

SECTION IV - FIELD EVENTS

RULE 180

General Conditions – Field Events

Practice Trials at the Competition Area

1. At the competition area and before the beginning of the event, each athlete may have practice trials. In the case of throwing events, the practice trials will be in draw order and always under the supervision of the Judges.

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A draw shall be made to decide the order in which competitors shall take their trials and this order should be printed in the programme. The Judges shall have the power to alter this order. Competitors cannot hold over any of their trials to a subsequent round, except in the High Jump and Pole Vault.

2. Once a competition has begun, athletes are not permitted to use, for practice purposes, as appropriate,
 - (a) the runway or take-off area;
 - (b) vaulting poles;
 - (c) implements;
 - (d) the circles or the ground within the sector with or without implements.

Markers

3.
 - (a) In all Field Events where a runway is used, markers shall be placed alongside it, except for High Jump where the markers can be placed on the runway. An athlete may use one or two markers (supplied or approved by the Organising Committee) to assist him in his run-up and take-off. If such markers are not supplied, he may use adhesive tape but not chalk or similar substance nor anything which leaves indelible marks.
 - (b) For throws made from a circle, an athlete may use one marker only. This marker may be placed only on the ground in the area immediately behind or adjacent to the circle. It must be temporary, in position only for the duration of each

athlete's own trial, and shall not impair the view of the judges. No personal markers may be placed in or beside the landing area.

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NOTE: In the Long and Triple Jumps, and in the Pole Vault, athletes may request that a line be laid down alongside the runway, using tape which is a maximum of 5cm in width and 10cm in length. For the Long & Triple Jumps, this line is to be placed at 3m from the scratch line and for the Pole Vault at 5m from the zero mark. If more than one take-off board is to be used for the Triple Jump, it shall only be placed for the board further (furthest) from the landing area.

Performance Markers

4. A distinctive flag or marker may be provided to mark the existing World Record and, when appropriate, the existing Area, National or Meeting Record.

Competing Order and Trials

5. The athletes shall compete in an order drawn by lot. Failure to do so shall result in the application of Rules 125.5 and 145.2. If there is a preliminary round, there shall be a fresh drawing of lot for the final (see also Rule 180.6).

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A draw shall be made to decide the order in which competitors shall take their trials and this order should be printed in the programme. The Judges shall have the power to alter this order. Competitors cannot hold over any of their trials to a subsequent round, except in the High Jump and Pole Vault.

6. Except for the High Jump and Pole Vault, no athlete shall have more than one trial recorded in any one round of trials of the competition.

In all Field Events, except for the High Jump and Pole Vault, where there are more than eight athletes, each athlete shall be allowed three trials and the eight athletes with the best valid performances shall be allowed three additional trials.

In the case of the last qualifying place, if two or more athletes

have the same best performances, Rule 180.22 shall be applied. If it is thus determined that there has been a tie, the tying athletes shall be allowed three additional trials.

Where there are eight athletes or fewer, each athlete shall be allowed six trials. If more than one fail to achieve a valid trial during the first three rounds of trials, such athletes shall compete in subsequent rounds of trials before those with valid trials, in the same relative order according to the original draw.

In both cases:

- (a) the competing order for the last three rounds of trials shall be in the reverse ranking order recorded after the first three rounds of trials;

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The competition may be decided in either of the following ways:

- (a) Each competitor being allowed from three to six trials; or
- (b) Each competitor being allowed three trials and the three to eight best being allowed three more trials (see Rule 120(9)). In the event of a tie for the final place(s), any competitor so tying shall be allowed the three additional trials. (Tying means, in this connection, achieving the same distance and Rule 126(3) and 130(3) should not, therefore, be applied.) To qualify for these further trials the athlete must have achieved a valid performance. The competition conditions must be explained to the competitors before the event begins.

- (b) when the competing order is to be changed and there is a tie for any position, those tying shall compete in the same relative order according to the original draw.

Note (i): For Vertical Jumps, see Rule 181.2

Note (ii): If one or more athlete(s) is permitted by the Referee to continue in a competition under protest in accordance with Rule 146.5, such athletes shall compete in all subsequent rounds of trials before all other continuing in the competition and if more than one, in the same relative order according to the original draw.

Note (iii): It is permissible for the relevant governing body to specify in the regulations for a competition where there are more

than eight athletes in an event, that all athletes may have four trials.

Recording of Trials

7. Trials shall be recorded as follows:

- (a) except in High Jump and Pole Vault, a valid trial shall be indicated by the measurement taken. In High Jump and Pole Vault, it shall be indicated by the symbol "O";
- (b) a failure shall be indicated by the symbol "X";
- (c) if the athlete forgoes a trial (a "pass") it shall be indicated by the symbol "-".

Completion of Trials

8. The judge shall not raise a white flag to indicate a valid trial until a trial is completed.

The completion of a valid trial shall be determined as follows:

- (a) in the case of vertical jumps, once the judge has determined that there is no failure according to Rules 182.2, 183.2 or 183.4;
- (b) in the case of horizontal jumps, once the athlete leaves the landing area in accordance with Rule 185.42;
- (c) in the case of throwing events, once the athlete leaves the circle or runway in accordance with Rule 187.17.

Qualifying Competition (Preliminary Round)

- 9. A preliminary round shall be held in Field Events in which the number of athletes is too large to allow the competition to be conducted satisfactorily in a single round (final). When a preliminary round is held, all athletes shall compete in, and qualify through, that round. Performances accomplished in a preliminary round shall not be considered as part of the final.
- 10. The athletes shall normally be divided into two or more groups at random, but where possible so that representatives of each nation or team shall be placed in different groups. Unless there are facilities for the groups to compete at the same time and under the same conditions, each group should start its practice trials immediately after the previous group has finished.
- 11. It is recommended that, in competitions of more than three days, a rest day be provided between qualifying competitions and the finals in the vertical jumping events.
- 12. The conditions for qualifying, the qualifying standard and the number of athletes in the final, shall be decided by the Technical

Delegate(s). If no Technical Delegate(s) have been appointed, the conditions shall be decided by the Organising Committee. For competitions conducted under Rules 1.1(a), (b), (c) and (f), there should be at least 12 athletes in the final.

13. In a qualifying competition, apart from the High Jump and the Pole Vault, each athlete shall be allowed up to three trials. Once an athlete has achieved the qualifying standard, he shall not continue in the qualifying competition.
14. In the qualifying competition for the High Jump and the Pole Vault, the athletes, not eliminated after three consecutive failures, shall continue to compete according to Rule 181.2 until the end of the last trial at the height set as the qualifying standard, unless the number of athletes for the final has been reached as defined in Rule 180.12.
15. If no athletes, or fewer than the required number of athletes, achieve the pre-set qualifying standard, the group of finalists shall be expanded to that number by adding athletes according to their performances in the qualifying competition. In the case of the last qualifying place, if two or more athletes have the same best performances in the overall results of the competition, Rule 180.22 or 181.8 as appropriate shall be applied. If it is thus determined that there has been a tie, the tying athletes shall be placed in the final.
16. When a qualifying competition for the High Jump and Pole Vault is held in two simultaneous groups, it is recommended that the bar be raised to each height at the same time in each group. It is also recommended that the two groups be of approximately equal strength.

Obstruction

17. If, for any reason, an athlete is hampered in a trial, the Referee shall have the authority to award him a substitute trial.

Delay

18. An athlete in a Field Event who unreasonably delays making a trial renders himself liable to have that trial disallowed and recorded as a failure. It is a matter for the Referee to decide, having regard to all the circumstances, what is an unreasonable delay.

The official responsible shall indicate to an athlete that all is ready for the trial to begin, and the period allowed for this trial

shall commence from that moment. If an athlete subsequently decides not to attempt a trial, it shall be considered a failure once that period allowed for the trial has elapsed.

For the Pole Vault, the time shall begin when the crossbar has been adjusted according to the previous wishes of the athlete. No additional time will be allowed for further adjustment.

If the time allowed elapses after an athlete has started his trial, that trial should not be disallowed.

