

## INTERNATIONAL & NATIONAL COMPETITION

There are a number of sanctioning organizations for national and international amateur competition. Included here are the facility standards of FINA (the Federation Internationale de Natation) and two of its U.S. affiliates, USA Swimming and USA Diving, as well as the National Collegiate Athletic Association (NCAA).

### FINA STANDARDS

- Length—50m. When touch panels or electronic timing devices are used, the pool must be of such length that ensures the required distance between the panels.
- Width—25m preferred.
- Depth – A minimum depth of 1.35 meters, extending from 1.0 meter to at least 6.0 meters from the end wall is required for pools with starting blocks. A minimum depth of 1.0 meter is required elsewhere.
- Number of lanes—8. For Olympic Games and World Championships, 10 lanes are required.
- Width of lanes—2.5m minimum with spaces of 0.2m outside first and last lanes. A lane rope must separate these spaces from the first and last lanes.

### USA SWIMMING STANDARDS

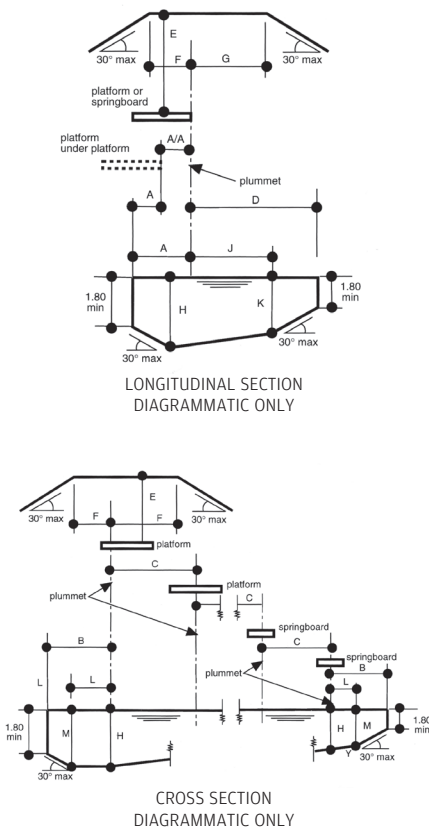
- Length—Long course, 164 $\frac{1}{2}$ " (50m); short course, 82 $\frac{1}{4}$ " (25m) or 25 yds.
- Width—Eight lanes, 8'2" (2.5m) minimum (centerline to centerline), with approximately 1'6" (0.45m) of open water outside first and last lanes.
- Water depth—For national championships and international competition, 6'7" (2m) throughout the course. Minimum water depth for racing starts during competition and practice shall be measured for a distance 3'3 $\frac{1}{2}$ " (1m) to 16'5" (5m) from the end wall. Starting requirements and height of starting blocks shall be as follows: Long Course and Short Course meters: (A) In pools with water depth less than 4' (1.22m) at the starting

end, the swimmer must start from within the water; (B) In pools with water depth 4' (1.22m) or more at the starting end, starting platforms shall be no less than 20" (0.5m) nor more than 2'5 $\frac{1}{2}$ " (0.75m) above the water surface. Short Course yards: The front edge of the starting platforms shall be no higher than 2'6" (0.762m) above the surface of the water.

**Note:** Minimum water depth for teaching racing starts in any setting from any height starting blocks or the deck shall be 6' (1.84m) measured for a distance of 3'3 $\frac{1}{2}$ " (1.0m) to 16'5" (5.0m) from the end wall.

