



WORLD SQUASH
FEDERATION

SQUASH
SPECIFICATIONS FOR:

COURTS
RACKETS
BALLS

RECOMMENDED STANDARDS
APPROVED BY THE WORLD SQUASH FEDERATION

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INTRODUCTION

- 1 This Specification defines recommended standards for Singles & Doubles Squash courts for the International Game of Squash; referred to in North America as "Softball" Squash. It has been drawn up on behalf of the World Squash Federation (WSF) (previously the International Squash Rackets Federation (ISRF)) as the sole International Federation for Squash recognised by the International Olympic Committee (IOC).
- 2 The AIMS of the Specification are:
 - ◆ to ensure comparability of recommended standards for courts from one country to another
 - ◆ to guide manufacturers, builders and designers as to suitable standards of squash court construction and design.
- 3 The Specification defines the basic characteristics of squash courts without reference to materials or methods of construction.
- 4 Courts built according to this Specification will be suitable for all types of play. The following events may only be played on courts which meet the Specification in all respects:
 - 4.1 International matches between representative teams from different countries unless agreed in advance by both captains or National Associations
 - 4.2 Individual or World Team Championships Semi-Finals and Finals
 - 4.3 Such matches, events or championships as may be decided from time to time by the WSF.
- 5 The WSF reserves the right to amend the Specification at any time if it is in its view desirable that this should be done.
- 6 The WSF runs an Accreditation scheme for courts and equipment whereby materials and components are tested against the recommended standards set by the Federation. Manufacturers of court materials and components may apply for such Accreditation and gain approval for their product as "WSF Approved and Certified". A list of Accredited companies can be found on page 17 of this document.
- 7 This Specification covers permanent court installations only. When finalised, a separate guidance on portable transparent courts, for special events, will be produced as Appendix 6 of this document.
- 8 The assistance of numerous manufacturers and National Associations in commenting on drafts and supplying information is acknowledged with grateful thanks, as is the work carried out by past and present Chairman and members of the WSF Technical Committee.

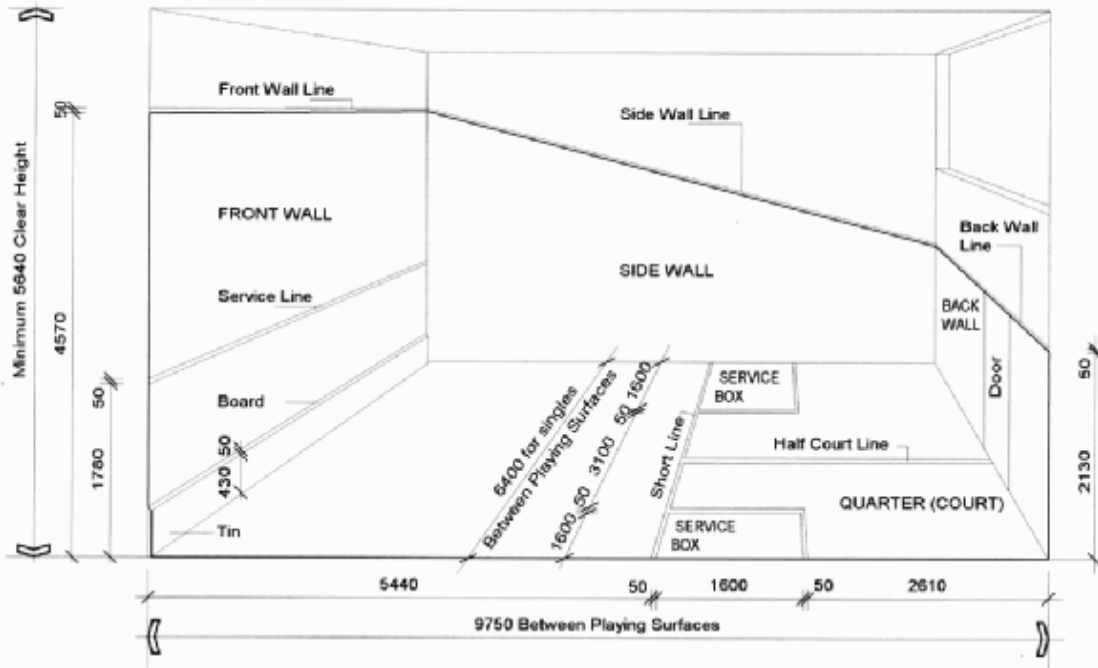
RULES

The Rules of the Individual Game of Squash contain Appendices relating to:-

The Dimensions of a singles court	APPENDIX 1
The Dimensions of doubles court	APPENDIX 2
Specification of the Squash Ball	APPENDIX 3
Dimensions of a Squash Racket	APPENDIX 4
The Use of Colour and Design	APPENDIX 5
Guidance on portable transparent Court	APPENDIX 6 - forthcoming

The Appendices are reprinted for reference at the end of this document.

GENERAL CONFIGURATION OF THE INTERNATIONAL SINGLES COURT



NEAR SIDE WALL OMITTED FOR CLARITY

DIAGONALS FOR SINGLES 11665

Dimensions of Singles Squash Court

DIAGRAM NO. 1 Date February 1999



WORLD SQUASH
FEDERATION

6 HAVELOCK ROAD, HASTINGS, TN34 1BP, GREAT BRITAIN
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Diagram 1
February 1999

RECOMMENDED STANDARDS OF CONSTRUCTION

1. MATCH OFFICIALS

- 1.1 There shall be space provided for a marker and a referee, who shall be able to see the whole of the court and shall be able to hear the play and the players and be heard by them.
- 1.2 The space for the marker and the referee shall be behind the plane of the back wall.

