

# OBSTACLE COMPETITION AND EQUIPMENT GUIDELINES

as of 1 January 2024







# OBSTACLE COMPETITION AND EQUIPMENT GUIDELINES

# COMPETITION GUIDELINES



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### 1

## **COMPETITION GUIDELINES**

#### PART A

#### **THE EVENT**

## 1.1 INTRODUCTION

- i) These guidelines serve to regulate Obstacle in Modern Pentathlon competitions in the 2024 season for Under 15, Under 17, Under 19 and Junior age groups.
- ii) These guidelines are divided into two sections: Competition Guidelines and Equipment Guidelines. The Equipment Guidelines section replaces the *2023 UIPM Obstacle Catalogue* and includes specific details linked to the obstacles to be used at different competition levels and age groups. This encompasses their dimensions, parameters, safety requirements, sequence, and placement on the course.
- iii) In the final of the Category A competitions, the order of the events must be as follows: Fencing Bonus Round, Obstacle, Swimming and Laser Run.
- iv) The UIPM 2024 Modern Pentathlon World Championships for the above mentioned age groups will be organised with Qualifications leading directly to a Final with 36 athletes (no Semi-finals).

# 1.2 PRESENTATION OF THE EVENT

- i) The Obstacle event is a race that consists of overcoming obstacles from a start line to a finish point organised both for Individuals and for Relays.
- ii) UIPM Category A competitions will be organised always as head-to-head races.
- iii) Obstacle Relay competitions are organised as sequential head-to-head races between the respective female and male athletes in each team. Each athlete in the team must complete the whole course.

#### 1.3 AUTHORITIES

At all official UIPM competitions, the following officials must be appointed: Obstacle Director, Secretary, Clerk of the Course, Course Judges, Starter, Timekeepers, Finish Wall Judge and Announcer. All decisions by the relevant official in regard to potential transgressions are final.

#### 1.3.1 The Obstacle Director (1)

- i) Responsible for the overall correct conduct of the Obstacle event, appoints all the aforementioned officials and is responsible for managing and coordinating the activities of all the officials appointed.
- ii) Adjudicate on any verbal complaints received from athletes/team representatives relating to the event in progress.

## 1.3.2 The Secretary (1)

i) Takes care of all worksheets during the event.

#### 1.3.3 The Clerk of the Course (1)

- i) Assembles the athletes prior to each heat.
- ii) Checks uniforms, gloves, and accessories, refusing any athlete with non conforming equipment to go to the start including unauthorised substances on their hands.
- iii) Check each athlete not using safety pins for the start numbers.
- iv) Responsible for ensuring that the athletes are ready for the start prior to each heat.



### 1.3.4 The Course Judges

- Placed by the Obstacle Director so that they may best observe the running closely.
- In the case of an athlete's first failure on an obstacle, the Course Judge shall immediately raise a yellow flag and loudly call "Fail" to ensure the competing athlete understands an infringement has occurred, which corresponds to a warning. In the case of a second failure on the same obstacle, the judge must raise a red flag and give the voice "Stop" to confirm the elimination of the athlete.
- iii) Two judges are needed on each lane, and each one of them covers four out of eight obstacles. Another two judges are required, one positioned on each side of the Finish Wall, in case of a "failure" on obstacle #7. Their role is to be ready to raise the flag and stop the athlete before they start climbing the wall.
- iv) The Course Judges' flags must have the dimensions of 25x25cm (+5 cm).

#### 1.3.5 The Starter (1)

- Has the entire control of the athletes while on their marks and is the sole judge of any potential transgression connected with the start of the race.
- Responsible for giving the start signal to the athletes when they are due to
- iii) Responsible for applying false start penalties.

#### 1.3.6 The Timekeepers (2)

Responsible for recording the times of the athletes. They must use their stopwatches or manually operated electronic timers. Whether automatic timing is used or not, there should always be at least two timekeepers.

#### 1.3.7 The Finish Wall Judge (1)

- Responsible for registering the arrival order of the athletes in case of electronic timing failure, or if manual timing is used.
- Responsible for keeping the order up the Finish Wall, avoiding athletes' lanes crossing.
- iii) Takes care of opening and closing the gate up the wall and ensures that the athletes are in a condition to descend safely from the Finish Wall structure.

#### 1.4 **ORGANISATION AND SCHEDULE**

#### 1.4.1 **General Aspects**

- The competition can be organised indoors or outdoors with the course placed on any surface where the course can be settled on a level and solid
- ii) Eight obstacles on a course 60m-70m in length will be used for both Individual and Relay competitions.
- iii) In UIPM Pentathlon U15, U17, U19 and Junior World Championships and any Category A, B and C competition for those age groups, six (6) of the eight (8) obstacles will be fixed by UIPM for consistency across all events during the season, while each LOC can select the other two obstacles. Obstacles must be chosen exclusively according to the conditions specified in the Equipment Guidelines section of this document.
  - The LOC can have flexibility in Category B and C competitions, according to the conditions specified in the Equipment Guidelines section of this document. When flexibility is applied, no Pentathlon World Ranking (PWR) points will be granted.
- iv) In national competitions, the LOC can apply the flexibility above mentioned in point iii), always according to the conditions specified in the Equipment Guidelines section of this document.

#### 1.4.2 Starting Order

- i) In Qualifications, the athletes will be placed according to their PWR Obstacle time. If the athlete/team does not have a PWR, entry times will be used. The athlete with the slower PWR Obstacle time or slower entry time will compete first and will be placed in lane A.
- ii) In the case of the same entry time, the athlete with the lowest PWR position competes first. In case those athletes have no PWR, the athlete from the NOC Code alphabetical order will be followed. In case of an odd number of athletes in the group, the athlete in the first heat will compete alone.
- iii) In the U17, U19 and Junior Finals, the start order is the reverse of the ranking after the Fencing Bonus Round. The athlete/team ranked lowest after the Fencing Bonus Round will be placed in lane A.
- iv) In the U15 Individual Finals, athletes will be placed according to the achieved time in Qualifications. In Relay competition teams will be placed according to Art. 1.4.2 i)
- v) In the Relay competitions, the start order of the athletes on each team must be declared in writing by the team representative before the Technical Meeting and once approved by the UIPM Technical Delegates, cannot be changed. As soon as athlete #1 in the team completes the course by activating the finish buzzer, athlete #2 is allowed to start the course. In the Mixed Relay, Women compete first, then Men.

#### 1.4.3 Control in the Call Room

i) Athletes with non-conforming equipment (see Art. 1.8) will not be authorised to compete unless they change to approved equipment before the start of the presentation. Disqualification will be applied if an athlete refuses to comply with this rule.

#### 1.4.4 Warm-up

- i) The warm-up time for Qualifications will be at least 20 minutes.
- ii) In the Finals, there will be 60 minutes of general warm-up time for all the disciplines before the competition starts.
- iii) The LOC will announce all warm-up details at the Technical Meeting.

#### 1.5 CONDUCT OF THE COMPETITION

#### 1.5.1 Safety Guidelines

- i) During the warm-up it is forbidden for an athlete to start one obstacle while another athlete is still overcoming it in the same lane.
- ii) In the event of thunder and lightning strikes in outdoor competitions all activities must be immediately suspended.
- iii) Rain, wind, or other adverse weather conditions or in any exceptional circumstances such as a broken or failing obstacle element, the Technical Delegates may postpone the competition, exclude obstacles, reduce the number of elements of an obstacle or declare it mandatory to start obstacles with hanging elements by a specific element, and any other measure to ensure the safety of the athletes including, for example, the use of ropes with knots to climb obstacles and anti-slip elements.



#### 1.5.2 The Start

- i) Athletes will be introduced by the announcer and invited to take their places close to the starting platform.
- ii) If an athlete is not present in the Call Room at the time assigned for the beginning of the event, there will be two repetitions of the call by the referee at the start at intervals of one minute. An athlete not appearing by the third call will be eliminated.
- iii) On the long whistle from the Starter, the athletes must step on the starting platform and remain there until the start signal. On the Starter's command "Take your marks" the athletes must immediately take up a starting position. When both competitors are stationary, the Starter gives the start signal by using a start pistol, horn, whistle, buzzer, beep or command.

