



## **PROCEDURES FOR OBTAINING 2006 ITF APPROVAL OF TENNIS BALLS**

### **1. INTRODUCTION**

This document describes the procedures for companies who are involved in the manufacturing or marketing of tennis balls and who are interested in obtaining ITF Approval of their products.

The official ITF Rules of Tennis state that any ball to be used in a tournament which is played according to the Rules must be named on the list of balls which have been tested and approved as conforming to the specifications laid down in Appendix I of the Rules of Tennis and as issued by the ITF. See Appendix A of this document.

Whilst not a requirement of the Rules of Tennis, the ITF has commenced the approval of Introductory Tennis Balls in accordance with the specifications published on page 27 of the 2005 ITF Approved Tennis Balls and Court Surfaces Booklet.

### **2. TESTING METHODS AND SPECIFICATIONS**

All testing, administration and calibration procedures adopted by the ITF Technical Centre in testing tennis balls for ITF Approval are carried out and managed in accordance with ISO 9001:2000.

All balls submitted for ITF Approval will be tested strictly in accordance with the testing methods and specifications laid down in the Rules of Tennis which are applicable at that time. Additional information on the test methods adopted by the ITF are described in the 2005 edition of ITF Approved Tennis Balls and Classified Court Surfaces, which is available from the ITF Technical Centre on request.

Balls will only be approved for inclusion on the list of ITF approved balls if they fully satisfy the requirements for mass, size, compression and bound height, plus the other visual and construction requirements (e.g. colour, stitchless seams, fabric cover) as laid down in Appendix I of the Rules of Tennis.

In addition, the ITF Technical Centre shall test the internal pressure of all pressurised and pressureless tennis balls submitted for approval. If the internal pressure of a pressureless ball exceeds 1 psi (6.895Kpa), the ball would be deemed as lying outside of the official Rules of Tennis and would therefore be non-conforming. Whilst the testing of internal pressure does not form part of the approval process, the ITF reserves the right to fail non-conforming balls.

This action has been necessary to ensure the ITF's integrity and reputation as the sole authority for approving tennis balls according to the official ITF Rules of Tennis, and to ensuring that tournament organisers and consumers shall not be misled when purchasing balls based on the List of ITF Approved Tennis Balls.



### 3. LABORATORY

Testing of balls for ITF Approval is only carried out by the ITF Technical Centre in London, UK.

Note: National Associations are not authorised to give approval on behalf of the ITF.

### 4. NOTIFICATION OF RESULTS

The ITF Technical Centre will endeavour to inform manufacturers of the result of testing within three weeks of receiving the required number of ball samples and payment of the testing fee, although this cannot be guaranteed.

### 5. PUBLICATION OF THE LIST OF ITF APPROVED TENNIS BALLS

The ITF publishes a booklet listing all tennis balls that have been submitted and found to conform to the Rules of Tennis. This booklet is published annually in January of each calendar year and the deadline for balls to be included is as follows:

Publication Date	Deadline for inclusion
January 2006	30 <sup>th</sup> November 2005

Note: Ball samples and payment for testing must be received by the ITF at least **three calendar weeks (21 days) prior to the above deadline date** to ensure that sufficient time is allowed for testing.

Whilst all reasonable effort will be made by the ITF to accommodate manufacturers' ball samples that are delayed during transit, samples that are submitted late without the required payment and administrative details risk being omitted from the published listing. It is the responsibility of manufacturers and companies wishing to apply for ITF Approval to ensure timely delivery of their ball samples, payment and duly completed application forms.

To assist tournament organisers and consumers with selecting ITF Approved balls, the published list shall show the ball name as it appears on the packaging.

In addition, the list of ITF Approved balls will be published on the ITF web site, [www.itftennis.com](http://www.itftennis.com). This list will also include a link to a photograph of the ball packaging.

## 6. APPROVAL OF BALL TYPES BY ASSIMILATION

Balls which are marketed under different brand names or which have different markings on either the ball or packaging to a ball which is ITF Approved may also receive ITF Approval without the need for testing, through the process of assimilation.

A senior representative of the manufacturer applying for approval of a ball by assimilation must complete and sign a “Letter of Agreement” which lists the names of balls requiring approval by assimilation and confirming that they are of an identical construction to the ball which has passed the testing procedure during that same year. For the purposes of this requirement the ball must be identical in all aspects to the approved ball, i.e. core construction, fabric cover and adhesive, type, etc. The only variations permitted are cosmetic stamping and packaging variants.

