PART X

FINA FACILITIES RULES

2017– 2021

FR 4.7.2 There shall be an air-conditioned control centre, with dimensions of a least 6.0 metres x 3.0 metres, located between 3.0 metres and 5.0 metres from the finish wall, with an unobstructed view of the finish wall at all times during the race. The referee must have easy access to the control centre during the competition. At all other times the control centre shall be able to be secured.

FR 4.7.3 Video timing

FR 4.8 Semi-Automatic Equipment may be used as a backup to the Automatic Officiating Equipment at FINA or other major events if there are three buttons per lane, each operated by a separate official (in which case other finish judges shall not be required). An inspector of turns may operate one of the buttons.

DIAGRAMS FOR SWIMMING (Total 3)

FR 5 DIVING FACILITIES

FR 5.1 Springboard Diving

General requirements: Dimensions in metres for all diving facilities as detailed in ***Diving Diagram, Annex 1.1 & Annex 1.2,*** shall be observed.

FR 5.1.1 The springboards shall be at least 4.8 metres long and 0.5 metre wide. At all FINA Events, the type of springboard which must have a slip-resistant surface shall be approved by FINA.

FR 5.1.2 The springboards shall be provided with movable fulcrums easily adjustable by the diver.

FR 5.1.3 For springboard diving facilities modified or constructed on concrete platforms after 1 October 2013, the following shall be observed

FR 5.1.3.1 The vertical distance from the level of the platform, which supports the fulcrum assembly, to the level of the top of the springboard, shall be 0.35 metre**.**

FR 5.1.3.2 The distance from the front edge of the fulcrum assembly (which is 0.741 metres in length) to the front edge of the supporting platform, shall be a maximum of 0.44 metre.

FR 5.1.3.3 If the front edge of the platform projects past this point then the fulcrum assembly and the rear hinge assembly must be moved forward so as to provide for a maximum of 0.44 metres from the front edge of the platform to the front of the fulcrum assembly

FR 5.1.4 The minimum distance recommended from the rear to the centre line of the fulcrum shall be in accordance with the recommendation or specification of the springboard manufacturer.

FR 5.1.5 The springboards shall be installed dead level at the leading edge when the movable fulcrum is in all positions.

FR 5.1.6 The springboards should be placed on either one or both sides of the platform. For Synchronised Diving, it is required that at least two springboards at the same height shall be placed side by side and no objects should obstruct the visibility in any part of the dive between the divers.

See Diving Diagram, Annex 2.1 & Annex 2.2

FR 5.2 Platform Diving

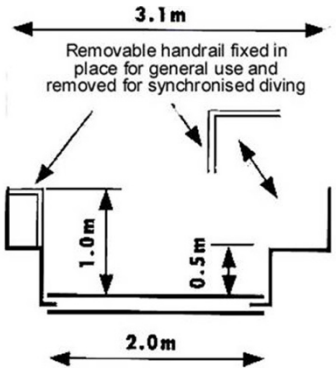
FR 5.2.1 Each platform shall be rigid and horizontal.

FR 5.2.2 The minimum dimensions of the platform shall be:

PLATFORM	WIDTH	LENGTH
0.6m to 1.0m	1.00m (2.90m preferred)	5.00m
2.6m to 3.0m	1.00m (2.00m preferred)	5.00m
5.0m	2.90m	6.00m
7.5m	2.00m	6.00m
10.0m	3.00m	6.00m

On 10m platforms, with a width of less than 3m, only the handrails on each side for a distance of at least 3.0m back from the front edge of the platform may be shaped as detailed next (see drawing).

It is recommended that an easily removable section of handrail be included for general use, which can be removed for synchronised diving. ***See Diagram***



FR 5.2.3 The preferred thickness of the front edge of the platform shall be 0.2 metre but not exceeding 0.3 metre, and can be vertical or inclined at an angle not greater than 10° to the vertical inside the plummet line. The front edge is to applied first and them the top surface.