The following times should not normally be exceeded:

Individual Events

Number of athletes left in the competition

	High Jump	Pole Vault	Other
More than 3	1min	1min	1min
2 or 3	1.5min	2min	1min
1	3min	5min	-
Consecutive trials	2min	3min	2min

Combined Events

Note (i): A clock which shows the remaining time allowed for a trial should be visible to an athlete. In addition, an official shall raise and keep raised, a yellow flag, or otherwise indicate, during the final 15 seconds of the time allowed.

Note (ii): In the High Jump and Pole Vault, any change in the time period allowed for a trial, except the time specified for consecutive trials, shall not be applied until the bar is raised to a new height.

Note (iii): For the first trial of any athlete upon entering the competition, the time allowed for such trial will be one minute.

Note (iv): When calculating the number of athletes remaining in the competition this should include those athletes who could be involved in a jump off for first place.

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It is a matter for the Referee to decide, having regard to all the circumstances, what is an unreasonable delay. The official responsible shall indicate to an athlete that all is ready for the trial to begin, and the period allowed for this trial shall commence from that moment. If an athlete subsequently decides not to attempt a trial, it shall be considered a failure once that period allowed for the trial has elapsed.

For the Pole Vault, the time shall begin when the crossbar has been adjusted according to the previous wishes of the athlete. No additional time will be allowed for further adjustment.

If the time allowed elapses after an athlete has started his trial, that trial should not be disallowed.

The following times should not normally be exceeded:

Number of athletes left in the competition	High Jump	Pole Vault	Other Events
More than 3	1 min	1 min	1 min
3 or fewer	1.5 min	2 min	1 min
Consecutive trials by the same athlete	2 min	3 min	2 min

In the Pole Vault the time shall begin when the uprights have been adjusted to the previously notified wishes of the competitor.

If the time allowed as indicated above elapses after the competitor has started a trial, that trial shall not for that reason be disallowed.

NOTE: The time allowed for the first attempt of any athlete on entering the competition shall be one minute.

Absence during Competition

19. An athlete may, with the permission of, and accompanied by, an official, leave the immediate area of the event during the progress of the competition.

Change of Competition Area or Time

20. The Technical Delegate or appropriate Referee shall have the authority to change the place or time of the competition if, in his opinion, the conditions justify it. Such a change should be made only after a round of trials has been completed.

Note: Neither the wind strength nor its change of direction is sufficient condition to change the place nor time of the competition.

Result

21. Each athlete shall be credited with the best of all his trials,

including, in the case of High Jump and Pole Vault, those achieved in resolving a tie for first place.

Ties

22. Except for the High Jump and Pole Vault, the second best performance of the athletes having the same best performances shall determine whether there has been a tie. Then, if necessary, the third best, and so on. If the athletes are still equal following the application of this Rule 180. 22, it shall be determined to be a tie.

Except in Vertical Jumps, in the case of a tie for any place, including first place, the tie shall remain.

Note: For Vertical Jumps, see Rules 181.8, 181.9.

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In the case of a tie, the second best performance of the competitors tying shall determine the result. If the tie remains, the third best trial will be decisive and so on. If the tie still remains and it concerns first place, the competitors so tying shall have such additional extra trials as are required to resolve the tie. If the tie concerns any other place, the competitors shall be awarded the same place in the competition.

A. VERTICAL JUMPS

RULE 181

General Conditions – Vertical Jumps

1. Before the competition begins, the Chief Judge shall announce to the athletes the starting height and the subsequent heights to which the bar will be raised at the end of each round of trials, until there is only one athlete remaining having won the competition, or there is a tie for first place.

Trials

2. An athlete may commence jumping / vaulting at any height previously announced by the Chief Judge and may jump / vault at his own discretion at any subsequent height. Three consecutive failures, regardless of the height at which any of such failures occur, disqualify from further jumping / vaulting except in the case of a tie for first place.

The effect of this Rule is that an athlete may forego his second or third trial at a particular height (after failing first or second time) and still jump / vault at a subsequent height.

If an athlete forgoes a trial at a certain height, he may not make any subsequent trial at that height, except in the case of a jump-off for first place.

In the case of the High Jump and Pole Vault, if an athlete is not present when all other athletes who are present have completed the competition, the Referee shall deem that such athlete(s) has abandoned the competition, once the period for one further trial has elapsed.

3. Even after all the other athletes have failed, an athlete is entitled to continue jumping until he has forfeited his right to compete further.
 4. Unless there is only one athlete remaining and he has won the competition:
 - (a) the bar shall never be raised by less than 2cm in the High Jump and 5cm in the Pole Vault after each round of trials; and
 - (b) the increment of the raising of the bar shall never increase.
- These Rules 181.4(a) and (b) shall not apply once the athletes still competing agree to raise it to a World Record height directly.

After an athlete has won the competition, the height or heights to which the bar is raised shall be decided by the athlete, in consultation with the relevant Judge or Referee.

Note: This does not apply for a Combined Events Competition.

In a Combined Events Competition held under Rules 1.1(a), (b), (c) and (f), each increase shall be uniformly 3cm in the High Jump and 10cm in the Pole Vault throughout the competition.

Measurements

5. All measurements shall be made, in whole centimetres, perpendicularly from the ground to the lowest part of the upper side of the bar.
6. Any measurement of a new height shall be made before athletes attempt such height. In all cases of Records, the Judges shall also re-check the measurement before each subsequent Record attempt if the bar has been touched since last measured.

Crossbar

7. The crossbar shall be made of fibre-glass, or other suitable material but not metal, circular in cross-section except for the end pieces. The overall length of the crossbar shall be $4.00\text{m} \pm 0.02\text{m}$ in the High Jump and $4.50\text{m} \pm 0.02\text{m}$ in Pole Vault. The maximum weight of the crossbar shall be 2kg in the High Jump and 2.25kg in Pole Vault. The diameter of the circular part of the crossbar shall be $30\text{mm} \pm (1\text{mm})$.

The crossbar shall consist of three parts - the circular bar and two end pieces, each 30mm-35mm wide and 0.15m-0.20m long for the purpose of resting on the supports of the uprights.

These end pieces shall be circular or semi-circular with one clearly defined flat surface on which the bar rests on the crossbar supports. This flat surface may not be higher than the centre of the vertical cross section of the crossbar. The end pieces shall be hard and smooth. They shall not be of, or covered with rubber or any other material which has the effect of increasing the friction between them and the supports.

The crossbar shall have no bias and, when in place, shall sag a maximum of 20mm in the High Jump and 30mm in Pole Vault.

Control of elasticity: Hang a 3kg weight in the middle of the crossbar when in position. It may sag a maximum of 70mm in the High Jump and 0.11m in Pole Vault.

[Figure 5 - Alternative ends for crossbar]

Placings

8. If two or more athletes clear the same final height, the procedure to decide the places will be the following:
- (a) The athlete with the lowest number of jumps at the height last cleared shall be awarded the higher place.
 - (b) If the athletes are equal following the application of Rule 181.8(a), the athlete with the lowest total of failures throughout the competition up to and including the height last cleared, shall be awarded the higher place.
 - (c) If the athletes are still equal following the application of Rule 181.8(b), the athletes concerned shall be awarded the same place unless it concerns the first place.
 - (d) If it concerns the first place, a jump-off between these athletes shall be conducted in accordance with Rule 181.9, unless otherwise decided, either in advance according to the Technical Regulations applying to the competition, or during the competition but before the start of the event by the Technical Delegate or the Referee if no Technical Delegate has been appointed. If no jump-off is carried out, including where the relevant athletes at any stage decide not to jump further, the tie for first place shall remain.

Note: This Rule (d) will not apply to Combined Events.

Jump-off

9. (a) Athletes concerned must jump at every height until a decision is reached or until all of the athletes concerned decide not to jump further.
- (b) Each athlete shall have one jump at each height.
 - (c) The jump-off shall start at the next height determined in accordance with Rule 181.1 after the height last cleared by the athletes concerned.
 - (d) If no decision is reached the bar shall be raised if more than one athlete concerned were successful, or lowered if all of them failed, by 2cm for the High Jump and 5cm for the Pole Vault.
 - (e) If an athlete is not jumping at a height he automatically forfeits any claim to a higher place. If only one other athlete then remains he is declared the winner regardless of whether he attempts that height.

High Jump - Example

Heights announced by the Chief Judge at the beginning of competition: 1.75m; 1.80m; 1.84m; 1.88m; 1.91m; 1.94m; 1.97m; 1.99m...

