

# ATRB-80



**FRONTIER PITTS SUCCESSFULLY CRASH-TEST A NEW HYDRAULIC BOLLARD IN ACCORDANCE WITH U.S. DEPARTMENT OF STATE K12/L3 CRASH-RATING, ENDORSED BY THE UK GOVERNMENTS NATIONAL SECURITY ADVISORY BODY, STOPPING 15,000LB TRAVELLING AT 50MPH, AND REMAINING FULLY FUNCTIONAL AFTER THE TEST.**

*The Leading Manufacturer of  
Perimeter Security Equipment*

**Introducing a crash-rated hydraulic bollard on the marketplace to surpass the highest industry standards in the World, based on the new PAS 68-69 standard.**



For more than seventy-years Frontier Pitts has been at the forefront of new security ideas and has pioneered several perimeter security innovations. Frontier Pitts has also been accredited with ISO 9000, certifying quality in sales, customer service and manufacturing. Now, Frontier Pitts dedicated research and development team have designed and produced one of the strongest Hydraulic Bollards on the market. The new product is based upon the Terra Blocker design (crash tested in the 1970's) which has been performing at more than 3000 installation sites worldwide for 30 years.

Following months of in-house design and computer simulations, the new ATRB-80 was successfully tested by TRL Crash Laboratories in October 2005.

The test was conducted to prove the arresting capability of a Frontier Pitts ATRB-80 Hydraulic Bollard when impacted with a 6804kg (15,000lb) test vehicle at a speed of 50mph (80km/hour). The test was conducted in accordance with the European test standard SD-STD-2.01 Revision A, Certification Class K12. A British lorry was used to act as the test vehicle and was loaded with concrete blocks and fitted with test sensors to meet the demanding specifications for this test laid down by the DOS.

Frontier Pitts was confident in selecting the toughest test for the most difficult standard to achieve. Similar products offered by competitors are only tested to the K4 Standard which is conducted at a far slower speed of impact (only 30mph). K12 testing denotes that the vehicle must be travelling at a minimum of 80km/hour on impact, and has over 3 times the stopping energy as K4.

The vehicle was brought to a complete halt by the hydraulic bollard with minimal penetration onto site or past the impacted face of the unit. A key feature of the design ensured that all forward energy was absorbed at the front of the equipment on impact, unlike other hydraulic bollards on the market which have been unable to stop the vehicle and thus the vehicle has penetrated site. The front axle of the truck was pushed rearwards impacting the fuel tanks on both sides of the vehicle.



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No other company in the World can offer a product which can surpass the standards for Department of State Certification. This is a major breakthrough in high security, anti-terrorist blockers.

These test results have been witnessed by NSAC (National Security Advice Centre) which is the UK Governments Advisory Body for Security.

The ATRB-80s hydraulic mechanism continued to raise and lower the bollard as normal following impact. This impressive test result has proved not only the stopping power of this equipment, but also the reliability and fortitude of the design. Competitors' equipment which has been tested to lower standards has not continued to operate following impact, or has allowed penetration onto site.

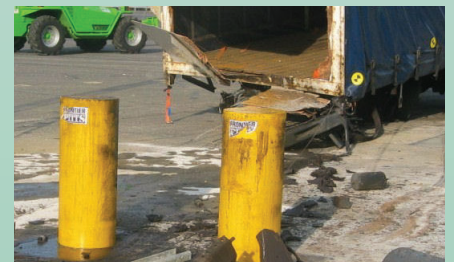
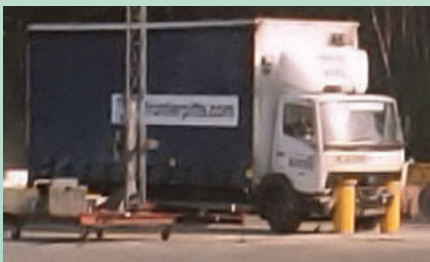
Computer simulations and finite element analysis has shown that the ATRB-80 will withstand a 7500kg vehicle at 130km/hour, or to put this in context; a weighted coach travelling at over 80mph will not break through this barricade or penetrate site. No other company in the World could make a similar claim.

Further tests are planned in order to test this equipment to destruction, using a similar vehicle of at least 7.5 tonnes travelling at a speed of 130km/hour.

Frontier Pitts have developed the ATRB-80 to meet the requirements of our customers at Airports, Embassies, Palaces, Government Institutions and Military Bases around the World.

The ATRB-80 Bollard Crash test follows the successful crash test of the ATTB-80 Roadblocker, which was successfully tested by MIRA independent Crash Laboratories in January 2005. The ATTB-80 surpassed the high standards set by the Department of state, when the vehicle brought to a complete halt by the blocker with zero penetration onto site or past the impacted face of the unit. The Frontier Pitts crash rated ATTB-80 is available in widths of up to 8000mm and a lifted height of 810mm.

**The Frontier Pitts crash-rated ATRB-80 is available with a lifted height of 900mm. Further details are available at [www.frontierpitts.com](http://www.frontierpitts.com) or by telephoning +44 (0) 1293 422800.**



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In accordance with Frontier Pitts policy of continual development, we reserve the right to make changes, improvements or amendments to any product at any time without prior notice. All items are offered subject to availability.