FR 5.2.4 The surface and the front edge of the platform shall be covered throughout with a resilient slip-resistant surface. The two surfaces shall be covered separately in order to achieve a clean 90° angle or as described in FR 5.2.3. The front surface is to be applied first and then the top surface.

FR 5.2.5 The platforms shall be covered in a slip-resistant material that shall have a tread pattern that provides sufficient traction in wet and dry conditions such that the divers are prevented from slipping when performing dives in all directions. The minimum thickness must be 6mm (- 0 / + 1mm) and the colour should give a contrast to the surrounding décor. The material shall be easily cleaned to maintain the anti-slip feature of the product. The installation of the slip-resistant platform covering shall respect FINA Rule FR 5.2.4.

FR 5.2.6 The front edge of the 10 metre platform shall project at least 1.50 metres, the 7.5 metre, 5 metre and 2.6 – 3.0 metre platforms 1.25 metres, and the 0.6 – 1 metre platform 0.75 metre beyond the edge of the pool.

FR 5.2.7 Where a platform is directly underneath another platform the platform above shall project a minimum of 0.75 metre (preferred 1.25 metres) beyond the platform below.

FR 5.2.8 The back and sides of each platform (except 1.0 metre or lower platforms) shall be surrounded by handrails up to 1m from the edge of the platform with a minimum clearance of 1.8 metres between vertical pairs. The minimum height shall be 1.0 metre and they shall be with at least two horizontal crossbars placed outside the platform beginning 1.0 metre from the front edge of the platform.

A solid transparent barrier is also permitted instead of crossbar.

The minimum handrails height surrounding 3.00m springboards must be measured from the level of the 3.00 m springboard.

FR 5.2.9 Each platform shall be accessible by suitable stairs (not ladders) as required by the countries building regulations and or health and safety standards that are applicable.

FR 5.2.10 It is preferable that a platform is not constructed directly under any other platform however in circumstance where this cannot be avoided then you must refer to ***Diving Diagram, Annex 1.1, 1.2, 2.1 & 2.2.***

FR 5.2.11 Requirements for the supporting structure. For platforms and supporting structure of the springboards the design load is p = 350 kiloponds (kilograms force) per lineal metre.

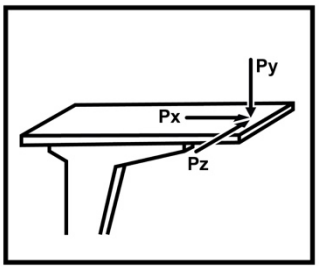
In addition to the static requirements and for the comfort and safety of the user with respect to the movement of the towers, the following limits shall be observed, with respect to the platforms and springboard supports.

Fundamental frequency of platforms 10.0 Hz

TOLERANCES:

PLATFORM	MINIMUM	MAXIMUM
10m	10 Hz	20 Hz
7.5m, 5m, 3m and 1m	10 Hz	30 Hz

Fundamental frequency of tower 3.5 Hz
Oscillation of total structure 3.5 Hz



The spatial deformation of the front edge of the platforms as a result of Px = Py = Pz = 100 kiloponds (kilograms force) shall be a maximum of 1 mm. **See Drawing**

These requirements can be met most adequately by a reinforced concrete structure. Proof of the dynamic behavior is to be obtained together with the static calculations for the whole structure.

FR 5.3 General Requirements

FR 5.3.1 For pools designed and constructed after 26th September 2013 the minimum dimensions in metres for diving facilities as detailed on the "Diving Facilities Diagram" (Annex 1.2) shall prevail, using, as a basic measuring point of reference, the plummet line, which is a vertical line extending through the centre of the front edge of the springboard or platform. It is recommended that the preferred dimensions be used for projects considered to have an important status.