2. SPECTATORS

- 2.1 Spectator areas may be located behind the plane of any wall of the court.

3. CAMERA FACILITIES

- 3.1 Play may be televised, filmed, photographed or recorded in any way from above the court or through any of the walls, provided that:
 - 3.1.1 no camera or other equipment may project into any part of the court or below the minimum clear height above the court specified in clause 4.4 below
 - 3.1.2 players inside the court are not aware of any camera or other equipment, or any persons operating the cameras or other equipment, behind either the front or the side walls during play.
- 3.2 Camera panels may be incorporated in any part of the court playing walls provided that any such panel shall:
 - 3.2.1 be flush with the adjacent wall surfaces on the court side
 - 3.2.2 match as closely as possible the colour of the adjacent surfaces on the court side
 - 3.2.3 have similar rebound characteristics to the surrounding court playing surface
 - 3.2.4 be fixed in such a way as to withstand indefinitely the impact of the ball, rackets and players in normal play
 - 3.2.5 be constructed of a material (for example safety glass) which will not be liable to cause serious injury to players or spectators if it breaks.
- 3.3 Further details relating to the conditions for the use of television cameras are contained in Appendix 6.

4. COURT DIMENSIONS AND TOLERANCES

Plan Dimensions

- 4.1 The plan dimensions of the singles court, measured 1 metre above finished floor level, shall be:

- 4.1.1 Length: 9750 mm plus or minus 10 mm
- 4.1.2 Width: 6400 mm plus or minus 10 mm
- 4.1.3 Diagonals: 11665 mm plus or minus 25 mm
- 4.2 The plan dimensions of the doubles court, measured 1 metre above finished floor level, shall be:
 - 4.2.1 Length: 9750 mm plus or minus 10 mm
 - 4.2.2 Width: 7620 mm plus or minus 10 mm
 - 4.2.3 Diagonals: 12375 mm plus or minus 25 mm
- 4.3 For existing courts, it is recognised that on occasions where the wall playing surface has deteriorated beyond economic repair then the use of a wall renovation system might be considered. In these circumstances, it is recommended that the court plan dimensions are not reduced by more than 80 mm from those noted above.

Clear Height

- 4.4 The clear height above finished floor level (i.e. the height to the underside of the lowest obstruction) over the whole of the court shall be not less than 5.64 m. The clear height shall be measured to the underside of the lowest obstruction including lights.

Verticality of Court Walls

- 4.5 The Court Walls shall be vertical to within plus or minus 5mm in a height of 2 metres when measured:
 - 4.5.1 within 250 mm of each corner of the court
 - 4.5.2 at three additional intermediate points evenly spaced along the length of each wall.

Straightness of Walls

- 4.6 The walls of the court shall be straight to within plus or minus 15 mm in the length of any wall when measured horizontally at a height of 1 metre above finished floor level.

Plane of Court Walls

- 4.7 The walls of the court shall be plane and:
 - 4.7.1 have no indentations, holes or open joints of more than 2 mm across in any dimension in the plane of the wall
 - 4.7.2 have no variations from the true surface of more than 3 mm when measured in any direction with a 1800 mm long straight edge.

The Floor

- 4.8 The floor shall be level to within plus or minus 10 mm in the length, width and on the diagonals of the court.
- 4.9 Any joint in the floor finish shall be plane to within 0.25 mm. Any open joint shall not be more than 2 mm wide, except that an expansion gap not more than 6 mm wide shall be allowed at the juncture of the floor with any wall.
- 4.10 The floor surface shall be true to within plus or minus 3 mm in 3 metres.

5. COURT MARKINGS

Generally

- 5.1 All court markings shall be 50 mm wide and contrast in colour to adjoining surfaces, all wall markings shall be the same colour and all floor markings shall be the same colour.
- 5.2 All court markings shall be straight to within plus or minus 2 mm in 3 metres.
- 5.3 The maximum variation from the correct position of any court marking at any point shall not exceed 5 mm, except that the board shall not be more than 2 mm from the correct height at any point.

Front Wall

- 5.4 There shall be three horizontal court markings on the front wall:
 - 5.4.1 the front wall line
 - 5.4.2 the service line
 - 5.4.3 the board, with the 'tin' beneath it for the full width of the court.
- 5.5 The lower edge of the front wall line shall be 4570 mm above finished floor level. The line shall not project into the space above the court and shall ideally be so shaped as to deflect any ball striking it.
- 5.6 The lower edge of the service line shall be 1780 mm above finished floor level. The line shall be marked on the surface of the wall and shall not deflect in any way any ball striking it.
- 5.7 The upper edge of the board shall be 480 mm above the finished floor level. The board shall project into the court by not more than 15 mm at the top and 45 mm at the bottom and shall be shaped so as to deflect any ball striking it. All edges of the board shall be rounded. Between the board and the floor, for the full width of the court, the 'tin' shall be constructed in such a manner as to make a distinctive noise when struck by the ball.
- 5.8 If the court has a transparent front wall it is recommended that the wall extends to a minimum height of 5250 mm above the floor.
- 5.9 As an alternative to the board electronic devices may be used providing they:-

- 5.9.1 Emit an audible sound when the ball passes within the 50 mm line zone that they replace.
- 5.9.2 Be unaffected by external condition such as vibrations, atmospheric or illuminance variations.