## POOL CROSS-SECTION

## FINA AND USA DIVING DIMENSIONS FOR DIVING FACILITIES



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 26 <sup>th</sup> , 2013 (see FR 5.3.1)		Length	4.80		4.80		5.00		5.00		6.00		6.00		6.00	
		Width	0.50		0.50		1.00 min 2.90 pre		1.00 min 2.90 pre		2.90		2.00		3.00	
		Height	1.00		3.00		0.60 min 1.00 pre		2.60 min 3.00 pre		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 WALL FOR CONCRETE PLATFORM	Designation	A-1	A-3	A-1pl	A-3pl	A-5	A-7.5	A-10							
	Minimum	2.22	2.22													
	PREFERRED	2.22	2.22													
	FROM PLUMMET BACK TO POOL WALL FOR PEDESTALS AND METAL STANDS	Minimum	1.50	1.50	0.75	1.25	1.25	1.25	1.25	1.50						
	PREFERRED	1.80	1.80	0.75	1.25	1.25	1.25	1.25	1.50							
A/A	FROM PLUMMET BACK TO PLATFORM plummet directly below	Designation					A/A5/1		A/A7.5/3.1		A/A10/5.3.1					
	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-1pl	B-3pl	B-5	B-7.5	B-10							
	Minimum	2.50	3.50	2.50	3.00	4.00	4.50	5.00	5.75							
	PREFERRED	2.50	3.50	3.50	3.60	4.50	4.75	5.75								
C	FROM PLUMMET TO ADJACENT PLUMMET	Designation	C1-1	C-3-3.1	C1-1pl	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-1pl	D-3pl	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-1pl	E-3pl	E-5	E-7.5	E-10							
	Minimum	5.00	5.00	3.25	3.25	3.25	3.25	3.25	4.00							
	PREFERRED	5.00	5.00	3.50	3.50	3.50	3.50	4.50								
F	CLEAR OVERHEAD BEHIND AND EACH SIDE OF PLUMMET	Designation	F-1	E-1	F-3	E-3	F-1pl	E-1pl	F-3pl	E-3pl	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-1pl	E-1pl	G-3pl	E-3pl	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-1pl	H-3pl	H-5	H-7.5	H-10							
	Minimum	3.40	3.70	3.20	3.50	3.70	4.10	4.10	4.50							
	PREFERRED	3.50	3.80	3.30	3.60	3.80	4.50	5.00								
J	DISTANCE AND DEPTH AHEAD OF PLUMMET FOR ALL STANDS	Designation	J-1	K-1	J-3	K-3	J-1pl	K-1pl	J-3pl	K-3pl	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	DISTANCE AND DEPTH EACH SIDE OF PLUMMET	Designation	L-1	M-1	L-3	M-3	L-1pl	M-1pl	L-3pl	M-3pl	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 DIMENSION BEYOND FULL REQUIREMENTS FOR POOL DEPTH AND CEILING HEIGHT	30 DEGREES														
		* Note: The minimum distance between adjacent platforms 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. If platform widths are increased then B and C are to 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.														

## FOR MORE INFORMATION CONTACT:

**USA Swimming**  
(719) 866-4578  
www.usaswimming.org

**USA Diving**  
(317) 237-5252  
www.usadiving.org

# SWIMMING & DIVING

## NCAA DIVING CHART

### LONG-COURSE SWIMMING

- Preferred—For facilities dated after Sept. 1, 1996, it is preferred that the racing course be 50m (164' ½") in length by 75' (22.86m) in width, providing for eight 9' (2.74m) lanes with additional width outside lanes 1 and 8. A minimum water depth of 7' (2.13m) is desirable for competition. Optional markings: nine 8' (2.44m) lanes or ten 7' (2.13m) lanes.
- Acceptable—For existing facilities, it is acceptable that the racing course be 50m (164' ½") in length by 60' (18.29m) in width, providing for eight 7' (2.13m) lanes with additional width outside lanes 1 and 8. The water depth may be no less than 4' (1.22m) at the starting end of the racing course and no less than 3'6" (1.07m) at the opposite end. However, a water depth of no less than 7' (2.13m) is recommended throughout the entire length of the racing course.

### SHORT-COURSE SWIMMING

- Preferred yards—The racing course should be 75' (22.86m) in length by at least 60' (18.29m) in width, providing for not less than eight 7' (2.13m) lanes with additional width outside lanes 1 and 8. A minimum water depth of 7' (2.13m) is desirable for optimal competition conditions.
- Preferred meters—The racing course should be 25m, (82' ¼") in length by at least 60' (18.29m) in width, providing for eight 7' (2.13m) lanes with additional width outside lanes 1 and 8. A minimum water depth of 7' (2.13m) is desirable for optimal competition conditions.
- Acceptable yards—The racing course may be 75' (22.86m) in length by 30' (9.15m) in width, providing for at least five 6' (1.83m) lanes. The water depth may be no less than 4' (1.22m) at the starting end of the racing course and no less than 3'6" (1.07m) at the opposite end. However, a water depth of no less than 4' (1.22m) is recommended throughout the entire length of the racing course.
- Acceptable meters—The racing course may be 25m, (82' ¼") in length by at least 30' (9.15m) in width, providing for at least five 6' (1.83m) lanes. The water depth may be no less than 4' (1.22m) at the starting end of the racing course and no less than 3.5' (1.07m) at the opposite end. However, a water depth of no less than 4' (1.22m) is recommended throughout the entire length of the racing course.