FR 5.3.2 The dimensions C from plummet to adjacent plummet in the "FINA Dimensions for Diving", Annex 1.2 table apply to platforms with widths as detailed in FR 5.2.2. If platform widths are increased then the dimensions B and C shall be increased by half the additional widths.

FR 5.3.3 The height of the springboards and each platform above the water level may vary by plus 0.05 metre and minus 0.00 metre from the heights prescribed in the Rules.

FR 5.3.4 The end of 5, 3, and 1 metre platforms must not project beyond the ends of the 3 and 1 metre springboards when they are adjacent to each other.

FR 5.3.5 In the area of full water depth, the bottom of the pool may rise up to 2%. In the diving pool, the depth of water shall not be less than 1.8 metres at any point.

FR 5.3.6 In outdoor pools, best practice suggests that springboards and platforms are recommended to face north in the northern hemisphere and south in the southern hemisphere.

FR 5.3.7 The minimum illumination at a level of 1 metre above the water surface shall not be less than 600 lux.

FR 5.3.8 Sources of natural and artificial illumination shall be provided with controls to prevent glare.

FR 5.3.9 The water temperature shall be not less than 26° Celsius.

FR 5.3.10 Mechanical surface agitation shall be installed under the diving facilities to aid the divers in their visual perception of the surface of the water. In pools equipped with an underwater bubble machine, the machine should only be used for this purpose if it creates sufficient water agitation when working with a very low pressure; otherwise a horizontal water sprinkler system should only be used.

FR 5.3.11 For Diving Pools that will also be used for swimming.

Lane markings for Diving pools shall be of a dark contrasting colour, placed on the floor of the pool in the centre of each lane.

Width: minimum 0.2 metre, maximum 0.3 metre.

Length: 21.0 metres for 25 metre long pools.

Each lane line shall end 2.0 metres from the end wall of the pool with a distinctive cross line 1.0 metre long and of the same width as the lane line. Target line shall be placed on the end of the walls or on the touch panels, in the centre of each lane, of the same width as the lane lines. A cross line 0.5 metre long shall be placed 0.3 metre below the water surface, measured to the centre point of the cross line. They shall extend without interruption from the deck edge (curb) to the floor or to a maximum of 3 metres.

FR 5.3.12 Individual diving

FR 5.3.12.1 The judges will be placed side by side in a line on each side of the springboard / platform by the Referee.

FR 5.3.12.2 When seven (7) / five (5) judges are used, four (4) / three (3) judges will be on the side closest to the competition.

Note: The Referee may decide to place four (4) / three (3) judges farthest from the competition depending of the local situation in the pool.

FR 5.3.12.3 No judge shall be seated behind the front edge of the springboard or platform.

FR 5.3.12.4 The numbering of the judge chairs will be clockwise when facing the springboard / platform.

FR 5.3.12.5 In the 1 metre springboard competitions, chairs suitable for use on poolside shall be used.

FR 5.3.12.6 In the 3 metre springboard competitions, the judges shall be seated at a height of not lower than two (2) metres above the water level.

FR 5.3.12.7 In the 10 metre platform competitions, the chairs from the 3m springboard competitions can be used but if at all possible, the judges shall be seated at an even higher level.

FR 5.3.12.8 To assist the judges in the 3 metre springboard and 10 metre platform competitions, the judge chairs must be positioned as far back from the edge of the pool as is practical.

FR 5.3.13 Synchronised diving

FR 5.3.13.1 Three (3) / two (2) execution judges will be placed on either side of the springboard / platform by the Referee.

FR 5.3.13.2 The numbering of the execution judge chairs will be clockwise when facing the springboard / platform, namely E 1, E 2 and E 3 (or E 1, E 2) on the left side and E 4, E 5 and E 6 (or E 3, E 4) on the right side.

FR 5.3.13.3 In between the execution judges on either side of the pool, the synchronised judges will be placed in a line.

FR 5.3.13.4 Three (3) synchronised judges will be on the side closest to the springboard / platform competition, and the other two (2) synchronised judges on the opposite side.