Back Wall

- 5.10 There shall be one horizontal court marking on the back wall, the back wall line. The lower edge of the line shall be 2130 mm above finished floor level except that if the court has a transparent wall 2130 mm (plus or minus 5 mm) high above finished floor level the back wall line shall be omitted.
- 5.11 If the court has a transparent back wall which is 2180 mm or more high above finished wall level, the back wall line shall be marked on the inside (court) face of the wall. No transparent wall with a height of between 2130 mm and 2180 mm (both dimensions plus or minus 5 mm) high above finished floor level shall be allowed.
- 5.12 If the court has a solid back wall, the back wall line shall ideally be so shaped as to deflect any ball striking it or shall be marked on the bottom edge of a sounding board not less than 200 mm deep across the full width of the court. Any such sounding board may project up to 5mm into the court.

Side Walls

- 5.13 There shall be one court marking on each side wall, the side wall line. The line shall join the ends of the front wall line and the back wall line. If the back wall line is omitted as allowed above, the side wall line shall join the ends of the front wall and an imaginary back wall line. The side wall lines shall not project into the court but should ideally be so shaped as to deflect any balls striking them.
- 5.14 If the court has a transparent side wall it is recommended that the wall extends to a minimum height of 5250 mm above the floor for at least the first 2000 mm back from the front wall.

Floor

- 5.15 There shall be four court markings on the floor:
 - 5.15.1 the Short Line
 - 5.15.2 the Half Court Line
 - 5.15.3 the Service Boxes (2).
- 5.16 Court markings on the floor shall be flush with the finish and be non-slip.
- 5.17 The Short Line shall be parallel to the front and back walls of the court. The distance to the nearest edge of the Short Line from the Back Wall shall be 4260 mm. The Short Line shall be marked for the full width of the court.
- 5.18 The Half Court Line shall be parallel to and equidistant from the side walls. It shall run from the back wall to the Short Line.

- 5.19 There shall be two Service Boxes, one on each side of the court behind the Short Line. Each service box shall be square with internal sides of 1600 mm and shall be bounded on three sides by lines (one of each shall be a part of the short line) and on the fourth side by one of the side walls).

6. COURT WALLS

Construction

- 6.1 Each wall of the court shall be of the same construction over the whole of the playing area except as allowed under 3.2 above. Adjacent walls need not be of the same construction.

Strength

- 6.2 The walls of the court and all components of them shall be capable of withstanding all the stresses which may be placed upon them in normal play and shall not suffer any permanent or temporary damage as a result of:

6.2.1 The impact of balls or rackets:

6.2.2 The impact of players defined as equivalent to that of a human body with a mass of 100kg and a coefficient of absorption of 47% (i.e. 47% of the impact energy is absorbed by the body and 53% transmitted to the wall), travelling at the moment of impact at a speed of 4.5 metres per second and striking the wall at right angles to it over an area of not more than 0.25 square metres at a height to the centre of the impact area of 1.47 metres (plus or minus 50 mm) over the whole of its length.

- 6.3 Where courts have transparent walls they shall be constructed of safety materials tested in accordance with the appropriate national standard to a test energy equivalent to that defined in 6.2.2 above and shall meet the stated requirements for safe breakage.

- 6.4 In the absence of any National Standards the requirements of British Standards BS6206 - 1981, German DIN 18038, North American ANSI Z97, BOCA 1984 and UBC 1991 are among those considered acceptable.

Deflection of Court Walls

- 6.5 The walls of the court shall not deflect under the impact of the ball in normal play to such an extent or in such a manner than the rebound of the ball is affected.

- 6.6 The walls may deflect under the impact of players if it is necessary for their structural integrity that they should do so; however, they should not deflect to such an extent or in such a manner so as to affect the safety of the players, officials or spectators.

- 6.7 Any wall which deflects as above shall return to its original static position within one second of the initial impact and shall not suffer any breakage nor any permanent or temporary damage as a result of the deflection.

Finishes

- 6.8 All playing walls of the court shall have a hard smooth finish.
- 6.9 Any front or side walls, or any transparent panel in the playing surface of the front or side walls, shall be treated and/or lit in such a manner as to make it non-reflecting when viewed from inside the court.

Reflectance

- 6.10 The average reflectance of the front and side walls shall not be less than 50% at any point when in a clean condition.
- 6.11 The reflectance of the front and side walls shall not vary at any point by more than plus or minus 5% of the average reflectance.

Ball Rebound

- 6.12 The ball shall rebound truly on striking all parts of the playing walls. The ball rebound shall be consistent over the whole area of each wall.
- 6.13 All wall surfaces including transparent materials shall have surface friction such that the pace and wall angle characteristics are equivalent to that encountered in a plaster court.

Joints in Playing Surfaces

- 6.14 Any open joint in the finish of a wall of panel construction shall:
 - 6.14.1 not deflect the rebound of the ball in any way
 - 6.14.2 not be wider than 2 mm in the plane of the wall surface
 - 6.14.3 be constructed in such a manner as to ensure that adjacent areas of the finish cannot move relative to one another at right angles to the plane of the wall following the impact of the ball, a racket or a player, except in the case of doors in transparent walls as allowed by clause 7.5 of this Specification.

Wall to Wall Junctions

- 6.15 There shall be no protrusions of any kind into the court at the junction of one wall with another.

