2000 *Quality management systems — Requirements*

BS EN ISO 14001 : 2004 *Environmental Management systems — Requirements with guidance for use*

MOAT No 36 : 1987 *UEAtc Directives for the Assessment of Manufactured Plastic Floorings*

17 Conditions

17.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is granted only to the company, firm or person named on the front page — no other company, firm or person may hold or claim any entitlement to this Certificate
- is valid only within the UK
- has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English law.

17.2 References in this Certificate to any Act of Parliament, Statutory Instrument, Directive or Regulation of the European Union, British, European or International Standard, Code of Practice, manufacturers' instructions or similar publication, are references to such publication in the form in which it was current at the date of this Certificate.

17.3 This Certificate will remain valid for an unlimited period provided that the product/system and the manufacture and/or fabrication including all related and relevant processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

17.4 In granting this Certificate, the BBA is not responsible for:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- individual installations of the product/system, including the nature, design, methods and workmanship of or related to the installation
- the actual works in which the product/system is installed, used and maintained, including the nature, design, methods and workmanship of such works.

17.5 Any information relating to the manufacture, supply, installation, use and maintenance of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used and maintained. It does not purport in any way to restate the requirements of the Health & Safety at Work etc Act 1974, or of any other statutory, common law or other duty which may exist at the date of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the manufacture, supply, installation, use and maintenance of this product/system.