**Balls are only entitled to be given approval by assimilation if they are marketed under the same company’s brand name or names.**

Note: Balls marketed by a company which is a separate organisation to the original manufacturer are not entitled to approval by assimilation and must therefore apply for ITF Approval through the procedures described in this document.

Further conditions for approval of a ball by assimilation are included in the following sections.

## 7. NUMBER OF BALLS TO BE SUBMITTED

All balls submitted for testing and assimilation become the property of the ITF. Should any balls fail the laboratory testing procedure, the ITF Technical Centre will, on request, return the balls to the manufacturer for analysis. The manufacturer will bear the costs of all delivery and transport charges incurred in the return of the balls.

### Standard Tennis Balls

For regular approval of a ball, six dozen (72) balls are required from which the ITF will randomly select two dozen (24) balls for testing.

For balls that are to be approved by assimilation, three (3) samples of the packaging container (including balls) of each ball type to be approved are required.

Note:

- a. Any ball with different markings on either ball or packaging which is not submitted in the above manner will not be included on the published list of ITF approved balls.
- b. If the packaging of an Approved or Assimilated ball changes during the year of Approval, the ITF shall be informed and three (3) samples of the balls in the new containers shall be submitted to the ITF.



## Introductory Tennis Balls

For approval of introductory tennis balls, three dozen (36) balls are required from which the ITF will randomly select one dozen (12) balls for testing.

### 8. PAYMENT FOR TESTING

The cost for ball testing by the ITF for 2006 Approval is **US\$1,850** per ball type. For introductory tennis balls, the fee is **US\$500** per ball type.

There is an additional charge for balls that are approved by assimilation. Each product variation listed in the booklet will be subject to an approval cost of **US\$300**.

Example:

Company X wishes to submit one ball construction for testing and approval, plus two separate ball brands to be approved by assimilation.

Cost for testing of one ball:	US\$ 1,850
Cost for assimilation of two further balls:	<u>US\$ 600</u>
Total:	<b><u>US\$ 2,450</u></b>

A ball which is submitted by a manufacturer and which fails the standard testing procedure can be re-submitted for testing immediately but will be subject to a further testing fee of US\$1,850 which must be paid before the ball is tested.

Payment for ball testing can be made by bankers draft or cheque drawn on a US bank, payable to "ITF Licensing (UK) Ltd" and sent to the ITF Technical Centre in London. Alternatively payment may be made by telegraphic transfer to:

National Westminster Bank plc,  
22 Kings Mall, King Street, Hammersmith, London, W6 0QD, England.  
Account no: 140/2/03197182, sort code 60-50-06.  
Account name: ITF Licensing (UK) Ltd  
IBAN: GB67 NWBK 6073 0103197182  
IBAN BIC: NWBKGB2L

quoting the reference "Ball Approval" and the applicable ITF invoice number.

The ITF will issue an invoice for testing, either in advance (on receipt of completed application forms) or on receipt of payment.

**Important Note: All delivery and transport costs shall be prepaid by the manufacturer, and any additional costs incurred by the ITF will be invoiced to the manufacturer.**

Note: For UK-based companies, VAT shall be payable at the prevailing rate.

## 9. DISCOUNT PAYMENTS FOR ITF FOUNDATION

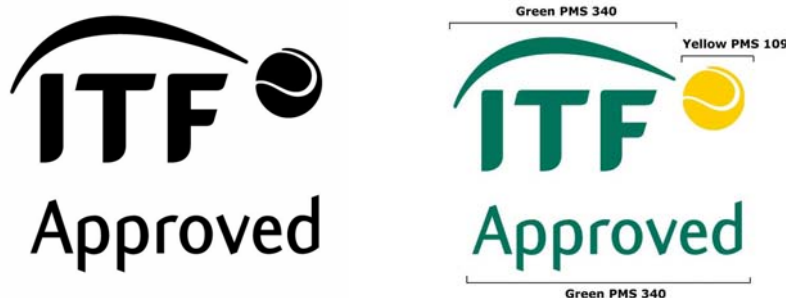
For companies that are members of the ITF Foundation at the time of testing, payments for the testing of one ball are discounted:

2005 Approval	Testing Fee per ball brand US\$	Discounted rates for ITF Foundation	
		General Member US\$	Supporting Member US\$
Approval testing	1,850	1650	1500
Approval by Assimilation	300	300	300
Introductory tennis balls	500	400	300

Note: Information on membership of the ITF Foundation may be obtained from the ITF Technical Centre.