#### 1.5.3 False Start

- i) The Starter/Announcer must announce a false start as soon as possible and audible to the athletes and spectators if an athlete has started too early.
- ii) An athlete starting late will not be penalised, but their time will be taken from the moment they should have started according to the starting signal.
- iii) A false start occurs if an athlete:
  - a) Departs the starting platform before the starting signal.
  - b) Begins their start movements prior to the starting signal.
- iv) An athlete or team is penalised by a deduction of 10 points in case of a false start.
- v) An athlete or team is disqualified in the case of a blatant attempt to start too early.

#### 1.5.4 The Course

- i) Each obstacle includes a take-off and a landing platform.
- ii) For correct obstacle completion, athletes must traverse the distance between take-off and landing platforms. Stepping off the platform to the sides after landing incurs no penalty.
- iii) If an athlete slips, brushes, or glides against the crash mats or the vertical trusses without gaining any benefit, such as obtaining momentum or regaining balance, it will not be considered a failure.
- iv) The athletes must overcome all obstacles on their dedicated lane according to the instructions published in these Guidelines. They can run, walk, jump, climb, crawl, slither, scramble, lift, carry, or otherwise propel themselves across, under, over, along or through the obstacles.
- v) Weighting an obstacle, for example by applying body weight to an obstacle element, is considered to be the start of an attempt to overcome an obstacle element.
- vi) After an unsuccessful attempt to overcome an obstacle, the athlete may repeat it by continuing to the end of this obstacle, turning around the vertical truss of the main structure of the obstacle and returning to its beginning using the external adjacent side. For balance elements including steps, the athlete must continue past the end of the obstacle before returning to its beginning using the external adjacent side.
- vii) If the first hanging element of one obstacle is still moving after an unsuccessful attempt to overcome an obstacle, the course judge must stop it before the athlete starts their second attempt.
- viii) After an unsuccessful second attempt to overcome the same obstacle, the athlete will be stopped, must immediately leave the course and will be eliminated.
- ix) Once an athlete starts the race, it is strictly prohibited to purposefully discarding clothing, equipment (e.g. gloves), or rubbish along the course shall result in a penalty.
- x) Starting an obstacle and then stepping backwards on the take-off platform will lead to a failure on the obstacle.

- xi) Jostling, running across, or obstructing another athlete in a way that impedes their progress, or any unsportsmanlike behaviour, results in disqualification.
- xii) If an athlete crosses into another athlete's lane to overcome obstacles with hanging elements, they will be eliminated.
- xiii) In the case of Art. 1.5.1 iii), 1.5.4 xi) and xii) where the affected athlete has been unfairly compromised in the opinion of the Course Judge, with the approval of the Technical Delegate, the athlete will have the right to perform the whole course again.

#### 1.5.5 The Finish

- i) Athletes complete the course the moment they activate the finish buzzer with any part of their hands, arms, or forearms. The buzzer must be connected to a horn, scoreboard, or another finish device. The winner of the heat is the first one to push the buzzer.
- ii) If an athlete pushes the buzzer of the opposite lane to their assigned lane, it will result in elimination. In such cases, manual timing will be used to record the athlete's performance on the lane that was stopped. If it is evident that the opposite lane athlete's performance was significantly affected, they will be granted the opportunity to repeat the race.

#### 1.5.6 Timing

- i) When automatic judging and timing equipment is provided, it must be used to determine the winner, placings and times for each athlete. The results and time have precedence over the decisions of Timekeepers. In the case of a breakdown or mechanical failure in one or both lanes, the decisions of the Timekeepers will have priority in the affected lanes.
- ii) Athletes will have their results ranked according to their performance times measured to  $1/100^{th}$  of a second.

## 1.6 SCORING POINTS

Modern Pentathlon points are awarded according to the performance times presented in *Appendix 1B1* of these Guidelines. Each 0.50 seconds is equal to 1 MP point.

# 1.7 INFRINGEMENTS AND PENALTIES

#### 1.7.1 Warning

- i) Failing an obstacle for the first time.
- ii) Any form of contact between any part of the athlete's body and the vertical trusses or the crash mattresses for the first time, except in the situations described in Art. 1.5.4 iii).

#### 1.7.2 10 points

- i) Contravening clothing/equipment guidelines.
- ii) Modifying dimensions of start numbers.
- iii) False start.
- iv) Delberately discarding any clothing, equipment (e.g. gloves), or rubbish along the course.

#### 1.7.3 Elimination

- i) Second failure on the same obstacle.
- ii) After a warning on an obstacle, any form of contact between any part of the athlete's body and the vertical trusses or the crash mattresses on the same obstacle, except in the situations described in Art. 1.5.4 iii).
- iii) Retiring from the competition during the race.
- iv) Crossing and running into another athlete's lane to overcome obstacles with hanging elements.
- v) An incorrect changeover in the Relay.
- vi) Use of cameras, phones, or other prohibited devices.
- vii) Use of chalk (magnesium) or any other sticky substances on the hands.



#### 1.7.4 Disqualification

- i) Jostling, running across, or obstructing another athlete.
- ii) Refusing to comply with Equipment Guidelines.
- iii) A blatant attempt to start too early.

#### **PART B**

#### **ANNEXES**

#### **PENALTY TABLE**

#### **OBSTACLE**

#### Appendix 1A

OFFENCES	Rule	Penalty
Failing an obstacle for the first time	1.7.1 i	Warning
Any form of contact between any part of the athlete's body and the vertical trusses or the crash mattresses for the first time, except in the situations described in Art. 1.5.4 iii).	1.7.1 ii	Warning
Contravening clothing/equipment guidelines	1.7.2 i	10 points
Modifying dimensions of start numbers	1.7.2 ii	10 points
False start	1.7.2 iii	10 points
Delberately discarding any clothing, equipment (e.g. gloves), or rubbish along the course.	1.7.2 iv	10 points
Second failure on the same obstacle	1.7.3 i	Elimination
After a warning on an obstacle, any form of contact between any part of the athlete's body and the vertical trusses or the crash mattresses on the same obstacle, except in the situations described in Art. 1.5.4 iii).	1.7.3 ii	Elimination
Retiring from the competition during the race	1.7.3 iii	Elimination
Crossing and running into another athlete's lane to overcome obstacles with hanging elements	1.7.3 iv	Elimination
An incorrect changeover in the Relay	1.7.3 v	Elimination
Use of cameras, phones, or other prohibited devices	1.7.3 vi	Elimination
Use of chalk (magnesium) or any other sticky substances on the hands	1.7.3 vii	Elimination
Jostling, running across, or obstructing another athlete	1.7.4 i	Disqualification
Refusing to comply with Equipment Guidelines	1.7.4 ii	Disqualification
A blatant attempt to start too early	1.7.4 iii	Disqualification