Athlete	Heights							Failures	Jump Off		Pos	
	1.75m	1.80m	1.84m	1.88m	1.91m	1.94m	1.97m		1.91m	1.89m		1.91m
A	O	XO	O	XO	X-	XX		2	X	O	X	2
B	-	XO	-	XO	-	-	XXX	2	X	O	O	1
C	-	O	XO	XO	-	XXX		2	X	X		3
D	-	XO	XO	XO	XXX			3				4

O = Cleared

X = Failed

– = Did not Jump

A, B, C and D all cleared 1.88m.

Rules 181.8 and 181.9 now come into operation; the Judges add up the total number of failures, up to and including the height last cleared, i.e. 1.88m.

"D" has more failures than "A", "B" or "C", and is therefore awarded fourth place. "A", "B" and "C" are still equal and as this concerns the first place, they shall jump at 1.91m which is the next height after the height last cleared by the athletes concerned.

As all the athletes failed, the bar is lowered to 1.89m for another jump-off. As only "C" failed to clear 1.89m, the two other athletes, "A" and "B" shall have a third jump-off at 1.91m which only "B" cleared and is therefore declared the winner.

Extraneous Forces

10. When it is clear that the bar has been displaced by a force not associated with an athlete (e.g. a gust of wind)
 - (a) if such displacement occurs after an athlete has cleared the bar without touching it, then the trial shall be considered successful, or
 - (b) if such displacement occurs under any other circumstance, a new trial shall be awarded.

RULE 182

High Jump

Competition

1. An athlete shall take off from one foot.
2. An athlete fails if:

- (a) After the jump, the bar does not remain on the supports because of the action of the athlete whilst jumping; or
- (b) He touches the ground including the landing area beyond the vertical plane through the nearer edge of the crossbar, either between or outside the uprights with any part of his body, without first clearing the bar. However, if when he jumps, an athlete touches the landing area with his foot and in the opinion of the Judge, no advantage is gained, the jump for that reason should not be considered a failure.

Note: To assist in the implementation of this Rule a white line 50mm wide shall be drawn (usually by adhesive tape or similar material) between points 3m outside of each upright, the nearer edge of the line being drawn along the vertical plane through the nearer edge of the crossbar.

Runway and Take-off Area

- 3. The minimum length of the runway shall be 15m except in competitions held under Rules 1.1(a), (b), (c), (e) and (f), where the minimum shall be 20m. Where conditions permit, the minimum length should be 25m.
- 4. The maximum overall downward inclination in the last 15m of the runway and take-off area shall not exceed 1:250 (0.4%) along any radius of the semi-circular area centred midway between the uprights and having the minimum radius specified in Rule 182.3. The landing area should be placed so that the athlete's approach is up the inclination.
- 5. The take-off area shall be level or any inclination shall be in accordance with the requirements of Rule 182.4 and the IAAF Track and Field Facilities Manual.

Apparatus

- 6. Any style of uprights or posts may be used, provided they are rigid.
They shall have supports for the crossbar firmly fixed to them.
They shall be sufficiently tall as to exceed the actual height to which the crossbar is raised by at least 0.10m.
The distance between the uprights shall be not less than 4.00m nor more than 4.04m.
- 7. The uprights or posts shall not be moved during the competition unless the Referee considers that either the take-off or landing area has become unsuitable.

In such a case, the change shall be made only after a round of trials has been completed.

8. The crossbar supports shall be flat and rectangular, 40mm wide and 60mm long. They shall be firmly fixed to the uprights and immovable during the jump and shall each face the opposite upright. The ends of the crossbar shall rest on them in such a manner that, if the crossbar is touched by an athlete, it will easily fall to the ground, either forwards or backwards. The surface of the supports shall be smooth.

The supports shall not be of, or covered with, rubber or with any other material which has the effect of increasing the friction between them and the surface of the crossbar, nor may they have any kind of springs.

The supports shall be the same height above the take-off area immediately below each end of the crossbar.

[Figure 6 - High Jump uprights and crossbar]

9. There shall be a space of at least 10mm between the ends of the crossbar and the uprights.

Landing Area

10. For competitions under Rules 1.1(a), (b), (c), (e) and (f), the landing area shall be not smaller than 6m long x 4m wide x 0.7m high behind the vertical plane of the crossbar. For other competitions, the landing area should measure not less than 5m long x 3m wide x 0.7m high.

Note: The uprights and landing area should also be designed so that there is a clearance of at least 0.1m between them when in use, to avoid displacement of the crossbar through a movement of the landing area causing contact with the uprights.

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The landing area should measure at least 5m long (that is at the take off side) by 3m wide. The minimum depth of the landing area shall be 60cm.

Competition

1. Athletes may have the crossbar moved only in the direction of the landing area so that the edge of the crossbar nearest the athlete can be positioned at any point from that directly above the back end of the box to a point 80cm in the direction of the landing area.

An athlete shall, before the competition starts, inform the appropriate official of the position of the crossbar he requires for his first trial and this position shall be recorded.

If subsequently an athlete wants to make any changes, he should immediately inform the appropriate official before the crossbar has been set in accordance with his initial wishes. Failure to do this shall lead to the start of his time limit.

Note: A line, 10mm wide and of distinguishable colour, shall be drawn at right angles to the axis of the runway, in line with the back end of the box ("zero" line). A similar line shall appear on the surface of the landing area and be prolonged as far as the outside edge of the uprights.

2. An athlete fails if:
 - (a) after the vault, the bar does not remain on both pegs because of the action of an athlete whilst vaulting; or
 - (b) he touches the ground, including the landing area, beyond the vertical plane through the back end of the box with any part of his body or with the pole, without first clearing the bar; or
 - (c) after leaving the ground, he places his lower hand above the upper one or moves the upper hand higher on the pole; or
 - (d) during the vault, he steadies or replaces the bar with his hand(s).

Note (i): It is not a failure if an athlete runs outside the white lines marking the runway at any point.

Note (ii) It is not a failure if the pole touches the landing mats, in the course of a trial, after properly being planted in the box.

3. Athletes may, during the competition, place a substance on their hands or on the pole, in order to obtain a better grip. The use of gloves is permitted.
4. After the release of the pole, no one including the athlete shall be allowed to touch the pole unless it is falling away from the bar or

uprights. If it is touched, however, and the Referee is of the opinion that, but for the intervention, the bar would have been knocked off, the vault shall be recorded as a failure.

5. If, in making a trial, an athlete's pole is broken, it shall not be counted as a failure and the vaulter shall be awarded a new trial.

Runway

6. The minimum length of the runway, measured from the "zero" line, shall be 40m and where conditions permit, 45m. It shall have a width of $1.22\text{m} \pm 0.01\text{m}$ and shall be marked by white lines 50mm in width.

Note: For all tracks constructed before 1 January 2004 the runway may have a width of maximum 1.25m.

7. The maximum lateral inclination of the runway shall be 1:100 (1%) and in the last 40m of the runway the overall downward inclination in the direction of running shall not exceed 1:1000 (0.1%).

Apparatus

8. The take-off for the Pole Vault shall be from a box. It shall be constructed of suitable material, with rounded upper or soft edges and shall be sunk level with the runway. It shall be 1.00m in length, measured along the inside of the bottom of the box, 0.60m in width at the front end and tapering to 0.15m in width at the bottom of the stop board. The length of the box at runway level and the depth of the stop board are determined by the angle of 105° formed between the base and the stop board. (Tolerances on dimensions and angles: $\pm 0.01\text{m}$ and $- 0^\circ / + 1^\circ$)

[Figure 7 - Pole Vault box (top and side view)]

The base of the box shall slope from runway level at the front end to a vertical distance below ground level of 0.20m at the point where it meets the stop board. The box should be constructed in such a manner that the sides slope outwards and end next to the stop board at an angle of approximately 120° to the base.

Note: An athlete may place padding around the box for additional protection during any of his trials. The placement of such equipment shall be done within the time allowed for the athlete's trial and shall be removed by the athlete immediately after his trial is completed. At competitions under Rule 1.1 (a), (b), (c), (e) and (f) this shall be provided by the organisers.