### NUMBER OF LANES

All championship swimming competitions shall be conducted in racing courses having a minimum of six, 6-foot lanes. It is recommended that the racing course have a minimum of eight, 6-foot lanes.

### STANDARD LENGTH

All championship swimming competitions shall be conducted in racing courses of standard length (75 feet 1 inch; 25 meters 2.54 centimeters; or 50 meters 2.54 centimeters).

**Note:** Length of pool is measured from inside walls or from tile or timing devices attached to the wall. New construction should account for pads being added when calculating length.

### DIVING POOL

- Preferred—The diving facility should be 60' (18.29m) in length by 75' (22.86m) in width. It should be equipped with two 1-meter and two 3-meter springboards and a diving tower, providing takeoff platforms at 5, 7.5 and 10 meters. Recommended dimensions for diving facilities are specified in the table on the left.
  - Acceptable—The diving facility may be separated from or incorporated with the swimming pool. Recommended dimensions for diving facilities are specified in the table on the left.
- Note:** The above dimensions may be incorporated in "L," "T," "Z" and "U" shaped pools.

### PLUMMET DEPTH

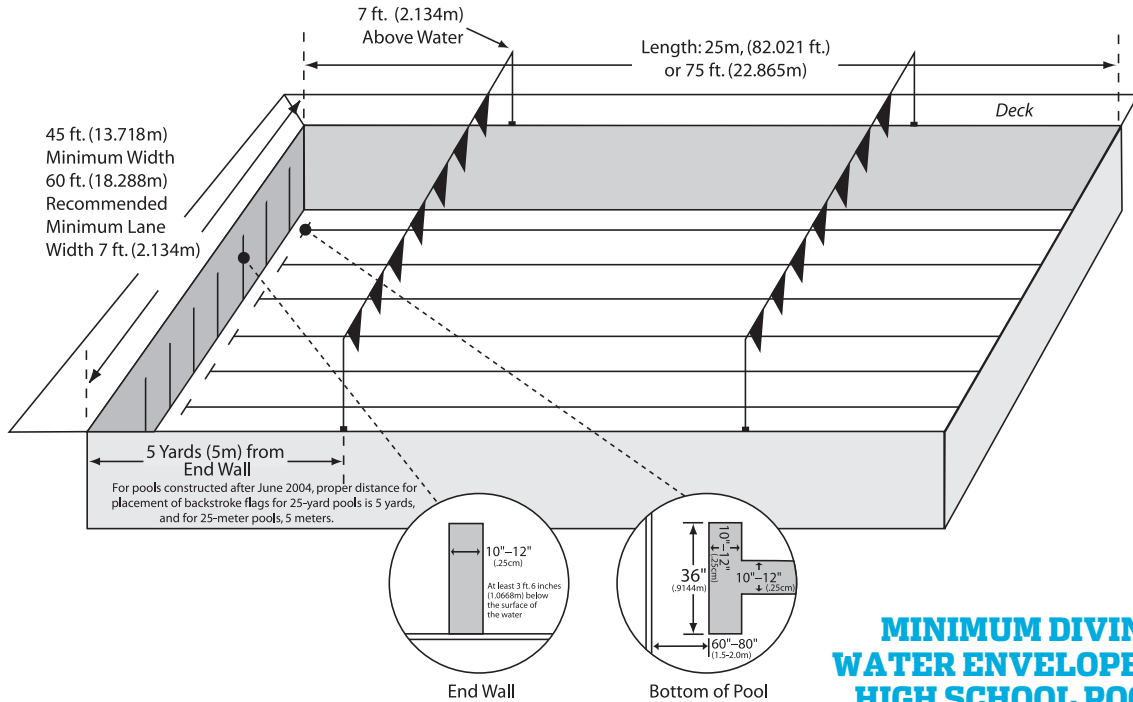
For all championship and nonchampionship springboard and platform diving competitions, the water depths at the plumbet may be no less than the minimum standards as specified in the table at left.