#### POINTS TABLE OBSTACLE – Appendix 1B1: Individual: U15, U17, U19, Junior

Time(s)	Pts	Time(s)	Pts	Time(s)	Pts	Time(s)	Pts	Time(s)	Pts	Time(s)	Pts	Time(s)	Pts
				1								1	
20,00	340	44,50	291	69,00	242	93,50	193	118,00	144	142,50	95	167,00	46
20,50	339	45,00	290	69,50	241	94,00	192	118,50	143	143,00	94	167,50	45
21,00	338	45,50	289	70,00	240	94,50	191	119,00	142	143,50	93	168,00	44
21,50	337	46,00	288	70,50	239	95,00	190	119,50	141	144,00	92	168,50	43
22,00	336	46,50	287	71,00	238	95,50	189	120,00	140	144,50	91	169,00	42
22,50	335	47,00	286	71,50	237	96,00	188	120,50	139	145,00	90	169,50	41
23,00	334	47,50	285	72,00	236	96,50	187	121,00	138	145,50	89	170,00	40
23,50	333	48,00	284	72,50	235	97,00	186	121,50	137	146,00	88	170,50	39
24,00	332	48,50	283	73,00	234	97,50	185	122,00	136	146,50	87	171,00	38
24,50	331	49,00	282	73,50	233	98,00	184	122,50	135	147,00	86	171,50	37
25,00	330	49,50	281	74,00	232	98,50	183	123,00	134	147,50	85	172,00	36
25,50	329	50,00	280	74,50	231	99,00	182	123,50	133	148,00	84	172,50	35
26,00	328	50,50	279	75,00	230	99,50	181	124,00	132	148,50	83	173,00	34
26,50	327	51,00	278	75,50	229	100,00	180	124,50	131	149,00	82	173,50	33
27,00	326	51,50	277	76,00	228	100,50	179	125,00	130	149,50	81	174,00	32
27,50	325	52,00	276	76,50	227	101,00	178	125,50	129	150,00	80	174,50	31
28,00	324	52,50	275	77,00	226	101,50	177	126,00	128	150,50	79	175,00	30
28,50	323	53,00	274	77,50	225	102,00	176	126,50	127	151,00	78	175,50	29
29,00	322	53,50	273	78,00	224	102,50	175	127,00	126	151,50	77	176,00	28
29,50	321	54,00	272	78,50	223	103,00	174	127,50	125	152,00	76	176,50	27
30,00	320	54,50	271	79,00	222	103,50	173	128,00	124	152,50	75	177,00	26
30,50	319	55,00	270	79,50	221	104,00	172	128,50	123	153,00	74	177,50	25
31,00	318	55,50	269	80,00	220	104,50	171	129,00	122	153,50	73	178,00	24
31,50	317	56,00	268	80,50	219	105,00	170	129,50	121	154,00	72	178,50	23
32,00	316	56,50	267	81,00	218	105,50	169	130,00	120	154,50	71	179,00	22
32,50	315	57,00	266	81,50	217	106,00	168	130,50	119	155,00	70	179,50	21
33,00	314	57,50	265	82,00	216	106,50	167	131,00	118	155,50	69	180,00	20
33,50	313	58,00	264	82,50	215	107,00	166	131,50	117	156,00	68	180,50	19
34,00	312	58,50	263	83,00	214	107,50	165	132,00	116	156,50	67	181,00	18
34,50	311		262		213			132,50	115	157,00		181,50	17
35,00	310	59,00 59,50	261	83,50	213	108,00	164		113	157,50	66 65		
				84,00		108,50	163	133,00				182,00	16
35,50	309	60,00	260	84,50	211	109,00	162	133,50	113	158,00	64	182,50	15
36,00	308	60,50	259	85,00	210	109,50	161	134,00	112	158,50	63	183,00	14
36,50	307	61,00	258	85,50	209	110,00	160	134,50	111	159,00	62	183,50	13
37,00	306	61,50	257	86,00	208	110,50	159	135,00	110	159,50	61	184,00	12
37,50	305	62,00	256	86,50	207	111,00	158	135,50	109	160,00	60	184,50	11
38,00	304	62,50	255	87,00	206	111,50	157	136,00	108	160,50	59	185,00	10
38,50	303	63,00	254	87,50	205	112,00	156	136,50	107	161,00	58	185,50	9
39,00	302	63,50	253	88,00	204	112,50	155	137,00	106	161,50	57	186,00	8
39,50	301	64,00	252	88,50	203	113,00	154	137,50	105	162,00	56	186,50	7
40,00	300	64,50	251	89,00	202	113,50	153	138,00	104	162,50	55	187,00	6
40,50	299	65,00	250	89,50	201	114,00	152	138,50	103	163,00	54	187,50	5
41,00	298	65,50	249	90,00	200	114,50	151	139,00	102	163,50	53	188,00	4
41,50	297	66,00	248	90,50	199	115,00	150	139,50	101	164,00	52	188,50	3
42,00	296	66,50	247	91,00	198	115,50	149	140,00	100	164,50	51	189,00	2
42,50	295	67,00	246	91,50	197	116,00	148	140,50	99	165,00	50	189,50	1
43,00	294	67,50	245	92,00	196	116,50	147	141,00	98	165,50	49	190,00	0
43,50	293	68,00	244	92,50	195	117,00	146	141,50	97	166,00	48		
44,00	292	68,50	243	93,00	194	117,50	145	142,00	96	166,50	47		

#### POINTS TABLE OBSTACLE - Appendix 1B2: Relay: U15, U17, U19, Junior

64,00

292

88,50

243

113,00

194

137,50

145

162,00

96

186,50

47

Time(s)	Pts	Time(s)	Pts	Time(s)	Pts	Time(s)	Pts	Time(s)	Pts	Time(s)	Pts	Time(s)	Pts
40,00	340	64,50	291	89,00	242	113,50	193	138,00	144	162,50	95	187,00	46
40,50	339	65,00	290	89,50	241	114,00	192	138,50	143	163,00	94	187,50	45
41,00	338	65,50	289	90,00	240	114,50	191	139,00	142	163,50	93	188,00	44
41,50	337	66,00	288	90,50	239	115,00	190	139,50	141	164,00	92	188,50	43
42,00	336	66,50	287	91,00	238	115,50	189	140,00	140	164,50	91	189,00	42
42,50	335	67,00	286	91,50	237	116,00	188	140,50	139	165,00	90	189,50	41
43,00	334	67,50	285	92,00	236	116,50	187	141,00	138	165,50	89	190,00	40
43,50	333	68,00	284	92,50	235	117,00	186	141,50	137	166,00	88	190,50	39
44,00	332	68,50	283	93,00	234	117,50	185	142,00	136	166,50	87	191,00	38
44,50	331	69,00	282	93,50	233	118,00	184	142,50	135	167,00	86	191,50	37
45,00	330	69,50	281	94,00	232	118,50	183	143,00	134	167,50	85	192,00	36
45,50	329	70,00	280	94,50	231	119,00	182	143,50	133	168,00	84	192,50	35
46,00	328	70,50	279	95,00	230	119,50	181	144,00	132	168,50	83	193,00	34
46,50	327	71,00	278	95,50	229	120,00	180	144,50	131	169,00	82	193,50	33
47,00	326	71,50	277	96,00	228	120,50	179	145,00	130	169,50	81	194,00	32
47,50	325	72,00	276	96,50	227	121,00	178	145,50	129	170,00	80	194,50	31
48,00	324	72,50	275	97,00	226	121,50	177	146,00	128	170,50	79	195,00	30
48,50	323	73,00	274	97,50	225	122,00	176	146,50	127	171,00	78	195,50	29
49,00	322	73,50	273	98,00	224	122,50	175	147,00	126	171,50	77	196,00	28
49,50	321	74,00	272	98,50	223	123,00	174	147,50	125	172,00	76	196,50	27
50,00	320	74,50	271	99,00	222	123,50	173	148,00	124	172,50	75	197,00	26
50,50	319	75,00	270	99,50	221	124,00	172	148,50	123	173,00	74	197,50	25
51,00	318	75,50	269	100,00	220	124,50	171	149,00	122	173,50	73	198,00	24
51,50	317	76,00	268	100,50	219	125,00	170	149,50	121	174,00	72	198,50	23
52,00	316	76,50	267	101,00	218	125,50	169	150,00	120	174,50	71	199,00	22
52,50	315	77,00	266	101,50	217	126,00	168	150,50	119	175,00	70	199,50	21
53,00	314	77,50	265	102,00	216	126,50	167	151,00	118	175,50	69	200,00	20
53,50	313	78,00	264	102,50	215	127,00	166	151,50	117	176,00	68	200,50	19
54,00	312	78,50	263	103,00	214	127,50	165	152,00	116	176,50	67	201,00	18
54,50	311	79,00	262	103,50	213	128,00	164	152,50	115	177,00	66	201,50	17
55,00	310	79,50	261	104,00	212	128,50	163	153,00	114	177,50	65	202,00	16
55,50	309	80,00	260	104,50	211	129,00	162	153,50	113	178,00	64	202,50	15
56,00	308	80,50	259	105,00	210	129,50	161	154,00	112	178,50	63	203,00	14
56,50	307	81,00	258	105,50	209	130,00	160	154,50	111	179,00	62	203,50	13
57,00	306	81,50	257	106,00	208	130,50	159	155,00	110	179,50	61	204,00	12
57,50	305	82,00	256	106,50	207	131,00	158	155,50	109	180,00	60	204,50	11
58,00	304	82,50	255	107,00	206	131,50	157	156,00	108	180,50	59	205,00	10
58,50	303	83,00	254	107,50	205	132,00	156	156,50	107	181,00	58	205,50	9
59,00	302	83,50	253	108,00	204	132,50	155	157,00	106	181,50	57	206,00	8
59,50	301	84,00	252	108,50	203	133,00	154	157,50	105	182,00	56	206,50	7
60,00	300	84,50	251	109,00	202	133,50	153	158,00	104	182,50	55	207,00	6
60,50	299	85,00	250	109,50	201	134,00	152	158,50	103	183,00	54	207,50	5
61,00	298	85,50	249	110,00	200	134,50	151	159,00	102	183,50	53	208,00	4
61,50	297	86,00	248	110,50	199	135,00	150	159,50	101	184,00	52	208,50	3
62,00	296	86,50	247	111,00	198	135,50	149	160,00	100	184,50	51	209,00	2
62,50	295	87,00	246	111,50	197	136,00	148	160,50	99	185,00	50	209,50	1
63,00	294	87,50	245	112,00	196	136,50	147	161,00	98	185,50	49	210,00	0
63,50	293	88,00	244	112,50	195	137,00	146	161,50	97	186,00	48		
6400	202	00.50	247	117.00	10.4	177.50	1.45	162.00	06	106.50	47	7	

