

Stopping Sight Distance

Stopping sight distances exceeding those shown in the table below should be used as basis for design wherever practical.

In computing and measuring stopping sight distances, the height of the driver's eye is estimated to be 3.5 feet and the height of the object to be seen by the driver is 2 feet, equivalent to the taillight height of a passenger car. The "K Values" shown are a coefficient by which the algebraic difference in grade may be multiplied to determine the length in feet of the vertical curve that will provide minimum sight distance. Crest vertical curves shall meet or exceed AASHTO design criteria for Stopping Sight Distance, not the "k" Values. Sag vertical curves shall meet or exceed the AASHTO design criteria for headlight sight distance and "k" Values.*

Height of Eye 3.5'				Height of Object 2'						
Design Speed (mph) **	25	30	35	40	45	50	55	60	65	70
MIN. SIGHT DISTANCE (FT.)	155	200	250	305	360	425	495	570	645	730
MINIMUM K VALUE FOR:										
CREST VERTICAL CURVES	12	19	29	44	61	84	114	151	193	247
SAG VERTICAL CURVES	26	37	49	64	79	96	115	136	157	181

Source: 2004 AASHTO Green Book, pages 112, 113, 272 and 277

TABLE 2-5 STOPPING SIGHT DISTANCE

When a highway is on a grade, the sight distances in the table below should be used.

Design Speed (mph) **	Stopping Sight Distance on Grades					
	Downgrades			Upgrades		
	3%	6%	9%	3%	6%	9%
15	80	82	85	75	74	73
20	116	120	126	109	107	104
25	158	165	173	147	143	140
30	205	215	227	200	184	179
35	257	271	287	237	229	222
40	315	333	354	289	278	269
45	378	400	427	344	331	320
50	446	474	507	405	388	375
55	520	553	593	469	450	433
60	598	638	686	538	515	495
65	682	728	785	612	584	561
70	771	825	891	690	658	631

TABLE 2-6 STOPPING SIGHT DISTANCE ON GRADES

(See 2004 AASHTO Green Book, page 115)

* Rev. 7/10