NCAA Recommended Dimensions for Diving Facilities		Dimensions are in Feet	SPRINGBOARD				PLATFORM					
			1 meter		3 meters		5 meters		7.5 meters		10 meters	
		LENGTH	16'		16'		20'		20'		20'	
		WIDTH	18"		18"		8'6" <sup>(min)</sup> 9'10" <sup>(pref)</sup>		6'7" <sup>(min)</sup> 9'10" <sup>(pref)</sup>		9'10"	
Revised October 1, 2013		HEIGHT	3'4"		9'10"		16'5"		2'48"		32'10"	
			Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.
A	From plumbet BACK TO POOL WALL	Designation	A-1		A-3		A-5		A-7.5		A-10	
		Minimum	5'		5'		4'2"		4'2"		5'	
		Preferred	6'1"		6'1"		4'2"		4'2"		5'	
A/A	From plumbet BACK TO PLATFORM plumbet directly below	Designation			A/A5		A/A7.5		A/A10			
		Minimum			2'6"		2'6"		2'6"			
		Preferred			4'2"		4'2"		4'2"			
B	From plumbet to POOL WALL AT SIDE	Designation	B-1		B-3		B-5		B-7.5		B-10	
		Minimum	8'3"		11'6"		11'2"		14'10"		18'11"	
		Preferred	8'3"		11'6"		12'10"		15'7"		18'11"	
C	From plumbet to ADJACENT PLUMMET	Designation	C-11		C-331		C-531		C-7.5531		C-107.55531	
		Minimum	6'7"		7'3"		7'11"		9'1"		10'8"	
		Preferred	7'1"		8'3"		8'9"		9'1"		10'8"	
D	From plumbet to POOL WALL AHEAD	Designation	D-1		D-3		D-5		D-7.5		D-10	
		Minimum	29'7"		33'8"		33'8"		36'2"		44'4"	
		Preferred	29'7"		33'8"		33'8"		36'2"		44'4"	
E	On plumbet from BOARD TO CEILING	Designation	E-1		E-3		E-5		E-7.5		E-10	
		Minimum	16'5"		16'5"		10'8"		10'8"		13'2"	
		Preferred	16'5"		16'5"		11'6"		11'6"		16'5"	
F	CLEAR OVERHEAD behind and each side of plumbet	Designation	F-1	E-1	F-3	E-3	F-5	E-5	F-7.5	E-7.5	F-10	E-10
		Minimum	8'3"	16'5"	8'3"	16'5"	9'1"	10'8"	9'1"	10'9"	9'1"	13'2"
		Preferred	8'3"	16'5"	8'3"	16'5"	9'1"	11'6"	9'1"	11'6"	9'1"	16'5"
G	CLEAR OVERHEAD ahead of plumbet	Designation	G-1	E-1	G-3	E-3	G-5	E-5	G-7.5	E-7.5	G-10	E-10
		Minimum	16'5"	16'5"	16'5"	16'5"	16'5"	10'8"	16'5"	10'8"	19'9"	13'2"
		Preferred	16'5"	16'5"	16'5"	16'5"	16'5"	11'6"	16'5"	11'6"	19'9"	16'5"
H	DEPTH OF WATER at plumbet (minimum required)	Designation	H-1		H-3		H-5		H-7.5		H-10	
		Minimum	11'2"		12'2"		12'2"		13'6"		14'10"	
		Preferred	11'6"		12'6"		12'6"		14'10"		16'5"	
J-K	DISTANCE AND DEPTH ahead of plumbet	Designation	J-1	K-1	J-3	K-3	J-5	K-5	J-7.5	K-7.5	J-10	K-10
		Minimum	21'4"	10'10"	24'8"	11'10"	23'10"	11'10"	31'10"	13'2"	41'	14'
		Preferred	22'4"	11'2"	25'7"	12'2"	19'9"	12'2"	26'3"	14'6"	36'2"	15'7"
L-M	DISTANCE AND DEPTH each side of plumbet	Designation	L-1	M-1	L-3	M-3	L-5	M-5	L-7.5	M-7.5	L-10	M-10
		Minimum	5'	10'10"	6'7"	11'10"	9'11"	11'10"	12'4"	13'2"	14'10"	14'
		Preferred	6'7"	11'2"	8'3"	12'2"	11'6"	12'2"	14'10"	14'6"	17'3"	15'7"
N	MAXIMUM SLOPE TO REDUCE DIMENSIONS beyond full requirements	Pool depth	30 degrees		Note 1: Dimensions C (plumbet to adjacent plumbet) apply for platforms with widths as detailed. For wider platforms increase C by half the additional width(s).							
		Ceiling Ht.	30 degrees		Note 2: All dimensions rounded up, even if only fractionally greater than the next lowest inch.							