# EQUIPMENT GUIDELINES



# **OBSTACLE**

#### PART A

#### INDIVIDUAL EQUIPMENT

## 1.8 CLOTHING

#### **PART B**

#### **EQUIPMENT PROVIDED BY THE LOC**

## 1.9 TYPE OF COURSES

- **1** UIPM Pentathlon Junior World Championships
- **2** Other UIPM Category A, B and C Competitions

# 1.10 STRUCTURAL

- 1 UIPM Competitions
- 2 Other Competitions

# COMPONENTS 1.11

**OBSTACLES** 

**DESCRIPTION** 

- **1** Measuring height of elements
- 2 Obstacle #1 Steps
- **3** Obstacle #2 Big Wheel
- 4 Obstacle #3 1.5m Wall
- 5 Obstacle #4 Over-Under
- **6** Obstacle #5 Over-Under-Through
- **7** Obstacle #6 Rings
- 8 Obstacle #7 Balance Beam

#### 1.12 SAFETY REQUIREMENTS

- 1 Structure approval
- 2 Build and inspection
- **3** Risk assessment

- **3** Other Competitions
- **3** Platforms
- 4 Safety mattresses
- 9 Obstacle #8 Giant Steps
- **10** Obstacle #9 Lisbon Steps
- 11 Obstacle #10 Wheels
- **12** Obstacle #11 Monkey Bars
- 13 Obstacle #12 Swinging Globes
- **14** Obstacle #13 Tilting Ladders
- 15 Obstacle #14 Finish Wall
- 4 Medical provision
- **5** Electrical system

15

## 2

## **EQUIPMENT GUIDELINES**

#### PART A

#### INDIVIDUAL EQUIPMENT

#### 1.8 CLOTHING

- i) In Category A competitions, athletes from the same National Federation must wear their national uniforms.
- ii) The athlete must wear a top or pentasuit with their surname clearly visible and professionally made, printed, or embroidered, on the back of the top or pentasuit, below which is the NF code, of a size between 7-12cm and in a colour contrasting to that of their shirt or pentasuit.
- iii) The UIPM logo patch must be placed on the top or pentasuit according to the current version of the UIPM Uniform Guidelines. Missing or wrongly placing the UIPM logo patch will be penalised by a deduction of 10 points.
- iv) Athletes must compete with athletic shoes without spikes.
- v) The LOC is responsible for providing every athlete with a start number. Safety pins must not be used to fast start numbers on the frontal part of the top or pentasuit, only adhesive start numbers will be allowed in this case. Start number must be worn on the front, above waist height and be visible in all weather conditions.
- vi) Gloves, wristbands, compressive sleeves, taping, and similar items are allowed.
- vii) Watches, necklaces, rings, earrings, bracelets, piercings (of any type), loose apparel, and any other item that could catch on an obstacle are prohibited. Athletes are also not allowed to wear caps/hats.
- viii) Hair must be secured in a way so as not to cover the name printed on the top/pentasuit or the start number.
- ix) Sunglasses or eyeglasses are only allowed with safety stripes.
- x) Climbing, weightlifting, gymnastics, football, basketball, and similar "chalk" (magnesium), and any other sticky substance in all its forms (liquid, powder, etc.) are prohibited.
- xi) Cameras, phones, radios, tape recorders or any type of communication systems are prohibited.



#### **PART B**

#### **EQUIPMENT PROVIDED BY THE LOC**

#### 1.9 COURSES

- i) The course comprises eight (8) obstacles spread across a distance ranging from 60 to 70 meters for Individual and Relay competitions.
- ii) The course length is the horizontal distance measured along the central line of a lane from the vertical plane at the starting platform's starting point to the vertical plane at the finish buzzer centerline, with the athletes competing in two lanes.
- iii) The course can be set on a straight line, curve, "u" or "v" shape.
- iv) In the Relay competitions, one of the following systems is mandatory for the athletes' changeover:
  - a) Electronic: one repeating light for each lane should be synchronised with the finish buzzer and placed at each of the corners closest to the starting line of the obstacle #2 structure. The repeating light must give athlete #2 in the relay a clear view that athlete #1 finished their course.
  - b) Manual: Using judges with flags to replicate the electronic system.
- v) Take-off and landing platforms must be installed before and after each obstacle according to Figure 6 with mattresses covering all areas where a fall from height can happen (see 1.10.3 and 1.10.4).
  - The platforms must be installed aligned to the truss's inner edge, on the obstacle's internal side (see Figure 6).

#### 1.9.1 UIPM Pentathlon Junior World Championships

- i) In the UIPM Pentathlon Junior World Championships, the configuration of the course must be according to Table 1 obstacles 3 and 7 in the first column shall be chosen by the LOC from the three options available in the adjacent columns. The LOC choices must be communicated in the competition invitation letter.
- ii) The course should be set on an elevated structure. The height of the running surface must be constant from the ground. Structural components may be wider and higher than those described in 1.11 of this Equipment Guidelines section, to adapt the construction of the obstacles to the elevated structure. Regardless, the obstacle characteristics described in each section will remain the same, while maintaining standard obstacle functionality.

Table 1. UIPM Pentathlon Junior World Championships: course configuration options

	OBSTACLES
1	Steps
2	Big Wheel
3	LOC CHOICE 1
4	Tilting Ladders
5	Balance Beam
6	Wheels
7	LOC CHOICE 2
8	Finish Wall

LOC CHOICE 1						
1.5m wall						
Over-under*						
Over-under-through**						

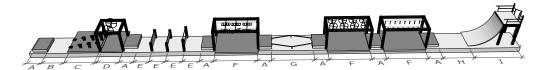
LOC CHOICE 2
Swinging Globes
Rings
Monkey Bars

<sup>\*</sup>The arrangement of walls (Over and Under) may be altered at the discretion of the Organiser.

<sup>\*\*</sup>The sequence of walls (Over, Under, and Through) may be altered at the discretion of the Organiser. All the potential arrangements of this wall are allowed (E.g. Under-Through-Over, Over-Through-Under, etc...).

In Figure 1 a simplified view of the course is presented with obstacle 3 choice "over-under-through" and obstacle 7 choice "swinging globes" and 40x40cm trusses.

Figure 1. UIPM Pentathlon Junior World Championships: simplified profile view of course



•	A (platform) 200	Ocm •	•	F 600cm
•	B100 to 300	ocm •	•	$G \dots \qquad \qquad 600 cm \ (\pm 50 \ cm)$
•	C 400	ocm •	•	$H$ 500cm ( $\pm$ 50 cm)
•	D 300	ocm •	•	I 600cm
•	E 200cm (±50	) cm)		

#### 1.9.2 Other UIPM Category A, B and C Competitions

- i) In all other UIPM Category A, B and C competitions, six (6) of the eight (8) obstacles on the course are fixed by UIPM for consistency across all events during the season, while each LOC can select the other two obstacles. This includes the UIPM Pentathlon U15, U17 and U19 World Championships.
- ii) The configuration of the course must be according to Table 2 obstacles 3 and 5 in the first column shall be chosen by the LOC from the three options available in the adjacent columns. The LOC choices must be communicated in the competition invitation letter.

Table 2. Other UIPM Category A, B, C competitions: course configuration options

	OBSTACLES
1	Steps
2	Big Wheel
3	LOC CHOICE 1
4	Rings
5	LOC CHOICE 2
6	Wheels
7	Monkey Bars
8	Finish Wall
7	7 Monkey Bars

LOC CHOICE 1							
1.5m wall							
Over-under*							
Over-under-through**							

LOC CHOICE 2
Balance Beam
Giant Steps
Lisbon Steps

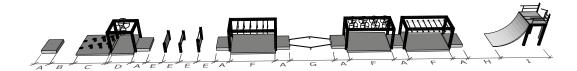
In Figure 2 a simplified view of the course is presented with obstacle 3 choice "over-under-through" and obstacle 5 choice "balance beam".