9. Any style of uprights or posts may be used, provided they are rigid. The metallic structure of the base and the lower part of the uprights above the landing area must be covered with padding of appropriate material in order to provide protection to the athletes and the poles.
10. The crossbar shall rest on horizontal pegs so that if it is touched by an athlete or his pole, it will fall easily to the ground in the direction of the landing area. The pegs shall be without notches or indentations of any kind, of uniform thickness throughout and not more than 13mm in diameter.
They shall not extend more than 55mm from the supporting members, which shall be smooth. The vertical peg backings, which shall also be smooth and be constructed in a way that the crossbar cannot rest on the top of them, may extend 35mm-40mm above the pegs.

[Figure 8 - Crossbar support (view from landing area and top view)]

The distance between the pegs shall be 4.30m-4.37m. The pegs shall not be of, or covered with, rubber or with any other material which has the effect of increasing the friction between them and the surface of the bar, nor may they have any kind of springs.

Note: To lessen the chance of injury to an athlete by his falling on the feet of the uprights, the pegs supporting the crossbar may be placed upon extension arms permanently attached to the uprights, thus allowing the uprights to be placed wider apart, without increasing the length of the crossbar (see Figure 8).

Vaulting Poles

11. Athletes may use their own poles. No athlete shall use any other athlete's pole except with the consent of the owner.
The pole may be of any material or combination of materials and of any length or diameter, but the basic surface must be smooth.
The pole may have layers of tape at the grip end (to protect the hand) and of tape and/or any other suitable material at the bottom end (to protect the pole). Any tape at the grip end must be uniform except for incidental overlapping and must not result in any sudden change in diameter, such as the creation of any "ring" on the pole.

Landing Area

12. For competitions under Rules 1.1(a), (b), (c), (e) and (f), the

landing area shall be not smaller than 6m long (behind the zero line and excluding the front pieces) x 6m wide x 0.8m high. For other competitions, the landing area should measure not less than 5m long (excluding the front pieces) x 5m wide. The front pieces, in all cases, must be at least 2m long.

The sides of the landing area nearest to the box shall be placed 0.10m to 0.15m from the box and shall slope away from the box at an angle of approximately 45° (see Figure 9).

[Figure 9 - Pole Vault landing area (top and side views)]

B. HORIZONTAL JUMPS

RULE 184

General Conditions – Horizontal Jumps

Runway

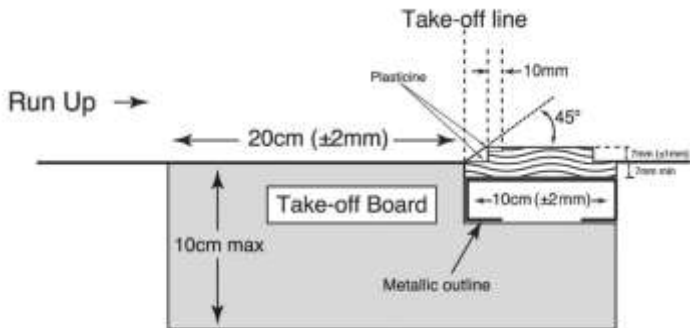
1. The minimum length of the runway, measured from the relevant take-off line, shall be 40m and where conditions permit, 45m. It shall have a width of $1.22\text{m} \pm 0.01\text{m}$ and shall be marked by white lines 50mm in width.

Note: For all tracks constructed before 1 January 2004 the runway may have a width of maximum 1.25m.

2. The maximum lateral inclination of the runway shall be 1:100 (1%) and, in the last 40m of the runway, the overall downward inclination in the direction of running shall not exceed 1:1000 (0.1%).

Take-off Board

3. The take-off shall be marked by a board sunk level with the runway and the surface of the landing area. The edge of the board which is nearer to the landing area shall be the take-off line. Immediately beyond the take-off line there shall be placed a **plasticine indicator board** for the assistance of the Judges.



[Figure 10 - Take-off board and plasticine indicator board]

4. The take-off board shall be rectangular, made of wood or other suitable rigid material in which the spikes of an athlete's shoe will grip and not skid and shall measure $1.22\text{m} \pm 0.01\text{m}$ long,

0.20m $\pm$ 0.002m wide and not more than 0.10m deep. It shall be white.

5. The plasticine indicator board shall consist of a rigid board, 0.10m $\pm$ 0.002m wide and 1.22m $\pm$ 0.01m long made of wood or any other suitable material and shall be painted in a contrasting colour to the take-off board. Where possible, the plasticine should be of a third contrasting colour. The board shall be mounted in a recess or shelf in the runway, on the side of the take-off board nearer the landing area. The surface shall rise from the level of the take-off board to a height of 7mm $\pm$ 1mm. The edges shall either slant at an angle of 45° with the edge nearer to the runway covered with a plasticine layer along its length 1mm thick or shall be cut away such that the recess, when filled with plasticine shall slant at an angle of 45° (see Figure 10).

The upper part of the indicator board shall also be covered for the first 10mm approximately and along its entire length, by a plasticine layer.

When mounted in this recess, the whole assembly shall be sufficiently rigid to accept the full force of the athlete's foot.

The surface of the board beneath the plasticine shall be of a material in which the spikes of an athlete's shoe will grip and not skid.

The layer of plasticine can be smoothed off by means of a roller or suitably shaped scraper for the purposes of removing the footprint of an athlete.

Note: It will be found very helpful to have spare plasticine boards available so that, while a footprint is being eliminated, the competition is not delayed.

Landing Area

6. The landing area shall have a minimum width of 2.75m and a maximum width of 3m. It shall, if possible, be so placed that the middle of the runway, if extended, would coincide with the middle of the landing area.

Note: When the axis of the runway is not in line with the centre line of the landing area, a tape, or if necessary, two tapes, should be placed along the landing area so that the above is achieved (see Figure 11).

[Figure 11 - Centralised Long Jump / Triple Jump landing area]

7. The landing area should be filled with soft damp sand, the top surface of which shall be level with the take-off board.

Distance Measurement

8. The measurement of each jump shall be made immediately after each valid trial (or after an immediate oral protest made under Rule 146.5). All jumps shall be measured from the nearest break in the landing area made by any part of the body, **or anything that was attached to the body at the time it made a mark**, to the take-off line, or take-off line extended. The measurement shall be taken perpendicular to the take-off line or its extension.
9. In all horizontal jumping events, distances shall be recorded to the nearest 0.01m below the distance measured if the distance measured is not a whole centimetre.

Wind Measurement

10. The wind velocity shall be measured for a period of 5 seconds from the time an athlete passes a mark placed alongside the runway, for the Long Jump 40m from the take-off line and for the Triple Jump 35m. If an athlete runs less than 40m or 35m, as appropriate, the wind velocity shall be measured from the time he commences his run.
11. The wind gauge shall be placed 20m from the take-off line. It shall be positioned 1.22m high and not more than 2m away from the runway.
12. The wind gauge shall be the same as described in Rules 163.8 and 163.9. It shall be operated as described in Rules 163.11 and 163.12 and read as per Rule 163.13.

RULE 185

Long Jump

Competition

1. An athlete fails if:
 - (a) he while taking off, touches the ground beyond the take-off line with any part of his body, whether running up without jumping or in the act of jumping; or
 - (b) he takes off from outside either end of the board, whether beyond or before the extension of the take-off line; or
 - (c) he employs any form of somersaulting whilst running up or in the act of jumping; or

- (d) after taking off, but before his first contact with the landing area, he touches the runway or the ground outside the runway or outside the landing area; or
- (e) in the course of landing, he touches the border of, or the ground outside, the landing area closer to the take-off line than the nearest break made in the sand; or
- (f) he leaves the landing area in any manner other than that described in Rule 185.2.

Note: The course of landing in Rule 185.1 (e) includes overbalancing completely inside the landing area (or walking back) closer to the take-off line than the initial break made on landing.

2. When leaving the landing area, an athlete's first contact by foot with its border or the ground outside shall be further from the take-off line than the nearest break in the sand.

Note: This first contact is considered leaving.

3. An athlete shall not be regarded to have failed if:
 - (a) he runs outside the white lines marking the runway at any point; or
 - (b) except as described in Rule 185.1(b), he takes off before reaching the board; or
 - (c) under Rule 185.1(b) a part of his shoe / foot is touching the ground outside either end of the take-off board, before the take-off line; or
 - (d) if in the course of landing, he touches, with any part of his body, or anything attached to it at that moment, the ground outside the landing area, unless such contact contravenes Rule 185.1(d) or (e); or
 - (e) he walks back through the landing area after having left the landing area in the manner described in Rule 185.2.