Wall to Floor Junctions

- 6.16 There shall be no protrusion of any kind into the court at the junction of any wall of the court with the floor. An expansion joint may be provided at the junction of any wall of the court with the floor, but this shall not exceed 6 mm in any dimension or at any point where the adjoining surfaces are fixed or 12 mm when a moveable wall is used.

Moveable walls

- 6.17 While courts are provided with moveable walls these walls shall comply in all aspects with the above as if they are of a permanent construction.

7. THE DOOR

Position of the Door

- 7.1 It is recommended that the door to the court is located in the middle of the back wall, but in any event should be in the middle third and shall open into the court.

Inside Surface of the Door

- 7.2 The inside surface of the door shall be plane and shall be flush with the adjacent wall surfaces when the door is closed. It shall be fitted with a flush handle and a restraining device which shall stop the door opening through 180 degrees and hitting the court wall.
- 7.3 The door shall match the colour, texture and ball rebound characteristics of the adjacent wall surfaces as closely as possible and shall be fitted with a latch or other mechanism which will prevent the door opening following an impact of a player with it on the court side.

Size of the Door

- 7.4 The door shall not normally be more than 900 mm wide and 2130 mm high. Note should be taken that local conditions may require disabled access greater than this which should be referred to manufacturers when transparent materials are being used.

Finger Traps with Transparent Doors

- 7.5 The amount by which the edge of any transparent door, or adjacent transparent panel, deflects relative to any part of the frame or edge of any adjacent panel following an impact equivalent to that of a simulated human body with a mass of 100 kg and a coefficient of absorption of 47% (i.e. 47% of the impact energy is absorbed by the body and 53% transmitted to the wall) striking the door or the transparent panel at right angles to it shall not exceed:
- 7.5.1 the thickness of the transparent panel plus 2 mm at an impact velocity of 3 metres per second
- 7.5.2 the thickness of the transparent panel plus 12 mm at an impact velocity of 4.5 metres per second.

8. THE FLOOR

Finish

- 8.1 The floor shall be hard, smooth, have limited spring and provide a firm footing in normal play.
- 8.2 The floor shall either be:
 - 8.2.1 Able to absorb small amounts of moisture without becoming slippery, or;
 - 8.2.2 If provided with an impervious surface be tested in accordance with appropriate National Standards to demonstrate adequate slip resistance in wet conditions.
- 8.3 In the absence of any National Standards the requirements of the German DIN 18032 Part 2 when tested in wet conditions is considered acceptable.
- 8.4 The floor shall be kept clean of all rubber, dust particles and other depositions which may reduce its slip resistance.

Resilience

- 8.5 The bounce of the ball shall be of even height and pace over the whole area of the floor.
- 8.6 When viewed from vertically above the line of flight of the ball, the linear path of the ball shall not be affected when it bounces on the floor.

Colour and Reflectance

- 8.7 The floor shall have a matt finish.
- 8.8 The floor shall have a natural wood finish or be otherwise coloured as below with a minimum reflectance value of 50% + or - 10%.

9. THE CEILING AND OUT OF COURT AREAS

Shape of the Ceiling

- 9.1 The ceiling shall be a simple shape against which the players shall be able to sight the ball without difficulty.

Ceiling Finish

- 9.2 The ceiling shall have a plain matt finish and shall be white or a light colour against which the players shall be able to sight the ball without difficulty. The minimum reflectance value shall be 80% as below and for the purposes of this paragraph the ceiling shall include all areas in view from the court against which players may have to sight the ball.

Roof Lights

- 9.3 There shall be no windows or other areas of glazing over any part of the court. If windows are provided in any walls above or adjoining the court they shall be provided with blinds.

Out Of Court Wall Areas

- 9.4 The walls of the court may be extended upwards as required but shall not project into the space above the court. Any wall so extended upwards shall have a plain matt finish and shall be white or a light colour against which the players shall be able to sight the ball without difficulty with a minimum reflectance value of 50% as below.

10. THE USE OF COLOUR AND DESIGNS - See Appendix 5

- 10.1 There shall be no more than three different colours on the wall playing surfaces within the court.
- 10.2 Each of the side walls shall be of one colour and each side wall shall be the same colour.
- 10.3 The front wall may be two colours, one below and one above the service line. The front wall colours need not be the same colour as the side wall colours.
- 10.4 The floor shall have no more than two colours and each colour shall be bounded on at least two sides by the floor markings. The use of colours shall be symmetrical about the half court line. Natural wood materials shall be considered to be of one colour providing the whole complies with clause 10.5.
- 10.5 All colours shall have a minimum reflectance value of 50% and all colours shall be of the same reflectance value + or - 10%.
- 10.6 Colours will be permitted on all new and existing courts providing that the average illumination does not fall below the recommended standard of 500 lux or the minimum standard of 300 lux.
- 10.7 Out of court wall surfaces shall have a reflectance value the same or higher than any of the colours used on the play wall surfaces.
- 10.8 The ceiling shall have a minimum reflectance value of 80%.
- 10.9 Stripes or patterns of any type will not be permitted on the wall playing surfaces except on the front wall at a minimum height of 3600 mm above the floor where a logo, club or sponsors name may be used providing it is not more than 750 mm square and is located central on the front wall.
- 10.10 A logo, club or sponsors name on the floor will not normally be permitted however individual designs may be specifically approved by the WSF upon request.
- 10.11 The minimum reflectance value of any of the colours used in any logo or name shall be 30%.
- 10.12 The tin may be of any colour and contain advertising, logos, club or sponsors names providing no part has a reflectance value of less than 30%.