<sup>\*</sup>The arrangement of walls (Over and Under) may be altered at the discretion of the Organiser.

<sup>&</sup>quot;The sequence of walls (Over, Under, and Through) may be altered at the discretion of the Organiser. All the potential arrangements of this wall are allowed (E.g. Under-Through-Over, Over-Through-Under, etc...).



Figure 2. Other UIPM Category A, B, C competitions: simplified profile view of course



•	A (platform)	200cm	•	F 600cm
•	В	100 to 300cm	•	G 600cm (±50 cm)
•	C	400cm	•	H 500cm (±50 cm)
•	D	300cm	•	I 600cm
•	E	. 200cm (±50 cm)		

#### 1.9.3 Other Competitions

- i) The LOC can have flexibility in Category B and C competitions. When flexibility is applied, no Pentathlon World Ranking (PWR) points will be granted.
- ii) Changing the order of the obstacles is allowed, but modifying their dimensions is not permitted, to ensure the consistency and safety of the competition. Obstacles not listed in this section cannot be used. Using materials other than trusses will be allowed to build structural components provided the materials and construction methods meet all safety requirements presented in this document.
- iii) For national competitions, the LOC is given the flexibility to make changes to the obstacle course design. However, the basic structure of the course eight (8) obstacles and 60-70m length must remain consistent.

#### 1.10 STRUCTURAL COMPONENTS

#### 1.10.1 UIPM Competitions

- i) The architecture of obstacles is an essential part of the course to maintain long-term consistency across competitions and ensure the safety of athletes. The technical specifications for the obstacles, including their dimensions and structural integrity, are outlined in Art. 1.11.
- ii) In UIPM competitions, the structures used are of the truss type, with a square cross-section.
- iii) The standardised truss structure to be used in UIPM events is made in 6082 Aluminium alloy with TUV Homologation. It is chosen for its high strength-to-weight ratio, durability, and ease of assembly, making it the ideal choice for temporary structures that need to be set up and taken down frequently. Additionally, the square cross-section allows for a greater degree of flexibility in terms of layout.
- iv) For the UIPM Pentathlon Junior World Championships, the trusses' square cross-section should measure 40cm x 40cm and 3mm wall thickness. This provides more rigidity and stability to accommodate the increased obstacle heights. For other UIPM competitions, the trusses square cross-section dimensions should be set at 30cm x 30cm. These dimensions are fundamental to ensure the safety of the course.
- v) To ensure the safety and stability of structural components of rings, wheels, monkey bars, swinging globes and tilting ladders, in UIPM competitions only 600cm long trusses will be accepted. Therefore, two segments of 300cm each will not be allowed.
- vi) When building obstacles using trusses, all load calculations must follow the norm UN-ENV 1999-1-1 (Eurocode 9).

#### Technical description of the truss

Alloy: EN-AW 6082 T6

Chords: Extruded tube Ø50mm x 2mm
Diagonals: Extruded tube Ø16mm x 2mm

• Welding Process: TIG (EWF - EN ISO 9606-2 - 2004)

Figure 3. Basic obstacle truss structure



## 1.10.2 Other Competitions

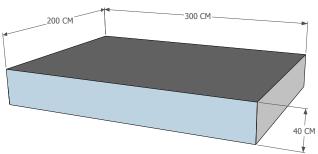
- i) A variety of materials such as steel or iron trusses, scaffolds and wood, among others, can be considered when constructing obstacles. Using simpler and more efficient construction methods, such as prefabrication or modular construction, can reduce costs while maintaining safety standards.
- ii) Using alternative materials or methods should be done under the guidance of a qualified professional to ensure the safety and integrity of the structure under repeated loading conditions. Athlete safety should be the top priority when constructing any structure, and it is important that all used materials and methods meet safety standards.

#### 1.10.3 Platforms

- i) The platforms described in this section are designed to mitigate the impact load on the athletes and make the course faster and easier to judge for referees. They all have the same dimensions and are referred to as obstacle take-off and landing platforms, as well as the starting platform (the one from which the athletes commence the race).
- ii) The platform measures must be standardised according to Figure 4; 200cm (depth) x 300cm (length) x 40cm (height). Using two platforms of 20cm in height is allowed provided they are securely joined together.
- iii) Platforms can be constructed using materials such as wood, metal and plastic and should always be covered with a "Platform mat" (see references on Art. 1.10.4) to ensure a non-slip surface and provide a secure footing for take-off and landing.
- iv) Maintaining the platforms properly is crucial to ensure the surface remains smooth and free of hazards throughout the competition.
- v) The starting platform should be positioned between 1m-3m before the first step of obstacle #1. That extra distance added to the course does not affect its maximum length (70m).



Figure 4. Detail of platform



#### 1.10.4 Safety Mattresses

- i) Correct positioning of the safety mats is essential for the safety and security of participants. The mattresses should be placed in a manner that minimises the risk of injury to athletes while they are traversing the course.
- ii) Two kinds and thicknesses of mats shall be used for this purpose:
  - a) Crash mats The mat should be 20cm thick with a recommended density of  $21 \text{ kg/m}^3$ .
  - b) Platform mats The mat should be 4cm thick with a recommended density of 200 kg/m<sup>3</sup>.
- iii) Both platform mats and crash mats must be finished with non-slip materials such as carpet bonded foam. Installing self-adhesive textured bands in both mat types is recommended to enhance their anti-slip properties.
- iv) Crash mats must fully cover the surface under the obstacle and extend beyond its boundaries by a minimum of 100cm on each side, to provide impact attenuation for the athletes in case of a fall from height.
- v) Crash mats should not have space between them and adjacent structures (e.g., trusses). Gaps can create a tripping or entrapment hazard and increase the risk of injury so all connections between the parts that make up the complete mats must be perfectly tightened and sealed with velcro.
- vi) Platform mats should be placed on the starting, take-off and landing platforms, providing an extra layer of protection for the athletes and a softer landing surface. Edges facing a competitor should be completely covered by wrapping the platform foam over the edge.
- vii) In the case of obstacle courses mounted on hard surfaces, platform mats must be installed on the ground after the obstacle "Over" and under the obstacle "Under" to provide impact attenuation for the athletes.
- viii) The vertical pillars of the truss structures must be covered with impactabsorbing soft material to protect athletes against potential impacts from any part of the body.

Figure 5. Thickness of mats







Platform mats (4 cm)

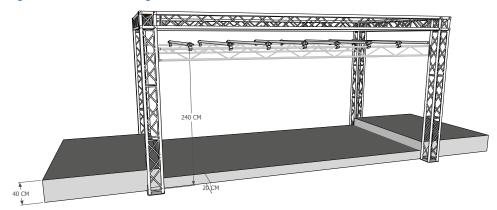
# 1.11 OBSTACLES DESCRIPTION

#### 1.11.1 Measuring height of elements

i) For the obstacles listed below, the height of the hanging elements must be measured from the bottom of the vertical trusses to the lowest part of the element. It is important to point out that mattresses should not be considered for this measurement.

Big Wheel; Rings; Wheels; Monkey Bars; Swinging Globes; Tilting Ladders

Figure 6. Measurements of height



ii) Following the previous article, for the obstacles listed below, the height of the hanging elements will vary according to the age group, dividing them into two main categories; U15-U17 and U19-Junior:

#### a) RINGS:

#### U15, U17

• Height (lowest part of the ring): 240cm (±10 cm).

#### U19, Junior

• Height (lowest part of the ring): 260cm (±10 cm).

#### b) WHEELS:

#### U15, U17

• Height (lowest part of the wheel): 240cm (±10 cm).

#### U19, Junior

• Height (lowest part of the wheel): 260cm (±10 cm).

#### c) MONKEY BARS:

#### U15, U17

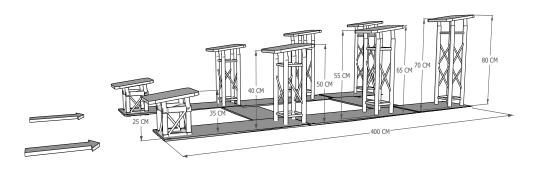
• Height (lowest part of the bar): 240cm (±10 cm).