Take-off Line

4. The distance between the take-off line and the far end of the landing area shall be at least 10m.
5. The take-off line shall be placed between 1m and 3m from the nearer end of the landing area.

RULE 186

Triple Jump

Rules 184 and 185 apply to Triple Jump with the following variations:

Competition

1. The Triple Jump shall consist of a hop, a step and a jump in that order.
2. The hop shall be made so that an athlete lands first on the same foot as that from which he has taken off; in the step he shall land on the other foot, from which, subsequently, the jump is performed.

It shall not be considered a failure if an athlete, while jumping, touches the ground with the "sleeping" leg.

Note: Rule 185.1(d) does not apply to the normal landings from the hop and step phases.

Take-off Line

3. The distance between the take-off line for men and the far end of the landing area shall be at least 21m.
4. For International Competitions, the take-off line shall not be less than 13m for men and 11m for women from the nearer end of the landing area. For any other competition, this distance shall be appropriate for the level of competition.
5. Between the take-off board and the landing area there shall, for the step and jump phases, be a take-off area of $1.22\text{m} \pm 0.01\text{m}$ wide providing firm and uniform footing.

Note: For all tracks constructed before 1 January 2004, this take-off area may have a width of maximum 1.25m.

C. THROWING EVENTS

RULE 187

General Conditions – Throwing Events

Official Implements

1. In all International Competitions, the implements used shall comply with IAAF specifications. Only implements which hold a current valid IAAF certificate of approval may be used. The following table shows the implement to be used by each age group:

UKA Supplement

Implement	Girls Youth	Women Junior/Senior	Boys Youth	Men Junior	Men Senior
Shot	3.000kg	4.000kg	5.000kg	6.000kg	7.260kg
Discus	1.000kg	1.000kg	1.500kg	1.750kg	2.000kg
Hammer	3.000kg	4.000kg	5.000kg	6.000kg	7.260kg
Javelin	500g	600g	700g	800g	800g

Note: The current standard forms required to be used for the certification and renewal application as well as the Certification System Procedures are available from the IAAF Office, or may be downloaded from the IAAF website.

2. Except as provided below, all such implements shall be provided by the Organising Committee. The Technical Delegate(s) may, based on the relevant Technical Regulations of each competition, allow athletes to use their own implements or those provided by a supplier, provided that such implements are IAAF certified, checked and marked as approved by the Organising Committee before the competition and made available to all athletes. Such implements will not be accepted if the same model is already on the list of those provided by the Organising Committee.

UKA Supplement

Competitors may use any implements provided for general use. Subject to any regulations laid down by the Promoting Body, competitors who wish to use their own implements must submit them to the Referee for approval. An athlete shall not use another's implement without the owner's prior permission.

NOTE TO MANUFACTURERS: In all cases it is recommended that implements for competition are produced so that the weight is at least

5gm over the minimum weight and no more than 25gm over the minimum weight.

3. No modification shall be made to any implements during the competition.

Assistance

4. The following shall be considered assistance and are therefore not allowed:
 - (a) The taping of two or more fingers together. If taping is used on the hands and fingers, it may be continuous provided that as a result no two or more fingers are taped together in such a way that the fingers cannot move individually. The taping should be shown to the Chief Judge before the event starts.
 - (b) The use of any device of any kind, including weights attached to the body, which in any way provides assistance when making a trial.
 - (c) The use of gloves except in the Hammer Throw. In this case, the gloves shall be smooth on the back and on the front and the tips of the glove fingers, other than the thumb, shall be open.
 - (d) The spraying or spreading by an athlete of any substance in the circle or on his shoes nor the roughening of the surface of the circle.
5. The following shall not be considered assistance and are therefore allowed:
 - (a) The use by an athlete, in order to obtain a better grip, of a suitable substance on his hands only or in the case of a hammer thrower on his gloves. A shot putter may use such substances on their neck.
 - (b) **The placement by an athlete, in the Shot Put and Discus Throw, on the implement, chalk or a similar substance.** All substances used shall be easily removable using a wet cloth and shall not leave any residue.
 - (c) The use of taping on the hands and fingers that is not in contravention of Rule 187.4(a).

Throwing Circle

6. The rim of the circle shall be made of band iron, steel or other suitable material, the top of which shall be flush with the ground outside. The ground surrounding the circle may be concrete,

synthetic, asphalt, wood or any other suitable material.

The interior of the circle may be constructed of concrete, asphalt or some other firm but not slippery material. The surface of this interior shall be level and $20\text{mm} \pm 6\text{mm}$ lower than the upper edge of the rim of the circle.

In the Shot Put, a portable circle meeting these specifications is permissible.

7. The inside diameter of the circle shall be $2.135\text{m} \pm 0.005\text{m}$ in the Shot Put and the Hammer Throw and $2.50\text{m} \pm 0.005\text{m}$ in the Discus Throw.

The rim of the circle shall be at least 6mm thick and shall be white.

The hammer may be thrown from the discus circle provided the diameter of this circle is reduced from 2.50m to 2.135m by placing a circular ring inside.

Note: The circular ring should preferably be coloured other than white so that the white lines required by Rule 187.78 be clearly visible.

[Figure 12 - Layout of Shot Put circle]

8. A white line 50mm wide shall be drawn from the top of the rim extending for at least 0.75m on either side of the circle. The white line may be painted or made of wood or other suitable material. The rear edge of the white line shall form a prolongation of a theoretical line through the centre of the circle at right angles to the centre line of the landing sector.

[Figure 13 - Layout of Discus Throw circle]

[Figure 14 - Layout of Hammer Throw circle]

[Figure 15 - Layout of concentric circles for Discus and Hammer Throw circle]

Javelin Throw Runway

9. The minimum length of the runway shall be 30m except in competitions held under Rules 1.1(a), (b), (c) (e) and (f), where the minimum shall be 33.50m. Where conditions permit, the minimum length should be 36.50m.

It shall be marked by two parallel white lines 50mm wide and 4m

apart. The throw shall be made from behind an arc of a circle drawn with a radius of 8m. The arc shall consist of a 70mm wide strip painted or made of wood or a suitable non-corrodible material like plastic. It shall be white and be flush with the ground. Lines shall be drawn from the extremities of the arc at right angles to the parallel lines marking the runway. These lines shall be white, 0.75m long and 70mm wide. The maximum lateral inclination of the runway shall be 1:100 (1%) and in the last 20m of the runway the overall downward inclination in the direction of running shall not exceed 1:1000 (0.1%).

[Figure 16 - Javelin Throw runway and landing sector (not to scale)]

Landing Sector

10. The landing sector shall consist of cinders or grass or other suitable material on which the implement makes an imprint.
11. The maximum overall downward inclination of the landing sector, in the throwing direction, shall not exceed 1:1000 (0.1%).
12. (a) Except for the Javelin Throw, the landing sector shall be marked with white lines 50mm wide at an angle of 34.92° such that the inner edge of lines, if extended, would pass through the centre of the circle.

Note: The 34.92° sector may be laid out accurately by making the distance between the two points on the sector lines 20m from the centre of the circle $12m \pm 0.05m$ ($20m \times 0.60m$) apart. Thus, for every 1m from the centre of the circle, the distance across shall be increased by 0.60m.

- (b) In the Javelin Throw, the landing sector shall be marked with white lines 50mm wide such that the inner edge of the lines, if extended, would pass through the two intersections of the inner edges of the arc, and the parallel lines marking the runway and intersect at the centre of the circle of which the arc is part (see Figure 16). The sector angle is thus 28.96° .

Trials

13. In the Shot Put, Discus Throw and Hammer Throw, implements shall be thrown from a circle, and in the Javelin Throw, from a runway. In the case of trials made from a circle, an athlete shall commence his trial from a stationary position inside the circle. An athlete is allowed to touch the inside of the rim. In the Shot Put, he is also allowed to touch the inside of the stop board

described in Rule 188.2.

