

Basic Track Layout Data

(All dimensions are in mm)

Turnout	Lead	Radius		Closure	X-over length	
		Switch	Closure	Straight	@44mm	@60mm
A4	172	1928	520	0	368	432
A5	189	1928	848	0	408	488
A6	202	1928	1240	4	440	536
A7*	218	1928	1928	0	478	590
A8	221	1928	1928	39	490	618
B6	228	2452	1248	0	492	588
B7	243	2452	1688	6	528	640
B8*	261	2452	2452	0	570	698
B9	263	2452	2452	39	580	724
B10	269	2452	2452	72	598	758
C8	295	3840	2248	0	638	765
C9	311	3840	2960	0	676	820
C10*	326	3840	3820	0	712	872
C12	333	3840	3840	73	738	930
D12	386	5516	4876	4	844	1036
D14	397	5516	5516	71	878	1102

(* 'Natural' turnouts, with constant, or near-constant, radius from end of planing to Vee)

The letters in the turnout designation refer to the planing angle and length of the switch rails ('A' being the steepest and shortest). The numbers in the designation refer to the crossing angle (for example, an A8 has a crossing angle of 1 in 8).

'Lead' is the distance from the tips of the switch rails (the toe) to the tip of the crossing Vee (the 'blunt nose'). The crossover lengths are from toe to toe and are given for the minimum track spacing (44mm) and the track spacing where loops and sidings are alongside the main (60mm).

Choice of turnout depends on the rolling stock that will use the curved route and the type of operation. With large steam locomotives and long vehicles, 1200mm is a sensible minimum radius to aim for on running lines, with B7 as the tightest turnout. 'A' switches are best used in yards and with short wheelbase wagons and locomotives. By building rolling stock with extra flexibility, large vehicles can be persuaded to go round tight curves - but generally do not look realistic doing so.