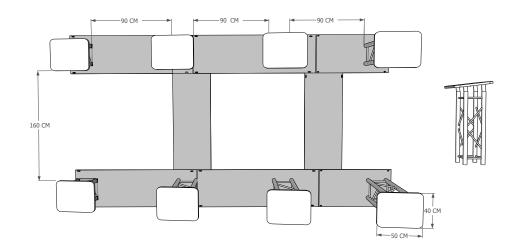
#### U19, Junior

• Height (lowest part of the bar): 260cm (±10 cm).



#### 1.11.2 Obstacle #1 Steps





#### Characteristics

•	Len	gth	
•	Late	eral elements spacing	
•	Step	os spacing*	
•	Step	base	30cm x 30cm
•	Step	top	50cm x 40cm
•	Step	os height <i>(lower part-upper part)</i>	
	<b>»</b>	First step	25cm-35cm (±10 cm)
	<b>»</b>	Second step	
	<b>»</b>	Third step	55cm-65cm (±10 cm)
	<b>»</b>	Four step	

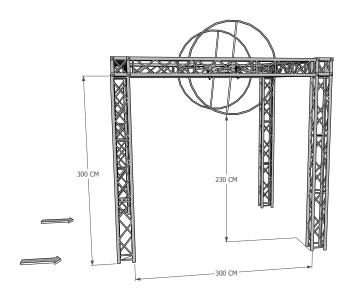
Supports must ensure stability and prevent movement.

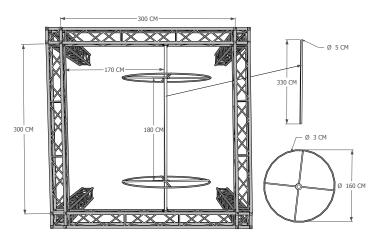
#### Crossing

Traverse the steps with the feet. Grasping or touching the steps with the hands is forbidden. There is no obligation to use all the steps except in circumstances described in Article 1.5.1 iii) of these Guidelines.

 $<sup>{}^{\</sup>star}\text{Measured}$  between the bases of the steps.

1.11.3 Obstacle #2 Big Wheel





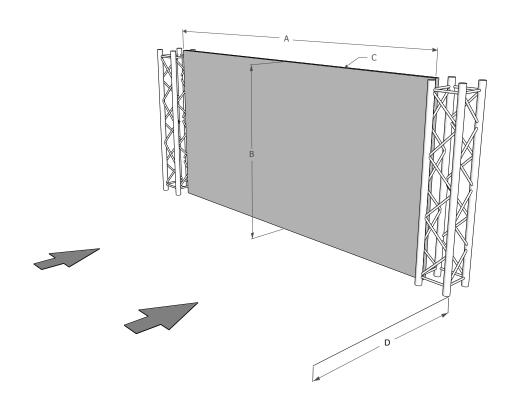
•	Length	300cm
•	Lateral elements spacing	180cm (±10 cm)
•	Support bar at	170cm
•	Wheel diameter	Ø160cm
•	Height (Wheel lowest part)	230cm (±10 cm)
•	Wheel spoke diameter	3cm
•	Bar wall thickness (EN 39 steel)	4mm - 5mm
•	Wheel wall thickness (6082 T6 Aluminium)	2mm

#### Crossing

Jump from the previous obstacle, grasping the wheel and swinging forward. Touching the ground between the platforms is forbidden, except in the situations described in Art. 1.5.4 iii).



#### 1.11.4 Obstacle #3 1.5m Wall



#### Characteristics

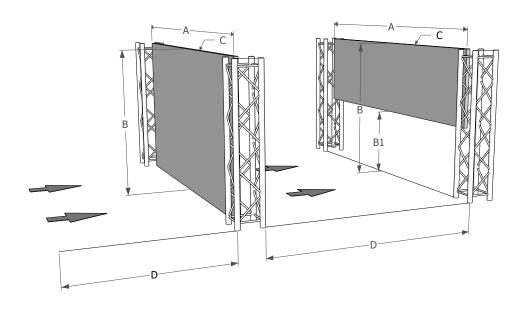
•	A	300cm
•	В	150cm
•	C (thickness)	4cm to 10cm
•	D	200cm (+50 cm)

If trusses are used, the exposed top of the truss must be covered with padding and to prevent shoes, clothing, etc. getting caught on the tubes.

#### Crossing

Overcome the wall passing over the top edge in any manner. Any part of the wall can be used or touched except for the supporting frame (truss in this image).

#### 1.11.5 Obstacle #4 Over-Under



#### Characteristics

•	A	300cm
•	В	150cm
•	B1	70cm
•	C (thickness)	4cm to 10cm
•	D	

If trusses are used, the exposed top of the truss must be covered with padding and to prevent shoes, clothing, etc. getting caught on the tubes.

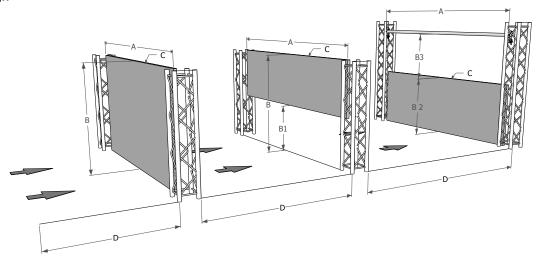
The arrangement of walls (Over and Under) may be altered at the discretion of the Organiser. The above-mentioned distances between the walls must be respected.

#### Crossing

Pass over the top of the first wall and pass under the second wall. Any part of the walls can be used or touched except for the supporting frame (truss in this image).



#### 1.11.6 Obstacle #5 Over-Under-Through



#### Characteristics

•	A	300cm
•	В	150cm
•	B1	70cm
•	B2	100cm
•	Вз	75cm
•	C (thickness)	4cm to 10cm
•	D	

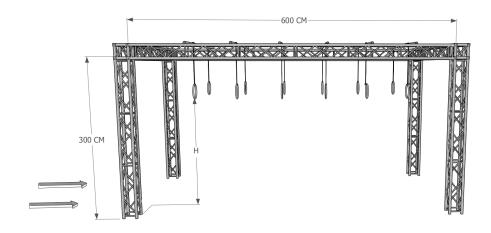
If trusses are used, the exposed top of the truss must be covered with padding and to prevent shoes, clothing, etc. getting caught on the tubes.

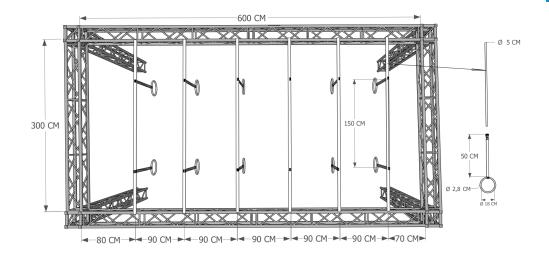
The sequence of walls (Over, Under, and Through) may be altered at the discretion of the Organiser. All the potential arrangements of this wall are allowed (E.g. Under-Through-Over, Over-Through-Under, etc...) as long as the distances between the walls respect the above-mentioned measurements.

#### Crossing

Pass over the first wall, under the second wall and through the opening in the third wall. Any part of the walls can be used or touched except for the vertical supporting frames (truss in this image).

1.11.7 Obstacle #6 Rings





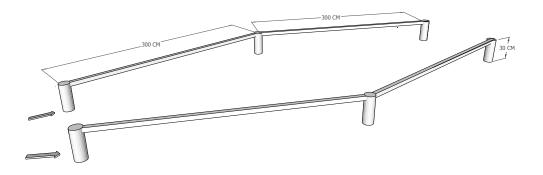
•	Lateral elements spacing	150cm (±10 cm)
•	Support bar spacing	90cm (±10 cm)
•	Ring inner diameter (standard gymnastics ring-synthetic, no wood)	Ø18cm
•	Ring spoke diameter	2.8cm
•	Ring support strap	50cm
•	Height (lowest part of ring)	
	» U15, U17	240cm (±10 cm)
	» U19, JUNIOR	260cm (±10 cm)

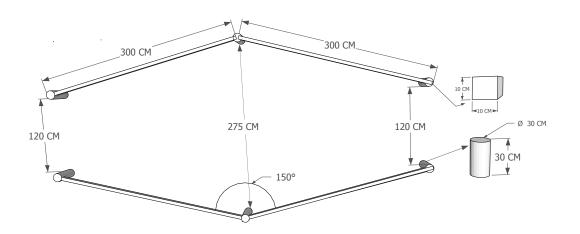
#### Crossing

Use only hands on the rings to traverse the obstacle. Touching the ground between the platforms is forbidden, except in the situations described in Art. 1.5.4 iii). There is no obligation to use all the rings except as described in Article 1.5.1 iii) of these Guidelines.