FR 5.3.13.5 The numbering of the synchronised judge chairs will start on the left-hand side on the pool with the lowest chair being S 1, and the highest chair on the right-hand side of the pool being S 5.

FR 5.3.13.6 In the synchronised competitions, the synchronised judges closest to the pool edge, shall be seated at a height of not lower than 2.0 metres above the water level.

FR 5.3.13.7 The subsequent heights for the remaining synchronised judges (or additional execution judge) must increase no less than 0.5 metre per seat.

FR 5.3.13.8 There shall be no interference or movement in front of the judge chairs.

FR 5.3.13.9 The above recommendations are shown in ***Diving Diagram, Annex 2.1 & Annex 2.2.***

FR 5.3.14 Dry Land Training Facilities

General Requirements: Dimensions in metres for Dry Land Training Facilities as detailed in ***Diving Dry Land Training, Annex 3.1 & Annex 3.2*** and ***Diving Dry Land Recommended Equipment, Annex 3.3 & 3.4***

FR 5.3.14.1 For the safety and development of divers in the learning of new and more difficult dives, it is strongly recommended that the guidelines presented below be incorporated into the facility and placed adjacent to the competitive diving area /facilities

FR 5.3.14.2 When minimum dimensions are used in B and C a vertical mat or other protective surface should be attached to the appropriate forward and side walls.

FR 5.4 Electronic Officiating Equipment

FR 5.4.1 Electronic Officiating equipment records the judges awards for each diver and determines the final score for each dive as required by Rule D 7

FR 5.4.2 Preferred Equipment must be able to;

FR 5.4.2.1 Record judges awards by whole and half points

FR 5.4.2.2 Be able to display all recorded and calculated information for each diver both before and after each dive

FR 5.4.2.3 Be able to display the scores for all divers before and after each dive

FR 5.4.2.4 Be able to display the rank order and scores for all divers after each round of dives

FR 5.4.2.5 The equipment must provide each judge with an electronic judging device that will permit each judge to enter their award and to see their award on a window on the device. After the referee has accepted the judges awards, all awards shall be displayed on each electronic judging device

FR 5.4.2.6 Judges analysis is to be provided at the conclusion of each event or series

FR 5.4.2.7 The referee must be provided with a monitor on which he/ she will be able to view the awards of all the judges prior to the awards then being displayed on the score board

FR 5.4.2.8 There is a requirement for a print out of the following information;

1. The draw for the diving order
2. A start list for each session or event
3. A ranking of dives at the end of each round
4. A ranking of dives at the end of each event
5. Judges awards and scores for each diver at the end of each session and event

FR 6 DIVING FACILITIES FOR OLYMPIC GAMES AND WORLD CHAMPIONSHIPS

FR 6.1 **General requirements:** Dimensions in Metres for Diving Facilities as detailed in ***Diving Diagram, Annex 1.1 & Annex 1.2*** and 'Field of Play for Olympic Games and World Championships: ***Diving Diagram, Annex 2.1 & Annex 2.2***.

FR 6.1.1 For Olympic Games and World Championships FR 5 in total shall apply; however, the light intensity at the level of 1 metre above the water surface shall not be less than 1500 lux.

FR 6.2 With regard to dimensions for diving facilities a combination of preferred and minimum measurements found in the "*FINA Dimensions for Diving Facilities, Annex 1.1 & Annex 1.2* table may be used. However, measurements less than minimum are not acceptable and may not be used. If the swimming pool and diving well are in the same area, the minimum distance separating the pools shall be of 8 metres, however 10 metres is preferred (see FR 3.16).

FR 6.2.1 The vertical height from the plummet of the diving board and or springboard at rest to the water surface at rest and before water sprays or bubbles are set in motion shall be specified in the Diving Facilities Dimensions table. These measurements should be certified by a surveyor or other qualified officials, appointed or approved by the member of the country in which the pool is situated.