14. It shall be a failure if an athlete in the course of a trial:
- (a) releases the shot or the javelin other than as permitted under Rules 188.1 and 193.1,
 - (b) after he has stepped into the circle and begun to make a throw, touches with any part of his body the top (or the top inside edge) of the rim or the ground outside the circle,
 - (c) in the Shot Put, touches with any part of his body any part of the stop board other than its inner side (excluding its top edge which is considered to be part of the top),
 - (d) in the Javelin Throw, touches with any part of his body the lines which mark the runway or the ground outside.

Note: It will not be considered a failure if the discus or any part of the hammer strikes the cage after release provided that no other Rule is infringed.

15. Provided that, in the course of a trial, the Rules relative to each throwing event have not been infringed, an athlete may interrupt a trial once started, may lay the implement down inside or outside the circle or runway and may leave it.

When leaving the circle or runway he shall step out as required in Rule 187.17 before returning to the circle or runway to begin a fresh trial.

Note: All the moves permitted by this paragraph shall be included in the maximum time for a trial given in Rule 180.18.

16. It shall be a failure if the shot, the discus, the hammer head or the head of the javelin in contacting the ground when it first lands touches the sector line, the ground or any object (other than the cage as provided in the Note to Rule 187.14) outside the sector line.
17. It shall be a failure if the athlete leaves the circle or runway before the implement has touched the ground, or
- (a) for throws made from a circle, if when leaving the circle, the athlete's first contact with the top of the rim or the ground outside the circle is not completely behind the white line which is drawn outside the circle running, theoretically, through the centre of the circle-;
- Note: The first contact with the top of the rim or the ground outside the circle is considered leaving.*
- (b) in the case of the Javelin Throw, if, when leaving the runway, the athlete's first contact with the parallel lines or the ground outside the runway is not completely behind the

white line of the arc or the lines drawn from the extremities of the arc at right angles to the parallel lines. Once the implement has touched the ground, an athlete will also be considered to have left the runway correctly, upon making contact with or behind a line (painted, or theoretical and indicated by markers beside the runway) drawn across the runway, four metres back from the end points of the throwing arc. Should an athlete be behind that line and inside the runway at the moment the implement touches the ground, he shall be considered to have left the runway correctly.

18. After each throw, implements shall be carried back to the area next to the circle or runway and never thrown back.

Measurements

19. In all throwing events, distances shall be recorded to the nearest 0.01m below the distance measured if the distance measured is not a whole centimetre.
20. The measurement of each throw shall be made immediately after each valid trial (or after an immediate oral protest made under Rule 146.5):
 - (a) from the nearest mark made by the fall of the shot, discus and hammer head, to the inside of the circumference of the circle along a line to the centre of the circle;
 - (b) in Javelin Throw, from where the head of the javelin first struck the ground to the inside edge of the arc, along a line to the centre of the circle of which the arc is part.

RULE 188

Shot Put

UKA Supplement

In order to avoid accidents the central throwing area or the specific safety sector must be roped off as a unit at a height of approximately 1 metre. Alternatively, shot throwing sectors must be roped off at a height of approximately 1 metre and at a minimum distance of 2 metres outside the shot sector lines.

Competition

1. The shot shall be put from the shoulder with one hand only. At the time an athlete takes a stance in the circle to commence a put, the shot shall touch or be in close proximity to the neck or the

chin and the hand shall not be dropped below this position during the action of putting. The shot shall not be taken behind the line of the shoulders.

Note: Cartwheeling techniques are not permitted.

Stop Board

2. The stop board shall be white and made of wood or other suitable material in the shape of an arc so that the inner surface aligns with the inner edge of the rim of the circle and is perpendicular to the surface of the circle. It shall be placed so that its centre coincides with the centre line of the landing sector (see Figure 12), and shall be firmly fixed to the ground or to the concrete surrounding the circle.

[Figure 17 - Shot Put stop board (top and side view)]

Note: Stop boards to the 1983/84 IAAF specifications remain acceptable.

3. The stop board shall measure 0.112m to 0.30m wide, with a chord of $1.21\text{m} \pm 0.01\text{m}$ for an arc of the same radius as the circle and $0.10\text{m} \pm 0.002\text{m}$ high in relation to the level of the inside of the circle.

Shot

4. The shot shall be of solid iron, brass or any metal not softer than brass, or a shell of such metal filled with lead or other solid material. It shall be spherical in shape and its surface finish shall be smooth. To be smooth, the surface average height must be less than $1.6\mu\text{m}$, i.e. a roughness number N7 or less.
5. The shot shall conform to the following specifications:

Minimum weight for admission to competition and acceptance of a

Record:	3.000kg	4.000kg	5.000kg	6.000kg	7.260kg
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Information for manufacturers: Range for supply of implement for competition

	3.005kg	4.005kg	5.005kg	6.005kg	7.265kg
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	3.025kg	4.025kg	5.025kg	6.025kg	7.285kg
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Diameter:

Minimum	85mm	95mm	100mm	105mm	110mm
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Maximum	110mm	110mm	120mm	125mm	130mm
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RULE 189

Discus Throw

UKA Supplement

In order to avoid accidents all the central throwing area or the specific safety sector must be roped off as a unit at a height of approximately 1 metre. Alternatively, discus throwing sectors must be roped off at a height of approximately 1 metre and to make a 60° sector inside which the hammer sector is centrally placed.

For safety reasons all throws should be preceded by a warning which **shall** be acknowledged by the event officials before the throw commences.

NOTE: Referees are reminded of the need to ensure that discus, hammer and javelin competitions (including warm-up for these events) are not held at the same time within the central throwing area when the standard of any of the competitors is likely to create possible danger to the officials operating within and alongside the respective sectors of these events.

Discus

1. The body of the discus may be solid or hollow and shall be made of wood, or other suitable material, with a metal rim, the edge of which shall be circular. The cross section of the edge shall be rounded in a true circle having a radius of approximately 6mm. There may be circular plates set flush into the centre of the sides. Alternatively, the discus may be made without metal plates, provided that the equivalent area is flat and the measurements and total weight of the implement correspond to the specifications. Each side of the discus shall be identical and shall be made without indentations, projections or sharp edges. The sides shall taper in a straight line from the beginning of the curve of the rim to a circle of a radius of 25mm to 28.5mm from the centre of the discus.

The profile of the discus shall be designed as follows. From the beginning of the curve of the rim the thickness of the discus increases regularly up to the maximum thickness D. This maximum value is achieved at a distance of 25 mm to 28.5mm from the axis of the discus Y. From this point up to the axis Y the thickness of the discus is constant. Upper and lower side of the discus must be identical, also the discus has to be symmetrical

concerning rotation around the axis Y.

The discus, including the surface of the rim shall have no roughness and the finish shall be smooth (see Rule 188.4) and uniform throughout.

[Figure 18 – Discus]

2. The discus shall conform to the following specifications:

Minimum weight for admission to competition and acceptance of a

Record :	1.000kg	1.500kg	1.750kg	2.000kg
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Information for manufacturers: Range for supply of implement for competition	1.005kg	1.505kg	1.755kg	2.005kg
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	1.025kg	1.525kg	1.775kg	2.025kg
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Outside diameter of metal rim:

Minimum	180mm	200mm	210mm	219mm
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Maximum	182mm	202mm	212mm	221mm
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Diameter of metal plate or flat centre area:

Minimum	50mm	50mm	50mm	50mm
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Maximum	57mm	57mm	57mm	57mm
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Thickness of metal plate or flat centre area:

Minimum	37mm	38mm	41mm	44mm
---------	------	------	------	------

Maximum	39mm	40mm	43mm	46mm
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Thickness of metal rim (6mm from edge):

Minimum	12mm	12mm	12mm	12mm
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Maximum	13mm	13mm	13mm	13mm
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RULE 190

Discus Cage

1. All discus throws shall be made from an enclosure or cage to ensure the safety of spectators, officials and athletes. The cage specified in this Rule is intended for use when the event takes place in the arena with other events taking place at the same time or when the event takes place outside the arena with spectators present. Where this does not apply, and especially in training areas, a much simpler construction may be satisfactory. Advice is available, on request, from national organisations or from the IAAF Office.

Note: The hammer cage specified in Rule 192 may also be used for Discus Throw, either by installing 2.135/2.50m concentric

circles, or by using the extension of the gates of that cage with a separate discus circle installed in front of the hammer circle.