- 10.13 The court play lines may be any colour providing they contrast with all colours used on adjoining play surfaces. Wall play lines need not be the same colour as floor play lines.
- 10.14 Patterns and coaching aids on either the floor or the walls will not normally be permitted however individual designs may be specifically approved by the WSF upon request and following play testing to determine ball visibility.
- 10.15 All lines colours or other markings on the floor shall be non slip in accordance with the Squash Court Specification.

11. LIGHTING

Lighting Installation

- 11.1 The court shall be lit by artificial light. The level of illumination measured 1000 mm above the finished floor shall be:-
 - 11.1.1 Recommended standard 500 lux
 - 11.1.2 Minimum standard 300 lux
 - 11.1.3 TV standard 1200 lux
- 11.2 The walls of the court shall be lit in such a way as to appear evenly and uniformly illuminated and the lux levels shall not vary at any point by more than 15% from the average level of illumination.
- 11.3 The lighting shall be shadow-free and free from any stroboscopic effects.

Transparent Back Walls

- 11.4 In courts with transparent walls, the level of illumination shall be the same on both sides of the wall.

12. HEATING AND VENTILATION

Temperature

- 12.1 It is recommended that a Squash court and any adjacent spectator areas (including the space for the marker and referee) shall be provided with a heating and/or air conditioning system which is capable of maintaining a temperature of between 10 and 25 degrees Celsius with an ideal range of 15 to 20 degrees Celsius.
- 12.2 Local variations in external temperature and humidity may result in temperatures outside of the above ranges being acceptable to players.

Ventilation System

- 12.3 The court and any adjacent spectator areas (including the space for the marker and referee) shall be provided with a ventilation system which shall provide not less than four complete air changes per hour when the court is in use.

Condensation

- 12.4 The court walls and floor shall be constructed, insulated, heated and/or ventilated in such a way as to ensure that they remain free of condensation when the court and any adjacent spectator area is in use.

Location of Grilles and Other Equipment

- 12.5 The only part of the court which may be used as a location for any heating or ventilation equipment shall be the board on the front wall, provided that the sounding characteristics are maintained and that there are no projections into the court.
- 12.6 No part of any heating or ventilating or other equipment may project into the clear space above the court required by clause 4.4 of this Specification, excepting that equipment may be mounted on the front wall above the playing surface provided that:
- 12.6.1 no part of any such equipment is less than 5400 mm above floor level in the court
- 12.6.2 no part of any such equipment projects more than 150 mm into the clear space above the court
- 12.6.3 no shadows are thrown onto the front wall.

WSF ACCREDITATION SCHEME

The World Squash Federation (WSF) is the governing body for the game of Squash throughout the world and is therefore responsible for the rules of Squash and for setting standards for courts and equipment. In order to continue the process of ensuring that courts are built to appropriate standards, it has introduced a scheme whereby materials and components may be tested against the standards set by the Federation.

Manufacturers of court materials and components may apply for such Accreditation and gain the accolade for their product "WSF Approved and Certified". Details of the scheme are available from:

**World Squash Federation
6 Havelock Road
Hastings
East Sussex TN34 1BP
England**

**Tel: (44) 1424 429245
Fax:(44) 1424 429250
E-mail: squash@worldsquash.org**

WSF ACCREDITED COMPANIES

The following companies hold a valid WSF Approval in respect of the products or components listed. No other company is authorised to describe its product or products as being approved in any way by the World Squash Federation.

If you have any queries or need any further information regarding WSF Accredited Companies, please contact the World Squash Federation Head Office.

A Best “Doubleplay” Standard Glass Back Wall & Door

A. Best Enterprises, Inc.

12670 East 132nd Avenue

Brighton

CO 80601-7111

USA

Tel: (1) 303 659 4477

Fax: (1) 303 659 4488

E-mail: brian@glasswalls.com

Website: www.glasswalls.com

Contact:

Brian Richy

Airthrust Pneumatic Squash Court Flooring System

Airthrust Pneumatic Rubber Pads & Batten Flooring System

Action Floor Systems, LLC.

4781 Highway 51

Mercer

Wisconsin 54547

USA

Tel: (1) 715 4763512

Fax: (1) 715 4763585

E-mail: info@actionfloors.com

Website: www.actionfloors.com

Contact:

Gary A. Stephenson

Altempco Tempered Glass Back Walls

Hollman, Inc.

1825 Walnut Hill Lane

Suite 110

Irving

Texas 75038

USA

Tel: (1) 972 331 2800

Fax: (1) 972 331 2921

E-mail: tomf@hollman.com

Website: www.hollman.com

Contact:

Tom Fuchs

**Armourcoat Squash Court Plaster
Armourcoat Sounding Board System**

Armourcoat Ltd

Morewood Close
London Road
Sevenoaks
Kent TN13 2HU
England

Tel: (44) 1732 460668

Fax: (44) 1732 450930

E-mail: marketing@armourcoat.co.uk

Website: www.armourcoat.com

Contact:

Duncan MacKellar

**ASB Squashcourts Wall Panel System & Rainbow Court
ASB Pro and ASB Freestanding Glass Back Walls
ASB Sports Floor
ASB Moveable Walls
ASB Sensitive Tin
ASB Glass Court**