## 10. USE OF “ITF APPROVED” LOGO

The manufacturer is entitled to use the words “ITF Approved” on the product packaging of all balls that have been tested and approved, including those by assimilation.



The logo may be printed in black, white or one single colour. When printed in two colours, the Pantone colours green PMS 340 and yellow PMS 109 shall be used. The artwork is available by email from the ITF Technical Centre upon request.

## 11. RANDOM MARKET AND TOURNAMENT TESTING OF BALLS

In addition to the approval testing of balls submitted by manufacturers, the ITF operates an extended testing procedure to ensure that balls which have met the criteria for ITF Approval continue to meet the standards laid down in the Rules of Tennis. Samples are randomly selected and tested from a variety of sources world wide. This system is operated in association with the ATP and WTA, from whose tournaments balls may be tested.

The ITF, in consultation with manufacturers, has determined a statistical procedure by which such randomly selected tennis balls will be deemed to satisfy the requirements of the ITF Approval procedure in the event that less than 100% of the randomly selected ball sample is found to conform to the Rules of Tennis.

No. of balls in sample	No. of balls failing to conform	Action
12	0-1	None
	2-3	Letter of warning
	4+	Removal of ITF Approval
24	0-2	None
	3-7	Letter of warning
	8+	Removal of ITF Approval
36	0-3	None
	4-11	Letter of warning
	12+	Removal of ITF Approval

The above figures are based on the normal distribution curve with action being taken in the form of either a warning letter to the manufacturer/distributor, or removal of ITF Approval at +/-1 and 2 sigma respectively. Criteria for other sample sizes are calculated accordingly.

Removal of ITF Approval is at all times the sole discretion of the ITF. Such action is normally only taken based on the results of more than one sample of balls taken from a market or tournament.

The ITF reserves the right to withdraw ITF Approval from any ball at any time during the 12-month approval period. In this event, any brands which have been approved by assimilation (see Section 7) to the ball being removed from the ITF Approved list, will also have ITF Approval withdrawn.

A ball which has been removed from the ITF Approved list will not qualify to be included on subsequent lists for a period of six months after the date from which notification of removal was made to the manufacturer.

A manufacturer wishing to submit a ball for re-testing and ITF Approval after that ball has been removed from the list must re-apply in the normal way.

## 12. NOTIFICATION OF NEW PROCEDURES FOR 2007 ITF APPROVAL

Companies should note that additional information is required on the application forms submitted for 2006 ITF Approval. Please see Appendix B for further details.

## 13. FURTHER INFORMATION

For further information on ITF ball testing and Approval procedures please contact:

The Technical Centre, International Tennis Federation  
 c/o ITF Licensing (UK) Ltd  
 Bank Lane, Roehampton,  
 London, SW15 5XZ,  
 England.

Tel: +44 (0) 20 8878 6464  
 Fax: +44 (0) 20 8392 4773  
 Email: [technical@itftennis.com](mailto:technical@itftennis.com)

## APPENDIX A:

### THE RULES OF TENNIS – APPENDIX I – THE BALL

Effective from 1 January 2005

*Note: Please be advised that subject to ratification by the ITF Annual General Meeting in June 2005, Appendix I of the Rules of Tennis 2006 will be amended. Whilst the tennis ball specifications and regulations for making tests have not changed, the new rule is easier to read and provides a more scientifically accurate and coherent document. Further information will be available from the ITF Technical Centre from July 2005.*