2. The cage should be designed, manufactured and maintained so as to be capable of stopping a 2kg discus moving at a speed of up to 25 metres per second. The arrangement should be such that there is no danger of ricocheting or rebounding back towards the athlete or over the top of the cage. Provided that it satisfies all the requirements of this Rule, any form of cage design and construction can be used.
3. The cage should be U-shaped in plan as shown in Figure 19. The width of the mouth should be 6m, positioned 7m in front of the centre of the throwing circle. The end points of the 6m wide mouth shall be the inner edge of the cage netting. The height of the netting panels or draped netting at their lowest point should be at least 4m.

Provision should be made in the design and construction of the cage to prevent a discus forcing its way through any joints in the cage or the netting or underneath the netting panels or draped netting.

Note (i): The arrangement of the rear panels/netting is not important provided the netting is a minimum of 3.00m away from the centre of the circle.

Note (ii): Innovative designs that provide the same degree of protection and do not increase the danger zone compared with conventional designs may be IAAF certified.

Note (iii) The cage side, particularly alongside the track, may be lengthened and/or increased in height so as to provide greater protection to athletes competing on the adjoining track during a discus competition.

4. The netting for the cage can be made from suitable natural or synthetic fibre cord or, alternatively, from mild or high tensile steel wire. The maximum mesh size shall be 44mm for cord netting and 50mm for steel wire.

Note: Further specifications for the netting and safety inspection procedures are set out in the IAAF Track and Field Facilities Manual.

5. The maximum danger sector for discus throws from this cage is approximately 69°, when used by both right and left handed throwers in the same competition. The position and alignment of the cage in the arena is, therefore, critical for its safe use.

[Figure 19 - Cage for Discus Throw only]

RULE 191 Hammer Throw

UKA Supplement

In order to avoid accidents all the central throwing area or the specific safety sector must be roped off as a unit at a height of approximately 1 metre. Alternatively, hammer throwing sectors must be roped off at a height of approximately 1 metre and to make a 60° sector inside which the hammer sector is centrally placed.

For safety reasons all throws should be preceded by a warning which **shall** be acknowledged by the event officials before the throw commences.

NOTE: Referees are reminded of the need to ensure that discus, hammer and javelin competitions (including warm-up for these events) are not held at the same time within the central throwing area when the standard of any of the competitors is likely to create possible danger to the officials operating within and alongside the respective sectors of these events.

Competition

1. An athlete, in his starting position prior to the preliminary swings or turns, is allowed to put the head of the hammer on the ground inside or outside the circle.
2. It shall not be considered a failure if the head of the hammer touches the ground inside or outside the circle, or the top of the rim. The athlete may stop and begin the throw again, provided no other Rule has been breached.
3. If the hammer breaks during a throw or while in the air, it shall not count as a failure, provided the trial was otherwise made in accordance with this Rule. Nor shall it count as a failure if an athlete thereby loses his balance and as a result contravenes any part of this Rule. In both cases the athlete shall be awarded a new trial.

Hammer

4. The hammer shall consist of three main parts: a metal head, a wire and a handle.
5. The head shall be of solid iron, brass or other metal not softer

than brass or a shell of such metal filled with lead or other solid material.

The centre of gravity of the head shall be not more than 6mm from the centre of the sphere, i.e. - it must be possible to balance the head, less handle and wire, on a horizontal sharp-edged circular orifice 12mm in diameter (see Figure 21). If a filling is used, this shall be inserted in such manner that it is immovable and complies with the requirement for the centre of gravity.

[Figure 20 - Suggested apparatus for testing centre of gravity of hammer head]

6. The wire shall be a single unbroken and straight length of spring steel wire not less than 3mm in diameter and shall be such that it cannot stretch appreciably while the hammer is being thrown.

The wire may be looped at one or both ends as a means of attachment. The wire shall be connected to the head by means of a swivel, which may be either plain or ball bearing.

7. The handle shall be rigid and without hinging joints of any kind. The total deformation of the handle under a tension load of 3.8kN shall not exceed 3mm. It shall be attached to the wire in such a manner that it cannot be turned within the loop of the wire to increase the overall length of the hammer. The handle shall be connected to the wire by means of a loop. A swivel may not be used.

The handle shall have a symmetric design and may have a curved or straight grip and/or brace. The minimum handle breaking strength shall be 8kN.

[Figure 21 - Generic hammer handle]

Note: Other designs complying with the specifications are acceptable.

8. The hammer shall conform to the following specifications:

Minimum weight for admission to competition and acceptance of a Record:

3.000kg	4.000kg	5.000kg	6.000kg	7.260kg
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Information for manufacturers: Range for supply of implement for competition

3.005kg	4.005kg	5.005kg	6.005kg	7.265kg
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3.025kg	4.025kg	5.025kg	6.025kg	7.285kg
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Length of hammer measured from inside of handle:

Maximum	1195mm	1195mm	1200mm	1215mm	1215mm
(No further tolerance applies to the maximum length.)					
Diameter of head:					
Minimum	85mm	95mm	100mm	105mm	110mm
Maximum	100mm	110mm	120mm	125mm	130mm

Note: The weight of the implement includes the totality of the hammer head, wire and handle.

RULE 192

Hammer Cage

1. All hammer throws shall be made from an enclosure or cage to ensure the safety of spectators, officials and athletes. The cage specified in this Rule is intended for use when the event takes place in the arena with other events taking place at the same time or when the event takes place outside the arena with spectators present. Where this does not apply, and especially in training areas, a much simpler construction may be satisfactory. Advice is available on request from national organisations or from the IAAF Office.
2. The cage should be designed, manufactured and maintained so as to be capable of stopping a 7.260kg hammer head moving at a speed of up to 32 metres per second. The arrangement should be such that there is no danger of ricocheting or rebounding back towards the athlete or over the top of the cage. Provided that it satisfies all the requirements of this Rule, any form of cage design and construction can be used.
3. The cage should be U-shaped in plan as shown in Figure 22. The width of the mouth should be 6m, positioned 7m in front of the centre of the throwing circle. The end points of the 6m wide mouth shall be the inner edge of the pivoted netting. The height of the netting panels or draped netting at their lowest point shall be at least 7m for the panels/netting at the rear of the cage and at least 10m for the last 2.80m panels to the gate pivot points. Provisions should be made in the design and construction of the cage to prevent a hammer forcing its way through any joints in the cage or the netting or underneath the netting panels or draped netting.

Note: The arrangement of the rear panels / netting is not important provided the netting is a minimum of 3.50m away from

the centre of the circle.

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The cage should be U-shaped in plan, consisting of a minimum of netting panels each having a minimum width of 2.74m as shown in the diagram. The width of the mouth should be 6m, positioned 4.2m in front of the centre of the throwing circle. The end points of the 6m wide mouth shall be the inner edge of the cage netting. The minimum height of these netting panels shall be 7m.

Provision should be made in the design and construction of the cage to prevent a hammer forcing its way through any joints in the cage or the netting. In addition, provision should be made to prevent a hammer sliding along the ground underneath the netting.

4. Two movable netting panels 2m wide shall be provided at the front of the cage, only one of which will be operative at a time. The minimum height of the panels shall be 10m.

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Two movable gate panels shall be provided at the front of the cage, only one of which will be operative at a time. The minimum height of the panels shall be 9m.

Note (i): The left hand panel is used for throwers turning anti clockwise, and the right hand panel for throwers turning clockwise. In view of the possible need to change over from one panel to the other during the competition, when both left and right-handed throwers are present, it is essential that this changeover should require little labour and be carried out in the minimum of time.

Note (ii): The end position of both panels is shown in the plan even though only one panel will be closed at any one time during competition.

Note (iii): When in operation, the movable panel shall be exactly in the position shown. Provision shall therefore, be made in the design of the movable panels to lock them in the operative position. It is recommended to mark (either temporarily or permanently) the operative positions of the panels on the ground.

Note (iv): The construction of these panels and their operation

depends on the overall design of the cage and can be sliding, hinging on a vertical or horizontal axis or dismounting. The only firm requirements are that the panel in operation shall be fully able to stop any hammer striking it and there shall be no danger of a hammer being able to force its way between the fixed and movable panels.

Note (v): Innovative designs that provide the same degree of protection and do not increase the danger zone compared with conventional designs may be IAAF certified.