ASB-Systembau Horst Babinsky GmbH

Fabrikstr. 14
Stein an der Traun
D-83371
Germany

Tel: (49) 8621 98740

Fax: (49) 8621 987420

E-mail: Babinsky@ASBSquash.com

Website: www.asbsquash.com

Contact:

**Horst Babinsky or
Markus Gaebel**

Combatwall Plaster Coat System

Harrison Industries

Harrison House
AB/8 Safdarjung Enclave
New Delhi 110 029
India

Tel: (91) 11 2610 5426

Fax: (91) 11 2616 9064

Email: harrison@touchtelindia.net, info@harrisonsport.com

Website: www.harrisonsport.com

Contact:

Ashu J. Aggarwal

**Courtwall Plaster System
McWil Squash Court Panels
McWil Synthetic Squash Floor
McWil Courtwall 4-sided Glass Court
McWil Courtwall 4-panel-fin Glass Back Wall**

McWil-Courtwall International

Zedlitzgasse 5/101
A-1010 Vienna
Austria

Tel: (43) 699 1002 9506

Fax: (43) 1 533 3332

E-mail: info@courtwall.com

Website: www.courtwall.com & www.mcwilcourt.com

Contact:

Wolfgang Denk

CRS Glass Back Walls

CRS Products International Inc.,

10565 - 111 Street
Edmonton
Alberta T5H 3E8
Canada

Tel: (1) 780 484 2786

Fax: (1) 780 484 5827

E-mail: sales5@crsproducts.com

Website: www.crsproducts.com

Contact:

Howard Rankin

**Ellis Pearson Glass Back Walls
Respatex Squash Court Panel System**

Prospec Court Systems

Manor House
Manor Way
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Fiberesin High Density 28mm and 38mm Wall Panels

Fiberesin Industries Inc.

Box 88
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53066-0088
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Tel: (1) 262 567 4427

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Hardmaas Squash Back Walls Types 95-II & Coco-95B

Hardmaas B.V.

Panovenweg 21
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JE Tiel
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Tel: (31) 344 679683

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HARO Sports Model Melbourne 65 Flooring

Hamberger Industrierwerke GmbH / HARO Sports

PO Box 10 03 53
83003 Rosenheim
Germany

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Website: www.haro-sports.de

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Hollman's Panelised Squash Courts

Hollman Inc.

1825 Walnut Hill Lane
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Moldrup 22mm Hevea Squash Flooring

Moldrup Timber Pte Ltd

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PFG 2-Panel & 4-Panel Glass Back Walls

GSA Armourplate

PO Box 1046
Springs, 1560
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Tel: (27) 11 360 1199

Fax: (27) 11 360 1182

E-mail: kevins@pfg.co.za

Website: www.pgggroup.co.za

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Prestige Resi-Sleeper, Resi-Panel, Bi-Power Sleeper and Bi-Power Panel Flooring Systems

Prestige Sports Systems

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SylvaSquash Flooring System

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Jesper S. Langballe

APPENDIX 1

DESCRIPTION AND DIMENSIONS OF A SINGLES COURT

DESCRIPTION

A Squash Court is a rectangular box with four vertical walls of varying height; being the Front Wall, Side Walls and Back Wall. It has a level floor and a clear height above the court area.

DIMENSIONS

Length of court between playing surfaces	9750 mm
Width of court between playing surfaces	6400 mm
Diagonal	11665 mm
Height above floor to lower edge of Front Wall Line	4570 mm
Height above floor to lower edge of Back Wall Line	2130 mm
Height above floor to lower edge of Service Line on Front Wall	1780 mm
Height above floor to upper edge of Board	480 mm
Distance to nearest edge of Short Line from Back Wall	4260 mm
Internal dimensions of Service Boxes	1600 mm
Width of all lines and the Board	50 mm
Minimum clear height above the floor of the court	5640 mm

NOTES

1. The Side Wall is angled between the Front Wall Line and the Back Wall Line.
2. The Service Box is a square formed by the Short Line, the Side Wall and two other lines marked on the floor.
3. The length, width and diagonal of the court are measured at a height of 1000 mm above the floor.
4. It is recommended that the Front Wall Line, Side Wall Line, Back Wall Line and Board are shaped so as to deflect any ball that strikes them.
5. The Board shall not project from the Front Wall by more than 45 mm.
6. It is recommended that the door to the court is in the centre of the Back Wall.
7. The general configuration of a Squash Court, its dimensions and its markings are illustrated on the diagram.

CONSTRUCTION

A Squash Court may be constructed from a number of materials providing they have suitable ball rebound characteristics and are safe for play; however, the WSF publishes a Squash Court Specification which contains recommended standards. The standards must be met for competitive play as required by the appropriate National Governing Body of Squash.

APPENDIX 2

DESCRIPTION AND DIMENSIONS OF A DOUBLES COURT

DESCRIPTION

A Squash Court is a rectangular box with four vertical walls of varying height; being the Front Wall, Side Walls and Back Wall. It has a level floor and a clear height above the court area.

