Stopping Sight Distance Calculator

Formula for calculating SSD (from Manual for Streets 2): SSD = vt + v2/2(d+0.1a)

v = Speed of vehicle (m/s)

t = driver perception-reaction time (seconds)

d = deceleration rate (m/s)a = longditudinal gradient (%)

Fill in the white boxes only



to mph

Based on Table 10.1 MfS2

Design speed	Vehicle Type	Reaction Time t (s)	Deceleration rate d (m/s) (ie factor x 9.81)	Standard
60kph and below	Light vehicles only	1.5	0.450 g	MfS2
	Buses and/or HGV's greater than 5% of the traffic	1.5	0.375 g	MfS2
Above 60kph	All vehicles (≤64kph)	2	0.375 g (Absolute minimum)	CD 109
	All vehicles (>64kph)	2	0.250 g (Desirable minimum)	CD 109

SSD =

Conversions

mph

kph

SSD adjusted for bonnet

26

length (MfS only) =



34 m

0.0

NOTE: The adjustment for the bonnet length is only required on the MfS SSD as the MfS formula is calculated from drivers eye. To avoid a collision, the bonnet length must be added.