[Figure 22 - Cage for Hammer and Discus Throw with concentric circles (Hammer Throw configuration)]

5. The netting for the cage can be made from suitable natural or synthetic fibre cord or, alternatively, from mild or high tensile steel wire. The maximum mesh size shall be 44mm for cord netting and 50mm for steel wire.

Note: Further specifications for the netting and safety inspection procedures are set out in the IAAF Track and Field Facilities Manual.

6. Where it is desired to use the same cage for Discus Throw, the installation can be adapted in two alternative ways. Most simply, a 2.135m/2.50m concentric circle may be fitted, but this involves using the same surface in the circle for Hammer Throw and Discus Throw. The hammer cage shall be used for Discus Throw by fixing the movable netting panels clear of the cage opening. For separate circles for Hammer Throw and Discus Throw in the same cage, the two circles shall be placed one behind the other with the centres 2.37m apart on the centre line of the landing sector and with the discus circle at the front. In that case, the movable netting panels shall be used for Discus Throw in order to lengthen the cage sides.

Note: The arrangement of the rear panels/draped netting is not important provided the netting is a minimum of 3.50m away from the centre of concentric circles or the hammer circle in case of separate circles (or 3.00m for cages with separate circles built under the Rule in force before 2004 with the discus circle at the back) (see also Rule 192.4).

[Figure 23 - Cage for Hammer and Discus Throw with concentric circles (Discus Throw configuration)]

[Figure 24 - Cage for Hammer and Discus Throw with separate circles]

7. The maximum danger sector for hammer throws from this cage is approximately 53° , when used by both right and left-handed throwers in the same competition. The position and alignment of the cage in the arena is, therefore, critical for its safe use.

RULE 193 **Javelin Throw**

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In order to avoid accidents the central throwing area or the specific safety sector must be roped off as a unit at a height of approximately 1 metre.

Alternatively, javelin throwing sectors must be roped off at a height of approximately 1 metre and to make a 50° sector inside which the javelin sector is centrally placed.

For safety reasons all throws should be preceded by a warning which **shall** be acknowledged by the event officials before the throw commences.

NOTE: Referees are reminded of the need to ensure that discus, hammer and javelin competitions (including warm-up for these events) are not held at the same time within the central throwing area when the standard of any of the competitors is likely to create possible danger to the officials operating within and alongside the respective sectors of these events.

Competition

1. (a) The javelin shall be held at the grip with one hand only. It shall be thrown over the shoulder or upper part of the throwing arm and shall not be slung or hurled. Non-orthodox styles are not permitted.
(b) **A throw shall be valid only if the metal head strikes the ground before any other part of the javelin.**
(c) Until the javelin has been thrown, an athlete shall not at any time turn completely around, so that his back is towards the throwing arc.
2. If the javelin breaks during a throw or while in the air, it shall not count as a failure, provided the trial was otherwise made in

accordance with this Rule. Nor shall it count as a failure if an athlete thereby loses his balance and as a result contravenes any part of this Rule. In both cases the athlete shall be awarded a new trial.

Javelin

3. The javelin shall consist of three main parts: a shaft, a head and a cord grip.
4. The shaft may be solid or hollow and shall be constructed of metal or other suitable material so as to constitute a fixed and integrated whole. The surface of the shaft shall have no dimples or pimples, grooves or ridges, holes or roughness, and the finish shall be smooth (see Rule 188.4) and uniform throughout.
5. The shaft shall have fixed to it a metal head terminating in a sharp point. The head shall be constructed completely of metal. It may contain a reinforced tip of other metal alloy fixed to the front end of the head provided that the completed head is smooth (see Rule 188.4) and uniform along the whole of its surface. The angle of tip shall not exceed 40 degrees.
6. The cord grip, which shall cover the centre of gravity, shall not exceed the diameter of the shaft by more than 8mm. It may have a regular non-slip pattern surface but without thongs, notches or indentations of any kind. The grip shall be of uniform thickness.
7. The cross-section shall be regularly circular throughout (see Note (i)). The maximum diameter of the shaft shall be immediately in front of the grip. The central portion of the shaft, including the part under the grip, may be cylindrical or slightly tapered towards the rear but in no case may the reduction in diameter, from immediately in front of the grip to immediately behind, exceed 0.25mm. From the grip, the javelin shall taper regularly to the tip at the front and the tail at the rear. The longitudinal profile from the grip to the front tip and to the tail shall be straight or slightly convex (see Note (ii)), and there shall be no abrupt alteration in the overall diameter, except immediately behind the head and at the front and rear of the grip, throughout the length of the javelin. At the rear of the head, the reduction in the diameter may not exceed 2.5mm and this departure from the longitudinal profile requirement may not extend more than 0.3m behind the head.

Note (i): Whilst the cross section throughout should be circular, a maximum difference between the largest and the smallest diameter at any cross section of 2% is permitted. The mean value

of these two diameters, at any nominated cross section, shall meet the specifications of a circular javelin in the tables hereunder.

Note (ii): The shape of the longitudinal profile may be quickly and easily checked using a metal straight edge at least 500mm long and two feeler gauges 0.20mm and 1.25mm thick. For slightly convex sections of the profile, the straight edge will rock while being in firm contact with a short section of the javelin. For straight sections of the profile, with the straight edge held firmly against it, it must be impossible to insert the 0.20mm gauge between the javelin and the straight edge anywhere over the length of contact. This shall not apply immediately behind the joint between the head and the shaft. At this point it must be impossible to insert the 1.25mm gauge.

8. The javelin shall conform to the following specifications:

Minimum weight for admission to competition and acceptance of a Record (inclusive of the cord grip):

500g	600g	700g	800g
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Information for manufacturers: Range for supply of implement for competition:

505g	605g	705g	805g
525g	625g	725g	825g

Overall length (L0):

Minimum	2.000m	2.200m	2.300m	2.600m
Maximum	2.100m	2.300m	2.400m	2.700m

Distance from tip of metal head to centre of gravity (L1):

Minimum	0.780m	0.800m	0.860m	0.900m
Maximum	0.880m	0.920m	1.000m	1.060m

Distance from tail to centre of gravity (L2):

Minimum	1.120m	1.280m	1.300m	1.540m
Maximum	1.320m	1.500m	1.540m	1.800m

Length of metal head (L3):

Minimum	0.220m	0.250m	0.250m	0.250m
Maximum	0.270m	0.330m	0.330m	0.330m

Width of cord grip (L4):

Minimum	0.135m	0.140m	0.150m	0.150m
Maximum	0.145m	0.150m	0.160m	0.160m

Diameter of shaft at thickest point (in front of grip - D0):

Minimum	20mm	20mm	23mm	25mm
Maximum	24mm	25mm	28mm	30mm

9. The javelin shall have no mobile parts or other apparatus, which during the throw could change its centre of gravity or throwing characteristics.
10. The tapering of the javelin to the tip of the metal head shall be such that the angle of the point shall be not more than 40° . The diameter, at a point 0.15m from the tip, shall not exceed 80% of the maximum diameter of the shaft. At the midpoint between the centre of gravity and the tip of the metal head, the diameter shall not exceed 90% of the maximum diameter of the shaft.
11. The tapering of the shaft to the tail at the rear shall be such that the diameter, at the midpoint between the centre of gravity and the tail, shall not be less than 90% of the maximum diameter of the shaft. At a point 0.15m from the tail, the diameter shall be not less than 40% of the maximum diameter of the shaft. The diameter of the shaft at the end of the tail shall not be less than 3.5mm.

[Figure 25 - International Javelin]

Lengths		Diameters		Maximum	Minimum
L0	Overall	D0	In front of grip	–	–
L1	Tip to C of G	D1	At rear of grip	– D0	D0-0.25mm
1/2L1	Half L1	D2	150mm from tip	0.8 D0	–
L2	Tail to C of G	D3	At rear of head	–	–
1/2L2	Half L2	D4	Immediately behind head	–	D3-2.5mm
L3	Head	D5	Half way tip to C of G	0.9 D0	–
L4	Grip	D6	Over grip	D0+8mm	–
		D7	Half way tail to C of G	–	0.9 D0
		D8	150mm from tail	–	0.4 D0
C of G	Centre of Gravity	D9	At tail	–	3.5mm

Note: All measurements of diameters must be to at least 0.1 mm.