- a. The ball shall have a uniform outer surface consisting of a fabric cover and shall be white or yellow in colour. If there are any seams they shall be stitchless.
- b. The ball shall conform to these requirements and have a weight (mass) of more than 1.975 ounces (56.0 grams) and less than 2.095 ounces (59.4 grams).
- c. More than one type of ball is specified. Each ball shall have a bound of more than 53 inches (134.62 cm) and less than 58 inches (147.32 cm) when dropped 100 inches (254.00 cm) upon a flat, rigid surface e.g. concrete. Ball Type 1 (fast speed) shall have a forward deformation of more than .195 inches (.495 cm) and less than .235 inches (.597 cm) and return deformation of more than .265 inches (.673 cm) and less than .360 inches (.914 cm) at 18 lb (8.165 kg) load. Ball Types 2 (medium speed) and 3 (slow speed) shall have a forward deformation of more than .220 inches (.559 cm) and less than .290 inches (.737 cm) and return deformation of more than .315 inches (.800 cm) and less than .425 inches (1.080 cm) at 18 lb (8.165 kg) load. The two deformation figures shall be the averages of three individual readings along three axes of the ball and no two individual readings shall differ by more than .030 inches (.076 cm) in each case.
- d. For play above 4,000 feet (1219 m) in altitude above sea level, two additional types of ball may be used.
  - i. The first type is identical to Ball Type 2 (medium speed) as defined above except that the ball shall have a bound of more than 48 inches (121.92 cm) and less than 53 inches (134.62 cm) and shall have an internal pressure that is greater than the external pressure. This type of tennis ball is commonly known as a pressurised ball.
  - ii. The second type is identical to Ball Type 2 (medium speed) as defined above except that the ball shall have an internal pressure that is approximately equal to the external pressure and have been acclimatised for 60 days or more at the altitude of the specific tournament. This type of tennis ball is commonly known as a zero-pressure or non-pressurised ball.

The third type of ball which is recommended for use for play on any court surface type above 4,000 feet (1219 m) in altitude is the Ball Type 3 (slow speed), as defined above.

- e. All tests for bound, size and deformation shall be made in accordance with the regulations below.

*Case 1: Which ball type should be used on which court surface?*

*Decision: 3 different types of balls are approved for play under the Rules of Tennis, however:*

- a. Ball Type 1 (fast speed) is intended for play on slow pace court surfaces*
- b. Ball Type 2 (medium speed) is intended for play on medium/medium-fast pace court surfaces*
- c. Ball Type 3 (slow speed) is intended for play on fast pace court surfaces*

## **REGULATIONS FOR MAKING TESTS**

- i. Unless otherwise specified all tests shall be made at a temperature of approximately 68° Fahrenheit (20° Celsius) and a relative humidity of approximately 60%. All balls shall be removed from their container and kept at the recognised temperature and humidity for 24 hours prior to testing, and shall be at that temperature and humidity when the test is commenced.
- ii. Unless otherwise specified the limits are for a test conducted in an atmospheric pressure resulting in a barometric reading of approximately 30 inches (76 cm).
- iii. Other standards may be fixed for localities where the average temperature, humidity or average barometric pressure at which the game is being played differ materially from 68° Fahrenheit (20° Celsius), 60% and 30 inches (76 cm) respectively.

Applications for such adjusted standards may be made by any National Association to the International Tennis Federation and, if approved, shall be adopted for such localities.

- iv. In all tests for diameter, a ring gauge shall be used consisting of a metal plate, preferably non-corrosive, of a uniform thickness of one-eighth of an inch (.318 cm). In the case of Ball Type 1 (fast speed) and Ball Type 2 (medium speed) balls there shall be two circular openings in the plate measuring 2.575 inches (6.541 cm) and 2.700 inches (6.858 cm) in diameter respectively. In the case of Ball Type 3 (slow speed) balls there shall be two circular openings in the plate measuring 2.750 inches (6.985 cm) and 2.875 inches (7.302 cm) in diameter respectively. The inner surface of the gauge shall have a convex profile with a radius of one-sixteenth of an inch (.159 cm). The ball shall not drop through the smaller opening by its own weight and shall drop through the larger opening by its own weight.
- v. In all tests for deformation conducted under Rule 3, the machine designed by Percy Herbert Stevens and patented in Great Britain under Patent No. 230250, together with the subsequent additions and improvements thereto, including the modifications required to take return deformations, shall be employed. Other machines may be specified which give equivalent readings to the Stevens machine and these may be used for testing ball deformation where such machines have been given approval by the International Tennis Federation.
- vi. The procedure for carrying out tests is as follows and should take place in the order specified:
  - a. Pre-compression – before any ball is tested it shall be steadily compressed by approximately one inch (2.54 cm) on each of three diameters at right angles to one another in succession; this process to be carried out three times (nine compressions in all). All tests are to be completed within two hours of pre-compression.

