

MAP ACCURACY CLASSES

Map accuracies can also be defined at lower spatial accuracy standards. Maps compiled within limiting rms errors of twice or three times those allowed for a Class 1 map shall be designated as Class 2 or Class 3 maps respectively. A map may be compiled that complies with the one class for vertical accuracy and another class for horizontal accuracy.

Table 1
Planimetric and Vertical Coordinate Accuracy Requirements in Feet
Ground X or Y or Z for Well-defined Points¹

Planimetric Classes (Limiting rms error, feet)			Typical Map Scale	Possible Contour Interval in Feet	Vertical Classes (Limiting rms error, feet)		
CLASS 1	CLASS 2	CLASS 3			CLASS 1	CLASS 2	CLASS 3
0.0500	0.1000	0.1500	1:60	0.05	0.0083	0.0167	0.0249
0.1000	0.2000	0.3000	1:120	0.10	0.0167	0.0333	0.0501
0.2000	0.4000	0.6000	1:240	0.20	0.0333	0.0667	0.0999

0.2500	0.5000	0.7500	1:300	0.25	0.0417	0.0833	0.1251
0.3000	0.6000	0.9000	1:360	0.30	0.0500	0.1000	0.1500
0.4000	0.8000	1.1200	1:480	0.40	0.0667	0.1333	0.2001
0.5000	1.0000	1.5000	1:600	0.50	0.0833	0.1667	0.2499
1.0000	2.0000	3.0000	1:1,200	1.00	0.1667	0.3333	0.5001
2.0000	4.0000	6.0000	1:2,400	2.00	0.3333	0.6667	0.9999
4.0000	8.0000	12.0000	1:4,800	4.00	0.6667	1.3333	2.0001
5.0000	10.0000	15.0000	1:6,000	5.00	0.8333	1.6667	2.4999
8.0000	16.0000	24.0000	1:9,600	8.00	1.3333	2.6667	3.9999
10.0000	20.0000	30.0000	1:12,000	10.00	1.6667	3.3333	5.0001
20.0000	40.0000	60.0000	1:24,000	20.00	3.3333	6.6667	9.9999
30.0000	60.0000	90.0000	1:36,000	30.00	5.0000	10.0000	15.0000
40.0000	80.0000	120.0000	1:48,000	40.00	6.6667	13.3333	20.0001
52.8000	105.6000	158.4000	1:63,360	50.00	8.8000	17.6000	26.4000

* indicates the practical limit for aerial methods - for scales above this line, ground methods are normally used.

¹ see Appendix A, Section A2.