DIMENSIONS

Length of court between playing surfaces	9750 mm
Width of court between playing surfaces	7620 mm
Diagonal	12375 mm
Height above floor to lower edge of Front Wall Line	4570 mm
Height above floor to lower edge of Back Wall Line	2130 mm
Height above floor to lower edge of Service Line on Front Wall	1780 mm
Height above floor to upper edge of Board	480 mm
Distance to nearest edge of Short Line from Back Wall	4260 mm
Internal dimensions of Service Boxes	1600 mm
Width of all lines and the Board	50 mm
Minimum clear height above the floor of the court	5640 mm

NOTES

1. The Side Wall is angled between the Front Wall Line and the Back Wall Line.
2. The Service Box is a square formed by the Short Line, the Side Wall and two other lines marked on the floor.
3. The length, width and diagonal of the court are measured at a height of 1000 mm above the floor.
4. It is recommended that the Front Wall Line, Side Wall Line, Back Wall Line and Board are shaped so as to deflect any ball that strikes them.
5. The Board shall not project from the Front Wall by more than 45 mm.
6. It is recommended that the door to the court is in the centre of the Back Wall.
7. The general configuration of a Squash Court, its dimensions and its markings are illustrated on the diagram.

CONSTRUCTION

A Squash Court may be constructed from a number of materials providing they have suitable ball rebound characteristics and are safe for play; however, the WSF publishes a Squash Court Specification which contains recommended standards. The standards must be met for competitive play as required by the appropriate National Governing Body of Squash.

APPENDIX 3

SPECIFICATIONS OF A STANDARD YELLOW DOT SQUASH BALL

The following specification is the standard for a yellow dot ball to be used under the Rules of Squash.

Diameter	(millimetres)	40.0 + or - 0.5
Weight	(grams)	24.0 + or - 1.0
Stiffness	(N/mm) @ 23 degrees C.	3.2 + or - 0.4
Seam Strength	(N/mm)	6.0 minimum
Rebound Resilience	- from 100 inches/254 centimetres	
@ 23 degrees C.	12% minimum	
@ 45 degrees C.	26% - 33%	

NOTES

1. The full procedure for testing balls to the above specification is available from the WSF. The WSF will arrange for testing of balls under standard procedures if requested.
2. No specifications are set for faster or slower speeds of ball, which may be used by players of greater or lesser ability or in court conditions which are hotter or colder than those used to determine the yellow dot specification. Where faster speeds of ball are produced they may vary from the diameter and weight in the above specification of a standard yellow dot squash ball. It is recommended that balls bear a permanent colour code or marking to indicate their speed or category of usage. It is also recommended that balls for beginners and improvers conform generally to the rebound resilience figures below.

Beginner	Rebound resilience @ 23 degrees C	not less than 17%
	Rebound resilience @ 45 degrees C	36% to 38%
Improver	Rebound resilience @ 23 degrees C	not less than 15%
	Rebound resilience @ 45 degrees C	33% to 36%

Specifications for balls currently fulfilling these requirements can be obtained from the WSF on request

The speed of balls may also be indicated as follows

Super slow -	Yellow Dot
Slow -	White Dot or Green Dot
Medium -	Red Dot
Fast -	Blue Dot

3. Yellow dot balls which are used at World Championships or at similar standards of play must meet the above specifications but additional subjective testing will be carried out by the WSF with players of the identified standard to determine the suitability of the nominated ball for Championship usage. The slowest speed of balls intended for elite players and Championship usage may if required be identified by a double yellow dot. Such balls will be deemed for the purposes of this specification to be yellow dot squash balls.
4. From 1 May 2001, yellow dot balls of a larger diameter than 40.0mm specified above, but which otherwise meet the specification, may be authorised for use in tournaments by the official organising body.

APPENDIX 4

DIMENSIONS OF A SQUASH RACKET

DIMENSIONS

Maximum length	- 686 mm
Maximum width, measured at right angles to the shaft	- 215 mm
Maximum length of strings	- 390 mm
Maximum strung area	- 500sq. cms
Minimum width of any frame or any structural member (measured in plane of strings)	- 7 mm
Maximum depth of any frame or other structural member (measured at right angles to plane of strings)	- 26 mm
Minimum radius of outside curvature of frame at any point	- 50 mm
Minimum radius of curvature of any edge of frame or other structural member	- 2 mm

WEIGHT

Maximum weight	- 255 gm
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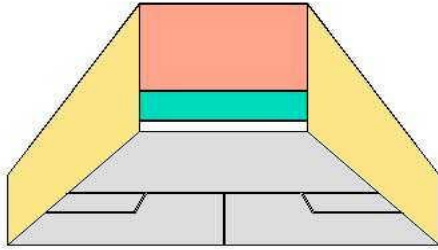
CONSTRUCTION

- a) The head of the racket is defined as that part of the racket containing or surrounding the strung area.
- b) Strings and string ends must be recessed within the racket head or, in cases where such recessing is impractical because of racket material, or design, must be protected by a securely attached bumper strip.
- c) The bumper strip must be made of a flexible material which cannot crease into sharp edges following abrasive contact with the floor or walls.
- d) The bumper strip shall be of a white, colourless or unpigmented material. Where for cosmetic reasons a manufacturer chooses to use a coloured bumper strip, then the manufacturer shall demonstrate to the satisfaction of the WSF that this does not leave a coloured deposit on the walls or floor of the court after contact.
- e) The frame of the racket shall be of a colour and/or material which will not mark the walls or floor following an impact in normal play.
- f) Strings shall be gut, nylon or a substitute material, provided metal is not used.
- g) Only two layers of strings shall be allowed and these shall be alternately interlaced or bonded where they cross, and the string pattern shall be generally uniform and form a single plane over the racket head.
- h) Any grommets, string spacers or other devices attached to any part of the racket shall be used solely to limit or prevent wear and tear or vibration, and be reasonable in size and placement for such purpose. They shall not be attached to any part of the strings within the hitting area (defined as the area formed by overlapping strings).
- i) There shall be no unstrung areas within the racket construction such that will allow the passage of a sphere greater than 50mm in diameter.
- j) The total racket construction including the head shall be symmetrical about the centre of the racket in a line drawn vertically through the head and shaft and when viewed face on.
- k) All changes to the racket specification will be subject to a notice period of two years before coming into force.