1.11.8 Obstacle #7 Balance Beam



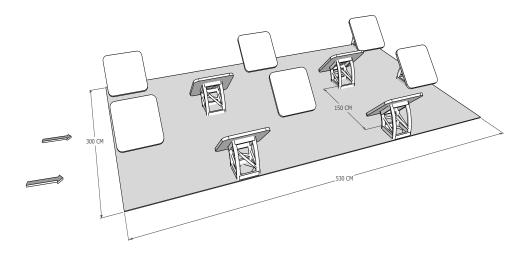


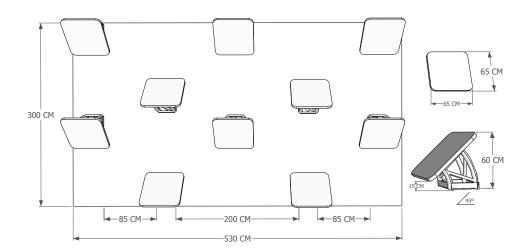
•	Beam length (each)	300cm (±10 cm)
•	Lateral elements spacing (start and finish)	120cm (±10 cm)
•	Lateral elements spacing (beams junction)	275cm (±10 cm)
•	Pillar height	30cm (±10 cm)
•	Pillar diameter	Ø30cm (±10 cm)
•	Angle between beams	150°
•	Beam squared section	10cm x 10cm

#### Crossing

Run the length of the obstacle using only feet on the beams. Contact with the ground between the start and finish lines is forbidden. Crawling or hugging the beam is forbidden.

1.11.9 Obstacle #8 Giant Steps





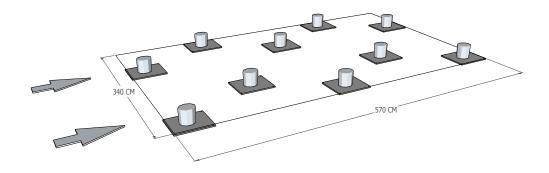
•	Length	530cm (±10 cm)
•	Steps spacing	200cm (±10 cm)
•	Steps dimensions	65cm x 65cm
•	Steps height (lower part-upper part)	15cm-60cm
•	Step angle	≈45°

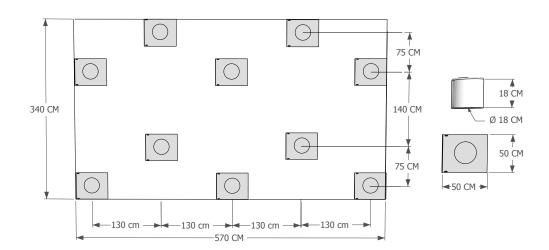
#### Crossing

Run the length of the obstacle using only feet on the steps. Grasping or touching the steps with the hands is forbidden. Touching the ground between the platforms is forbidden. There is no obligation to use all the steps except as described in Article 1.5.1 iii) of these Guidelines.



1.11.10 Obstacle #9 Lisbon Steps





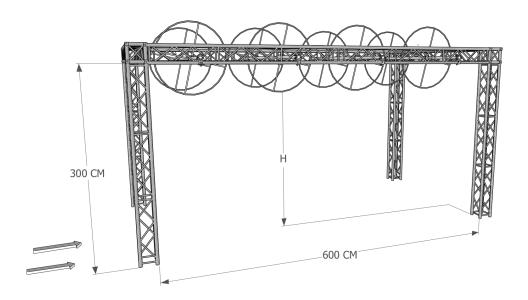
•	Length	570cm (±10 cm)
•	Width	340cm (±10 cm)
•	Lateral elements spacing	140cm (±10 cm)
•	Steps spacing	130cm (±10 cm)
•	Steps diameter	Ø18cm
•	Steps height	20cm (±5 cm)
•	Steps offset	
•	Step top chamfer	1cm @ 45°

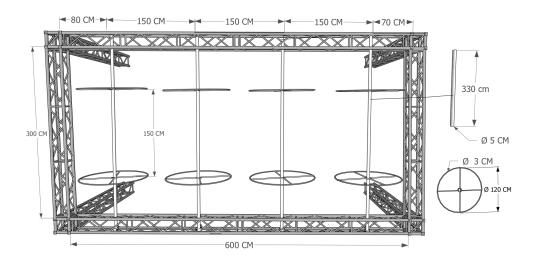
Supports must ensure stability and prevent movement. Top edges must be padded with 10mm minimum closed cell foam.

#### Crossing

Run the length of the obstacle using only feet. Grasping or touching the steps with the hands is forbidden. Touching the ground between the platforms is forbidden. There is no obligation to use all the steps except as described in Article  $1.5.1\,\text{iii}$ ) of these Guidelines.

1.11.11 Obstacle #10 Wheels





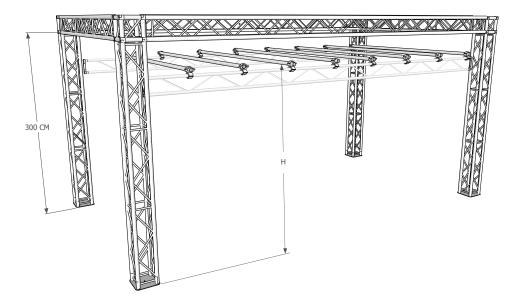
•	Lateral elements spacing	150cm (±10 cm)
•	Support bar spacing	150cm (±10 cm)
•	Wheel diameter	Ø120cm
•	Wheel spoke diameter	3cm
•	Bar wall thickness (EN 39 steel)	4mm - 5mm
•	Wheel wall thickness (6082 T6 Aluminium)	2mm
•	Height (lowest part)	
	» U15, U17	240cm (±10 cm)
	» LI19 JUNIOR	260cm (+10 cm)

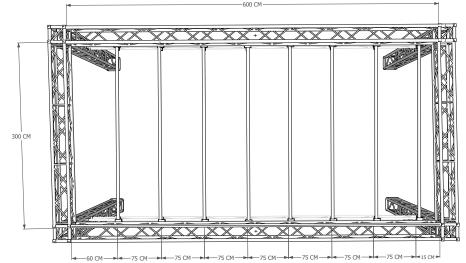
#### Crossing

Traverse between platforms using only hands on the wheels. Touching the ground between the platforms is forbidden, except in the situations described in Art. 1.5.4 iii). There is no obligation to use all the wheels except as described in Article 1.5.1 iii) of these Guidelines.



#### 1.11.12 Obstacle #11 Monkey Bars





#### Characteristics

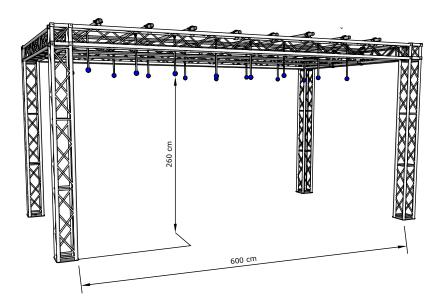
•	Bar spacing	
•	Bar diameter	Ø5cm
•	Bar wall thickness (EN 39 steel)	4mm - 5mm
•	Bar height (lowest part)	
	» U15, U17	240cm (±10 cm)
	» U19, JUNIOR	260cm (+10 cm)

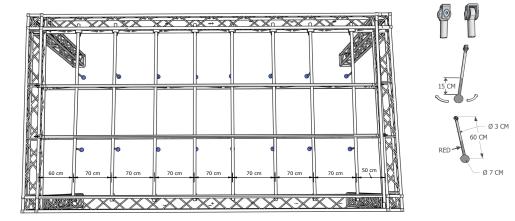
The Monkey Bars will incorporate an additional bar, resulting in 8 bars.

#### Crossing

Use only hands on the bars to traverse the obstacle. Touching the ground between the platforms is forbidden, except in the situations described in Art. 1.5.4 iii). There is no obligation to use all the bars except as described in Article 1.5.1 iii) of these Guidelines.

1.11.13 Obstacle #12 Swinging Globes





The globe's movement should be engineered to swing exclusively in the direction of travel through the obstacle. Lateral (side-to-side) movement of the globes is not allowed.