## FOR MORE INFORMATION CONTACT:

National Collegiate Athletic Association  
(317) 917-6222  
www.ncaa.org

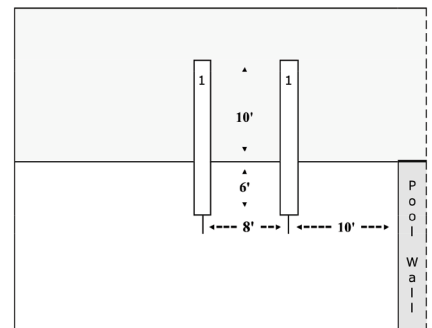
## NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS (NFHS)



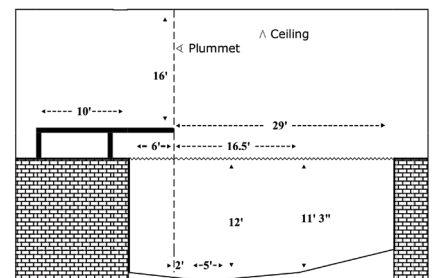
### MINIMUM DIVING WATER ENVELOPE FOR HIGH SCHOOL POOLS WITH TWO 1 METER SPRINGBOARDS

### MATRIX OF SPRINGBOARD DIMENSIONS FOR HIGH SCHOOL COMPETITIVE DIVING

Rule 9, Section 1, Article 1		U.S. Dimensions	Metric Dimensions
Board Height - 1 Meter			
Length of Board		16'	4.877m
Width of Board		20"	.508m
a.	End of springboard back to Pool Wall	6'	1.829m
b.	Center of board to center of another board	8'	2.438m
c.	Center of board to pool side wall	10'	3.048m
d.	End of springboard to forward pool wall	29'	8.839m
e.	Top of springboard to ceiling overhead	16'	4.877m
f.	Water depth at any point 2' to 5' in front of the end of the board must be 12' (3.658m) or more, except for pools constructed prior to January 1987, where water depth 2 to 5 feet in front of the end of the board must be a minimum of 10 feet (3.045m).	12' / 10'	3.658 / 3.048m
g.	Maximum depth reduction rate of diving pools which do not exceed minimum depth requirement shall be 6 1/4% for a distance of 16.5' (5.0m) forward from the end of the board and 6' (1.829m) back and to the sides. Deeper pools may have proportionally steeper depth reduction rates	**	**



OVERHEAD VIEW



SIDE VIEW

**Example:** If the pool is 12' deep (3.658m), as required for pools constructed after January 1, 1987, the depth at 16.5' ahead of the springboard must be a minimum of 11' 3" (3.429m);  $0.0625 (6.25\%) \times 3.658m (12') = 0.229m$ ;  $3.658m \text{ minus } 0.229m = 3.429m (11' 3")$ . If the pool is 10' deep (3.048m), as permitted in pools constructed prior to January, 1987, the depth at 16.5' ahead of the springboard must be a minimum of 9' 4 1/2" (2.858m),  $0.0625 \times 3.048m (10') = 0.191m$ ;  $3.048m \text{ minus } 0.191m = 2.857m (9' 4.48")$ .

### FOR MORE INFORMATION CONTACT:

National Federation of State High School Associations  
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www.nfhs.org