FR 6.3 Line markings for the diving well will consist of 3 lines running the width of the diving well 90 degree angle to the diver facing forward on the springboard or platform. These lines shall be as follows:

Width: minimum 0.2 metre, maximum 0.3 metres

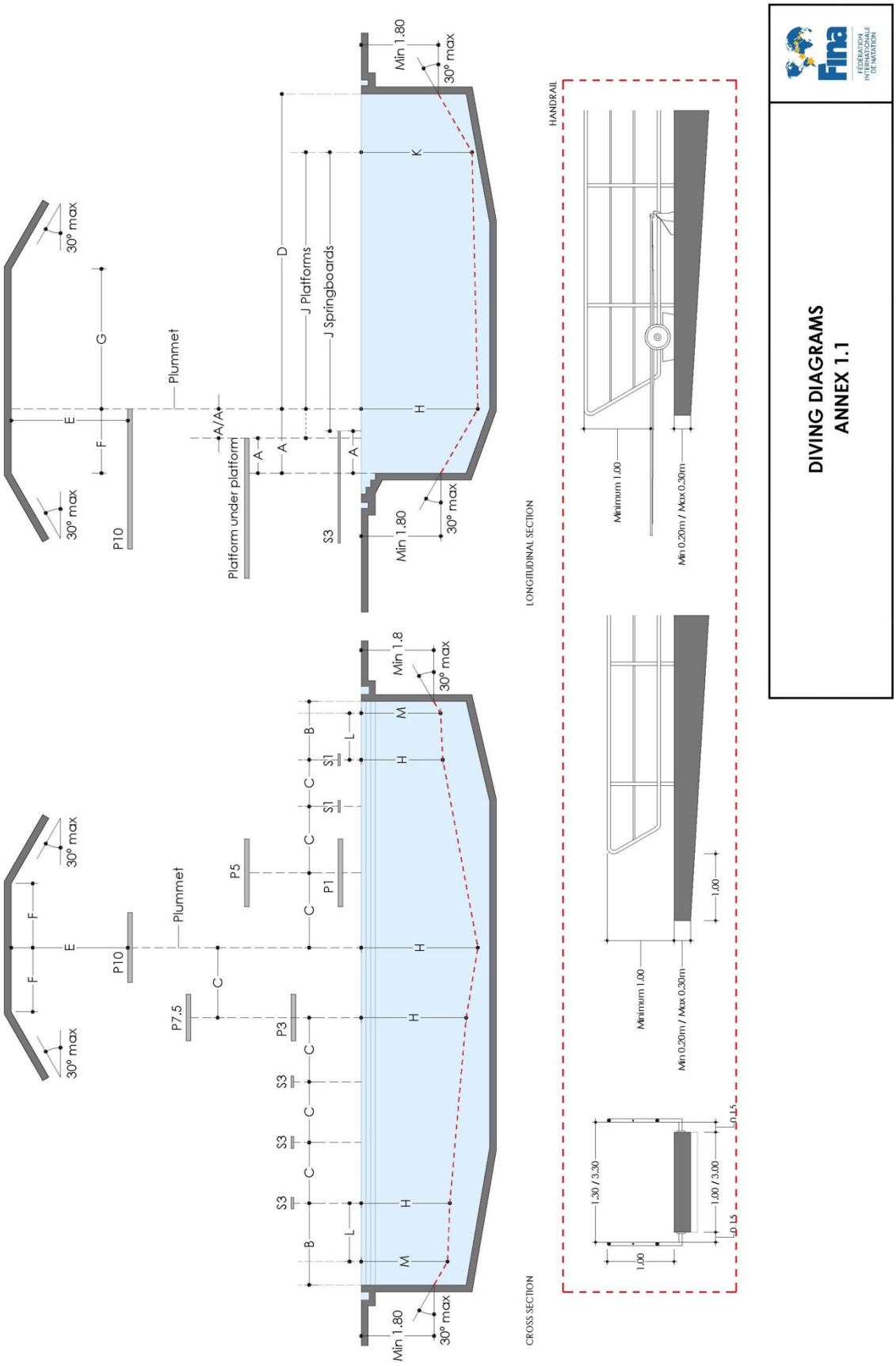
Length: 21.0 metre for 25 metre wide diving well

