

Competition Pool Design Parameters

Course Description	Nominal Length	Thickness of Two Touchpads ⁱ	Min Total Length ^j	Max Length Tolerance ^{k,l,m}	Max Total Length ⁿ	Max Total Length (ft)
Long Course 50 m ^{a,c,f}	164' - 0 1/2"	5/8"	164' - 1 1/8"	1 3/16"	164' - 1 11/16"	164.141
Short Course 25 yd ^{b,d,h}	75'	5/8"	75' - 0 5/8"	1 3/16"	75' - 1 3/16"	75.099
Short Course 25 m ^{b,e,g,h}	82' - 0 1/4"	5/8"	82' - 0 7/8"	1 3/16"	82' - 1 7/16"	82.120
Long Course 50 m ^{a,c,f}	50 m	0.016 m	50.016 m	0.03 m	50.03 m	
Short Course 25 yd ^{b,d,h}	22.860 m	0.016 m	22.876 m	0.03 m	22.89 m	
Short Course 25 m ^{b,e,g,h}	25 m	0.016 m	25.016 m	0.03 m	25.03 m	

Pool Description	Length (ft)	Width (ft)	Surface Area (ft ²)	Perimeter Length (ft)	Min Depth ^{c,d,e,p,q} (ft)	Deep End Depth ^r (ft)	Volume (gallons)	Min Turnover (minutes)	Min Filtration Rate (gpm)	Edge Flow Rate ^s (gpm/ft)
50 m x 25 yd ^c	164.141	75.099	12,326.8	478.5	7	8.71	724,306.4	360	2012.0	4.20
50 m x 25 m	164.141	82.120	13,479.2	492.5	7	8.71	792,020.2	360	2200.1	4.47
50 m x 25.4 m ^o	164.141	83.333	13,678.4	494.9	7	8.71	803,724.4	360	2232.6	4.51
25 m x 25 yd	82.120	75.099	6,167.1	314.4	7	7.86	342,663.8	360	951.8	3.03
25 m x 25 m	82.120	82.120	6,743.7	328.5	7	7.86	374,698.7	360	1040.8	3.17
25 m x 25.4 m ^o	82.120	83.333	6,843.3	330.9	7	7.86	380,235.9	360	1056.2	3.19
25 Yd x 60 ft ^{d,h}	75.099	60	4,505.9	270.2	7	7.78	249,131.3	360	692.0	2.56
25 m x 60 ft ^{e,h}	82.120	60	4,927.2	284.2	7	7.86	273,769.8	360	760.5	2.68
25 yd x 45 ft ^h	75.099	45	3,379.5	240.2	7	7.78	186,848.5	360	519.0	2.16
25 m x 45 ft ^h	82.120	45	3,695.4	254.2	7	7.86	205,327.4	360	570.4	2.24

^aUSA Swimming Article 103.3.A: 50 m (164' - 0 1/2").

^bUSA Swimming Article 103.3.B: 25 yd (22.86 m) or 25 m (82' - 0 1/4").

^cNCAA Rule 1, Section 1, Article 1.a: 50 m (164' - 0 1/2"), 75 ft (22.86 m) min width, 7 ft (2.13 m) min depth.

^dNCAA Rule 1, Section 1, Article 2.a.1: 75' (22.86 m), 60 ft (18.29 m) min width, 7 ft (2.13 m) min depth.

^eNCAA Rule 1, Section 1, Article 2.a.2: 25 m (82' - 0 1/4"), 60 ft (18.29 m) min width, 7 ft (2.13 m) min depth.

^fFINA FR 2.1.1: 50 m (164' - 0 1/2").

^gFINA FR 2.1.2: 25 m (82' - 0 1/4").

^hNational Federation of State High School Associations, 2013-14 NFHS Swimming & Diving Rules, Rule 2, Section 2: 75 ft (22.860 m) or 82.021 ft (25 m), 45 ft (13.716 m) min width, 60 ft (18.288 m) recommended width.

ⁱColorado Time Systems Aquagrip or Standard = 0.30" (0.0076 m). Daktronics T-6000 Series = 0.3" (0.008 m). Omega OCP5 = ?. FINA Rule FR 4.4.1 states 2.4 m wide, 0.9 m height, and 0.01 +/- 0.002 m thick.

^jMinimum Total Length = Nominal Length + Thickness of Two Touchpads.

^kUSA Swimming Article 103.3.C: +0.03 m (1 3/16") max tolerance.

^lNCAA Rule 1, Section 1, Article 3: +0.03 m (1 3/16") max tolerance.

^mFINA FR 2.2.1 / 2.2.2: +0.03 m (1 3/16") max tolerance.

ⁿMaximum Total Length = Nominal Length + Max Length Tolerance.

^oFINA FR 2.5: 2.5 m wide lanes plus 0.2 m outside of first and last lanes.

^pUSA Swimming Article 103.2.1: 2 m (6' - 7") min depth.

^qFINA FR 2.3: 1.35 m (4' - 5 3/16") min depth.

^rDeep end depth is calculated using 2% (1/4" per ft) slope to center-deep pool. Actual maximum depth may be greater.

^sEdge Flow Rate = Minimum Filtration Rate / Perimeter Length. Edge shall be capable of handling 100% flow without using suction outlets.

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