

# HBD/12 BOLLARD

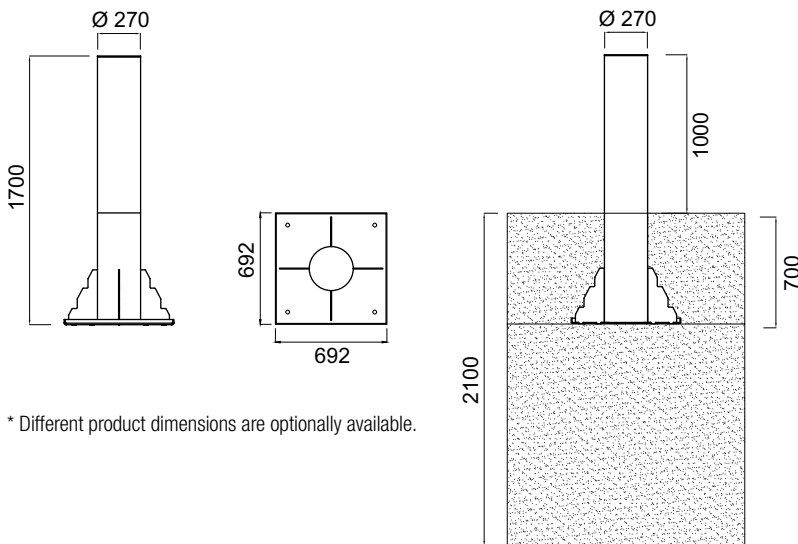
(Anti-terror / Heavy Duty - Fixed Model)



**M50 (K12)**  
**ASTM F2656-15**



## Dimensions (mm)



\* Different product dimensions are optionally available.

## Technical Features

### Crash / Impact Rating

Crash tested and certified according to ASTM F2656-15 at M50 (K-12) level (HBD 275 S 100) also designed and produced to withstand impacts mentioned below:

Standard	Vehicle Type	Weight	Speed
PAS 68	N3	7500 kg	80 km/h (50 mph)
IWA 14-1	N3C	7200 kg	80 km/h (50 mph)

(Please contact for applicable product dimensions.)

### Bollard Structure

Ø270 mm, solid steel and composite filled, 10 mm thick hot dip galvanised steel pipe, electrostatic powder coated in RAL9006 (optionally in other RAL colors) impact surface.

Special star-formed, 10 mm solid steel bar infilled inner structure for impact absorption distributed evenly to the whole body.

Furnished with red (opt. white or yellow) reflecting strips.

Includes 4 adjustment bolts for easy leveling, with an anchor plate of 692x692 mm welded to the impact pipe and 4 vertical anchor supports welded around the impact pipe.

Designed so that no vehicle crashing effect can displace it after embedded into the ground.

### Optional Features and Accessories

Removable structure (designed and produced to withstand impacts at ASTM F2656-15 M50 (K-12), PAS 68 [N3]/80 and IWA 14-1 [N3C]/80 levels), demountable aluminium (electrostatic powder coated in body color or 304/316 grade stainless steel) bollard top lid with 360° visible red flashing LED indicators, stainless steel sleeve (304/316 grade), different colors, different product dimensions.

### Installation

Easy levelling with 4 bolts and installation with C30 grade concrete and steel rebar reinforcement. Ground levelling and preparation works shall be carried on before pouring the concrete. Allowable bearing value of the ground shall be minimum 1/2 kg/cm<sup>2</sup>, if not, works shall be carried on to fulfil. Installation shall be done according to the manufacturer's instructions.