The distance between the centre points of each lane shall be 2.5 metres

The centre of the first line shall be directly under the plummet of the 3 metre springboard. ***See Diving Diagram, Annex 2.1 & Annex 2.2***

FR 6.4 The host facility must provide a trampoline with spotting equipment and a hot tub. It is preferred that there be two trampolines and a dry land area with a springboard and a platform take-off into foam landing pits as detailed in ***Annex 3.1***.

DIAGRAMS FOR DIVING (Total 8)


DIVING DIAGRAMS
ANNEX 1.1
LONGITUDINAL SECTION
CROSS SECTION
HANDRAIL
Plummet
Platform under platform
J Platforms
J Springboards
P10
P7.5
P5
P3
P1
S3
S1
30° max
Min 1.80
Min 1.8
Minimum 1.00
Min 0.20m / Max 0.30m
1.00
1.30 / 3.30
1.00 / 3.00
0.15

§

FR 5.3 GENERAL REQUIREMENTS

	FINA Dimensions for Diving facilities		SPRINGBOARD				PLATFORM									
			1 metre		3 metres		1 metre		3 metres		5 metres		7.5 metres		10 metres	
	For pools constructed after September, 26th, 2013 (see FR 5.3.1)	Lenght	4.80		4.80		5.00		5.00		6.00		6.00		6.00	
		Width	0.50		0.50		1.00 min. 2.90 preferred		1.00 min. 2.00 preferred		2.90		2.00		3.00	
		Height	1.00		3.00		0.60 min. 1.00 preferred		2.60 min. 3.00 preferred		5.00		7.50		10.00	
			Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert
A	From plummet back to pool wall for **CONCRETE PLAFORM**	Designation	A-1		A-3		A-1 pl		A-3 pl		A-5		A-7.5		A-10	
		Minimum	2.22		2.22		0.75		1.25		1.25		1.25		1.50	
		Preferred	2.22		2.22		0.75		1.25		1.25		1.25		1.50	
	From plummet back to pool wall for **PEDESTALS AND METAL STANDS**	Minimum	1.50		1.50											
		Preferred	1.80		1.80											
A/A	From plummet **BACK TO PLATFORM** Plummet directly below	Designation									A/A 5/1		A/A 7.5/3,1		A/A 10/5,3,1	
		Minimum									0.75		0.75		0.75	
		Preferred									1.25		1.25		1.25	
B	From plummet to **POOL WALL AT SIDE**	Designation	B-1		B-3		B-1 pl		B-3 pl		B-5		B-7.5		B-10	
		Minimum	2.50		3.50		2.50		3.00		4.00		4.50		5.75	
		Preferred	2.50		3.50		2.50		3.60		4.50		4.75		5.75	
C	From plummet to **ADJACENT PLUMMET**	Designation	C-1-1		C3-3,3-1		C-1-1 pl		C3-3pl,1pl		C5-3, 5-1		C7.5-5,3,1		C10-7.5,5,3,1	
		Minimum	2.00		2.20		1.85		2.20*		2.85*		2.75*		3.00*	
		Preferred	2.00		2.60		2.15		2.35*		2.85*		2.75*		3.00*	
D	From plummet to **POOL WALL AHEAD**	Designation	D-1		D-3		D-1 pl		D-3 pl		D-5		D-7.5		D-10	
		Minimum	9.00		10.25		8.00		9.50		10.25		11.00		13.50	
		Preferred	9.00		10.25		8.00		9.50		10.25		11.00		13.50	