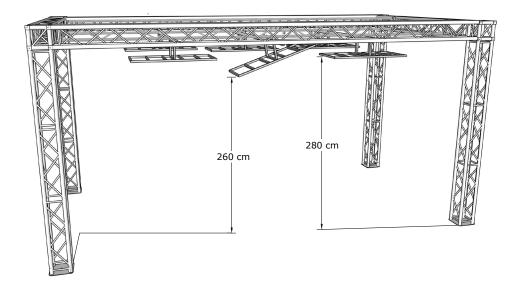
•	Lateral elements spacing	120cm (±10 cm)
•	Globes spacing	70cm (±10 cm)
•	Globe diameter	Ø7cm
•	Height (lowest part)	260cm (±10 cm)
•	Globe support pole	60cm

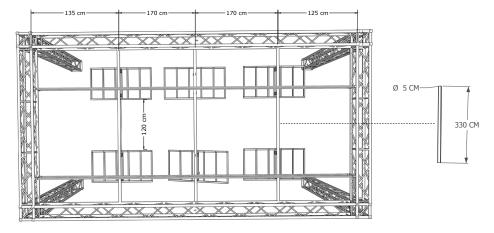
#### Crossing

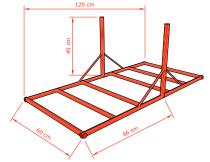
Use only hands on the globes to traverse the obstacle. It is not allowed to hold the support pole of each globe outside the area painted red (please see the graphic detail above). This red area must extend 15cm above the globe. Touching the ground between the platforms is forbidden, except in the situations described in Art. 1.5.4 iii). There is no obligation to use all of the globes except as described in Article 1.5.1 iii) of these Guidelines.

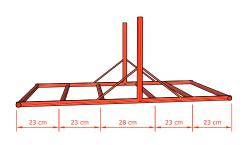


1.11.14 Obstacle #13 Tilting Ladders







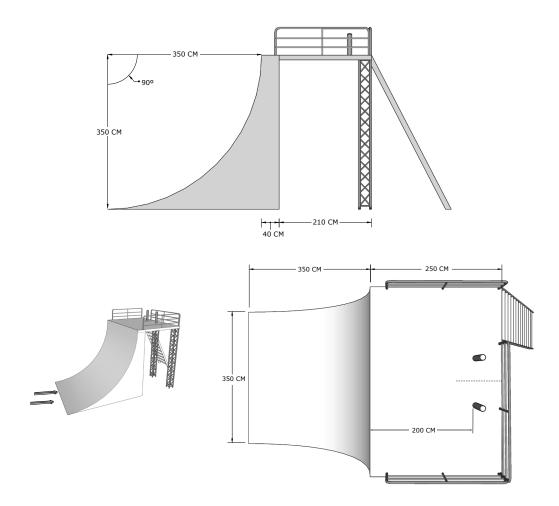


•	Lateral elements spacing	120cm (±10 cm)
•	Support bar spacing	200cm (±10 cm)
•	Ladder bars diameter	Ø3cm
•	Ladder support	45cm
•	Ladder height (Lowest part - horizontal)	280cm (±10 cm)
•	Ladder height (Lowest part - inclined)	260cm (±10 cm)

#### Crossing

Use only hands on the ladders to traverse the obstacle. Touching the ground between the platforms is forbidden, except in the situations described in Art.  $1.5.4\,\text{iii}$ ). There is no obligation to use all the bars except as described in Article  $1.5.1\,\text{iii}$ ) of these Guidelines.

1.11.15 Obstacle #14 Finish Wall



The wall surface must be smooth and free of splinters, sharp edges, gaps, or protrusions exceeding 0.5mm. The surface should provide good grip for athletic shoes but should not be textured in a manner that could cause injuries to athletes due to abrasions. It can be covered with 2mm or 3mm of smooth, recycled rubber of 900 kg/m³ density, providing a durable, slip-resistant surface that will help minimise injuries to athletes due to abrasions. The buzzer must be installed measuring 200cm from the edge of the ramp.

The top platform of the Finish Wall must have a minimum 1m high fence on the three sides outside of the ramp. This fence should include, at least, one top handrail, two parallel bars in the middle, and a 10cm high plinth at the bottom. An opening and closing gate must be provided for security. Additionally, ladders or pole for athletes' descent must be provided at the rear.

•	Ramp length	350cm
	Top platform length	
•	Width	360cm (±10 cm)
•	Height	350cm
•	Ramp curve angle	90°

#### Crossing

Run up the wall to reach the top platform. Any part of the wall except the sides can be touched or held with any part of the body provided the feet are never above head height.



#### 1.12 SAFETY REQUIREMENTS

It is the responsibility of the LOC (under the supervision of UIPM in UIPM events), to guarantee a safe competition tailored to the environmental conditions, course design, obstacles used, participant abilities and other factors that may influence safety for the obstacle course and event.

#### 1.12.1 Structure Approval

- i) All obstacles that include a structural element require written approval from a qualified professional before being used at events.
- ii) Upon approval of obstacle drawings, a qualified professional must document the structural element design loads for the event organiser considering the following factors, including but not limited to: anticipated environmental factors, wind, participant volume, maximum participant weight, maximum number of participants on an obstacle at one time, maximum expected forces applied by participants to the obstacle, and other safety factors.

#### 1.12.2 Build and Inspection

- i) Obstacles with structural elements must be built according to qualified professional approved design(s).
- ii) Event organisers must conduct and document a pre-event inspection and confirm the integrity of obstacles before each day of the event.
- iii) Any modifications to a structural obstacle that change the overall structural integrity of the obstacle relative to qualified professional approved designs must be approved and documented by a qualified professional before intended use.
- iv) The event organisers shall periodically monitor obstacles throughout the event for fitness for use. A comprehensive inspection of the course elements' condition shall be conducted five minutes prior to the start of the warm-up and again five minutes before the start of the competition. This meticulous check is essential to ensure the safety and proper functioning of all elements involved in the course.
- v) Special attention must be given to all trusses and screw tips, which must be countersunk or be covered with plastic/rubber caps to prevent injury and reduce the risk of tripping. The caps must be placed on the external adjacent side of the course, facing outward, for maximum visibility and safety.
- vi) To ensure the safety and longevity of hanging obstacles and grips, it is recommended to use metallic materials instead of wood. Metal is more durable and resistant to environmental factors, reducing the likelihood of instability and accidents.
- vii) Wooden obstacles, such as balance beams, must have all edges and corners rounded to prevent injury. Sharp angles can cause splinters, cuts, scrapes or other injuries, and must be eliminated through proper rounding and smoothing of the wooden surfaces. All wooden surfaces must be treated to prevent moisture damage and decay which can weaken the obstacle.

#### 1.12.3 Risk Assessment

- Obstacles must be subject to a risk assessment created and written by a qualified risk assessor in coordination with the competition medical team before the course is open for training and/or competition. The risk assessment must identify general hazards and hazardous obstacle elements, evaluate the probability and severity of a potential injury, and develop risk mitigation plans associated with the use of obstacles by participants.
- ii) For any obstacle with a fall from height (hazardous obstacle element), the risk assessment must consider the following factors: assessment of height of fall, landing surface, type of participant fall, participant body orientation throughout the obstacle, participants falling on each other, appropriate fall warning signage and landing surface maintenance.

#### 1.12.4 Medical Provision

- Medical provision is mandatory during the competition and must be conducted according to UIPM Competition Rules and Regulations and UIPM Medical Rules in order to ensure prompt and effective medical attention if necessary.
- ii) All medical staff must be trained on rescue protocols, specific hazards of the obstacles, locations of life-saving equipment and emergency response protocols.
- iii) All obstacles must be disinfected in cases where there are traces of blood to prevent the risk of disease transmission.
- iv) Hand sanitiser must be provided at the start and the finish of the obstacle course.

#### 1.12.5 Electrical System

- i) Electrical systems placed in temporary structures such as open-air competitions involve an increase in electrical risk, due to the temporary nature of the systems, the risk of fire, the presence of the public and the environmental conditions that change depending on the location installation; for this reason, their execution requires greater and careful evaluation in order to reduce the electrical risk.
- ii) Plugs and sockets must have an adequate degree of protection against the penetration of water.
- iii) The equipment, tools, panels and pipes, in addition to complying with the regulations in force, must always be kept in good condition and not be a source of risk for workers.
- iv) The systems and materials used must be certified as compliant with the regulations in force.



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