



FXB-CT Crash Tested Fixed Bollards



General Description

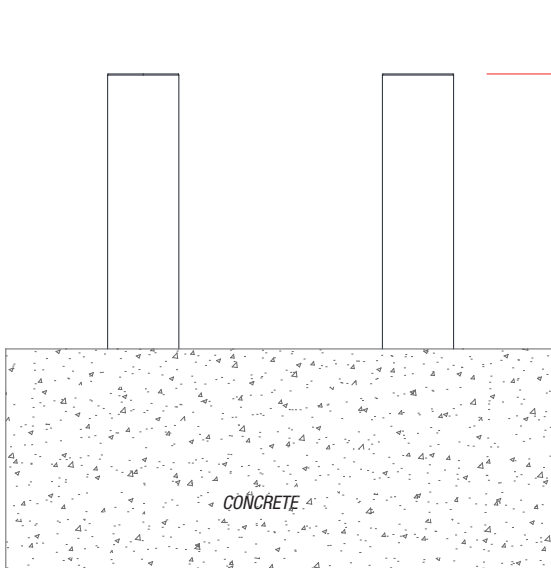
OPTIMA crash tested fixed bollards are designed for high security army, industrial, governmental and commercial buildings, sites, complexes etc. If there is a threat of vehicle attack, crash tested fix bollards are one of the best and most secure solutions. Even though the attack is from high tonnage vehicles with high speeds, it is not possible for the vehicle to keep on moving forward anymore beyond the bollards.

Optima FXB-CT Crash Tested Fixed Bollards are designed for PAS68:2013 crash rating. Actual crash test is realized in 19 December 2016. Optima bollard is tested by a N3 type truck weighing 7500 kg and travelling at a speed of 80km/hr.

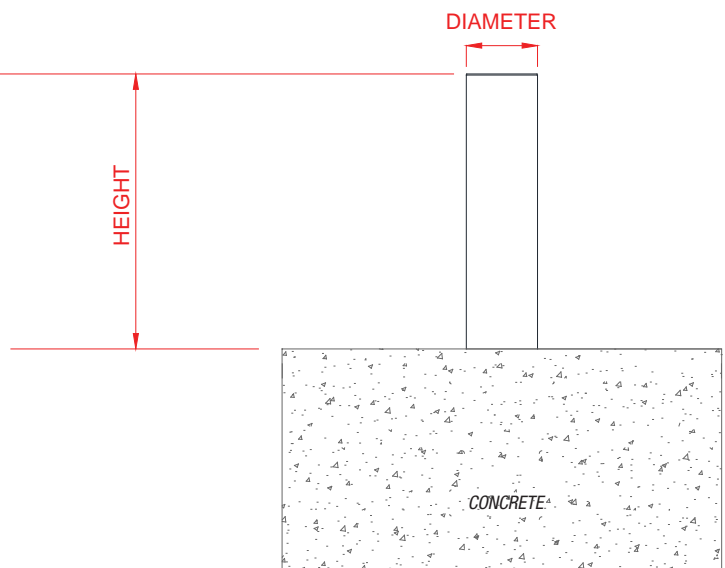
Optima crash tested bollard destroyed the vehicle and it was still functioning after the impact. Therefore Optima crash tested bollards successfully achieved and certified PAS 68:2013 V/7500[N3]/80/90 zero penetration (This means that M50-P1 "zero penetration" according to American standard).

CRASH TESTED FIXED BOLLARDS

1. Proven by the PAS 68:2013 V/7500[N3]/80/90 crash test, suicide vehicle is kept outside the secure side (grade P1, zero penetration)
2. No rebar required in the concrete foundation.
3. No plywood forms required on sides and bottom while pouring concrete
4. Continuous excavation by standard excavator. Rectangular excavation. No special circular excavation
5. No detailed calculations to determine the place of excavations.
6. Very economic and very easy civil works
7. Material of steel tube is special type high strength steel.
8. Top and bottom of the bollard is covered by welding same material.
9. Optima FXB-CT Bollards are sand blasted and three layers primer and epoxy painted for corrosion protection



FRONT VIEW



SIDE VIEW