E	On plummet, from **BOARD TO CEILING**	Designation		E-1		E-3		E-1 pl		E-3 pl		E-5		E-7.5		E-10
		Minimum		5.00		5.00		3.25		3.25		3.25		3.25		4.00
		Preferred		5.00		5.00		3.50		3.50		3.50		3.50		5.00
F	**CLEAR OVERHEAD** behind and each side of plummet	Designation	F-1	E-1	F-3	E-3	F-1 pl	E-1 pl	F-3 pl	E-3 pl	F-5	E-5	F-7.5	E-7.5	F-10	E-10
		Minimum	2.50	5.00	2.50	5.00	2.75	3.25	2.75	3.25	2.75	3.25	2.75	3.25	2.75	4.00
		Preferred	2.50	5.00	2.50	5.00	2.75	3.50	2.75	3.50	2.75	3.50	2.75	3.50	2.75	5.00
G	**CLEAR OVERHEAD** ahead of plummet	Designation	G-1	E-1	G-3	E-3	G-1 pl	E-1 pl	G-3 pl	E-3 pl	G-5	E-5	G-7.5	E-7.5	G-10	E-10
		Minimum	5.00	5.00	5.00	5.00	5.00	3.25	5.00	3.25	5.00	3.25	5.00	3.25	6.00	4.00
		Preferred	5.00	5.00	5.00	5.00	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50	6.00	5.00
H	**DEPTH OF WATER** At plummet	Designation		H-1		H-3		H-1 pl		H-3 pl		H-5		H-7.5		H-10
		Minimum		3.40		3.70		3.20		3.50		3.70		4.10		4.50
		Preferred		3.50		3.80		3.30		3.60		3.80		4.50		5.00
J K	**DISTANCE AND DEPTH** ahead of plummet for all stands	Designation	J-1	K-1	J-3	K-3	J-1 pl	K-1 pl	J-3 pl	K-3 pl	J-5	K-5	J-7.5	K-7.5	J-10	K-10
		Minimum	5.00	3.30	6.00	3.60	4.50	3.10	5.50	3.40	6.00	3.60	8.00	4.00	11.00	4.25
		Preferred	5.00	3.40	6.00	3.70	4.50	3.20	5.50	3.50	6.00	3.70	8.00	4.40	11.00	4.75
L M	**DISTANCE AND DEPTH** each side of plummet	Designation	L-1	M-1	L-3	M-3	L-1 pl	M-1 pl	L-3 pl	M-3 pl	L-5	M-5	L-7.5	M-7.5	L-10	M-10
		Minimum	1.50	3.30	2.00	3.60	1.40	3.10	1.80	3.40	3.00	3.60	3.75	4.00	4.50	4.25
		Preferred	2.00	3.40	2.50	3.70	1.90	3.20	2.30	3.50	3.50	3.70	4.50	4.40	5.25	4.75
N	**MAXIMUM SLOPE TO REDUCE DIMENSIONS BEYOND FULL REQUIREMENTS FOR POOL DEPTH and CEILING HEIGHT**					**30 DEGREES**										

*** Note:** The minimum distance between adjacent plaforms must be at least 0.25 metres.
Note: Dimensions B (plummet to pool wall at side) and C (plummet to adjacent plummet) apply to Platforms with widths as detailed in FR.5.2.2. If Platform widths are increased then B and C shall be increased by half the additional width(s).
Note: The 10 Metre Platform must project 0.25 metres beyond any adjacent platform.
Note: All platforms must project 0.75 metres beyond any platform directly below.
Note: The leading edge of the concrete platforms for springboards must be at least constructed to be directly above the pool wall or beyond.
Note: FR 5.3.4 The end of 5, 3 and 1 metre platforms must not project beyond the ends of the 3 and 1 metre springboards when they are adjacent to each other.

DIVING DIAGRAMS
ANNEX 1.2