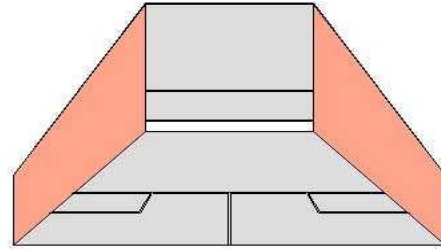
The World Squash Federation shall rule on the question of whether any racket or prototype complies with the above specifications, or is otherwise approved or not approved for play and will issue guidelines to assist in the interpretation of the above.

APPENDIX 5

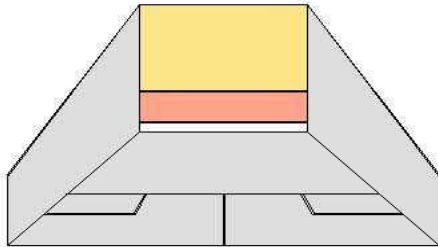
THE USE OF COLOUR AND DESIGN



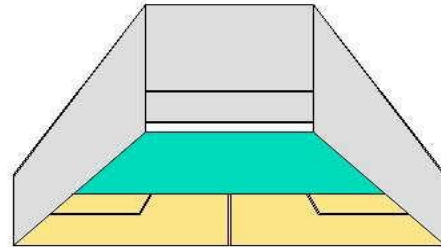
1. There shall be no more than three different colours on the floor and wall playing surfaces within one court.



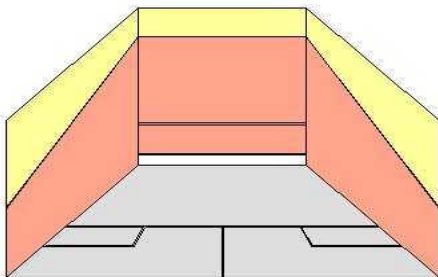
2. Each of the side walls shall be of one colour and each side wall shall be the same colour.



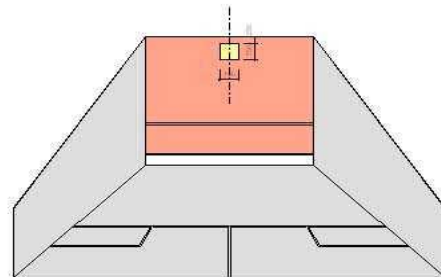
3. The front wall may be two colours, one below and one above the service line. The front wall colours need not be the same colour as the side wall colours.



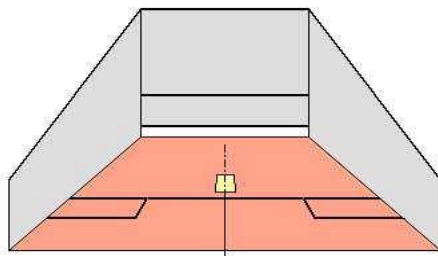
4. The floor shall have no more than two colours and each colour shall be bounded on at least two sides by the floor markings. The use of colours shall be symmetrical about the half court line.



5. All colours shall have a min. reflectance value of 50%, and all colours shall be of the same reflectance value + or - 10%.
 6. Colours will be permitted on existing courts providing they do not reduce the average illumination below the recommended min. standard of 500 lux
 7. Out of court wall surfaces shall have a reflectance value the same or higher than any of the colours used on the play wall surfaces.
 8. The ceiling shall have a minimum reflectance value of 80%.

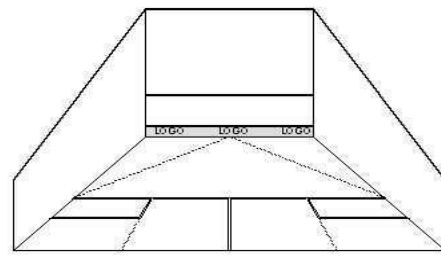


9. Stripes or patterns of any type will not be permitted on the wall playing surfaces except on the front wall at a min. height of 3600mm above the floor where a logo, club or sponsors name may be used providing it is not more than 750mm square and is located central on the front wall.



10. A logo, club or sponsors name on the floor will not normally be permitted, however individual designs may be specifically approved by the WVSF upon request.

11. The minimum reflectance value of any of the colours used in any logo or name shall be 30%.



12. The tin may be of any colour and contain advertising, logos, club or sponsor names providing no part has a reflectance value of less than 30%.

13. The court play lines may be any colour providing they contrast with all used on adjoining play surfaces. Wall play lines need not be the same as floor play lines.

14. Patterns and coaching aids on either the floor or the walls will not normally be permitted, however individual designs may be specifically approved by WVSF upon request and following play testing to determine ball visibility.

15. All lines, colours or other markings on the floor shall be non slip in accordance with the Squash Court Specification.

APPENDIX 6

GUIDANCE ON PORTABLE TRANSPARENT COURTS - FORTHCOMING