- b. Weight (mass) test (as above).
- c. Size test (as in paragraph iv above).
- d. Deformation test – the ball is placed in position on the modified Stevens machine so that neither platen of the machine is in contact with the cover seam. The contact weight is applied, the pointer and the mark brought level, and the dials set to zero. The test weight is placed on the beam in a position that is equivalent to a load of 18 lb (8.165 kg) on the ball, after which the wheel is turned at a uniform speed such that five seconds elapse from the instant the beam leaves its seat until the pointer is brought level with the mark. When turning ceases the reading is recorded (forward deformation). The wheel is turned again until figure ten is reached on the scale (1 inch (2.54 cm) deformation). The wheel is then rotated in the opposite direction at a uniform speed (thus releasing pressure) until the beam pointer again coincides with the mark. After waiting ten seconds, the pointer is adjusted to the mark if necessary. The reading is then recorded (return deformation). This procedure is repeated on each ball across the two diameters at right angles to the initial position and to each other.
- e. Bound test (as above) – measurements are to be taken from the concrete base to the bottom of the ball.



## **APPENDIX B:**

### **LETTER FROM DR STUART MILLER**

**10 May 2005**

Dear Tennis Ball supplier,

#### **NOTIFICATION OF NEW PROCEDURES FOR 2007 ITF APPROVAL**

##### ***Introduction***

Further to discussions held with the ITF Foundation tennis ball manufacturers in 2004, the ITF Technical Commission has recently confirmed its intention to introduce a new system for approving tennis balls, to commence with 2007 ITF Approval.

##### ***The proposal***

The proposal is based on the principle of a two-tier system. The tiers will differentiate between brands on the basis of the minimum quality that can be expected by consumers, the names of which are recommended to be '*ITF Regular*' and '*ITF Premium*' to represent the lower and higher quality categories respectively.

Categories will be differentiated by the tests to which brands are subjected; '*ITF Regular*' brands will retain the existing approval tests, according to existing specifications, whereas brands in the '*ITF Premium*' category will be subject a test of durability in addition to the existing approval tests (again according to the existing specifications). '*ITF Premium*' brands will also be subject to a fair and equitable market testing programme, the results of which will be used to establish whether or not approval is retained. Only '*ITF Premium*' brands will be subject to removal of approval, as it is these brands that are expected to be used at high level recreational and tournament play, where the use is more extreme and quality is more likely to be an issue.

The criteria by which approval is removed would be based on a fair and equitable market testing programme, and follow the guidelines published in the *ITF Approved Tennis Balls and Classified Court Surfaces* booklet, with the proposed modification that a 24-ball sample should be obtained and divided into 2 sub-samples of 12, of which 1 is tested. Should that sample fail to meet the required criteria, then the second sample is tested. If the second sample passes, then the brand will retain its approval, but failure of the second sample will result in approval being removed. Manufacturers will be able to re-submit that brand immediately for approval but a brand for which approval has been removed cannot be produced with identical markings, to allow non-approved balls to be easily identified.

It is known that the properties of balls change with time, even if not used. This is a natural property of all tennis balls; one for which the manufacturer should not be penalised. In this case, a maximum time period following manufacture will be established – in consultation with the industry – after which balls will not be subject to market testing. As market testing samples will be collected independently,



manufacturers would have to agree to print production date codes on packaging to enable the ITF to ensure that the agreed age limit of balls is not exceeded.

### ***Durability***

The rationale for the durability test is to ensure a minimum lifespan for a ball. Different players will use balls in different ways, so durability will have a different practical meaning to different groups. The practical meaning is not necessarily as important as the knowledge that a ball branded '*ITF Premium*' will provide a known and minimum lifespan. Any approval system will lose credibility if balls that have obtained approval become unplayable in a short time.

### ***Cost of obtaining 'ITF Premium' Approval***

This proposal is non profit-seeking. However, to reflect the greater testing required for the '*ITF Premium*' category, the testing fees will need to be increased. In order that we can estimate these costs and identify any problems with the proposed new two-tier system, we intend to operate a "shadow" test during the 2006 approval period.

Therefore, an additional section has been inserted on the enclosed application forms and we request that all manufacturers indicate into which category they would submit each brand for 2006 approval. Your co-operation in completing this additional section of the application form is appreciated.

Further consultation will take place with the tennis industry during the annual ITF Foundation meeting in June 2005, when the proposal will be reviewed and discussed in detail.

It is important to note that this proposal is designed to enhance the quality and credibility of the ITF ball approval programme. The proposal addresses the major limitations of the existing approval system, while providing several benefits to the ITF, ball manufacturers, and most importantly, consumers.

If you have any questions regarding the existing or proposed new tennis ball approval procedures, please do not hesitate to contact me.

Yours sincerely

**Stuart Miller**

Technical Manager  
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