



**PILOMAT**  
MASTERSHIP IN RETRACTILE TECHNOLOGY

**ROAD BLOCKER RB1000  
CRASH TESTED  
CERTIFICATION PAS68:2013  
ROAD BLOCKER  
V/7500(N3)/80 (K12) RATING**

## CERTIFICATION

Crash test - PAS68:2013 Road Blocker V/7500(N3)/80 (K12) Rating  
English Certification - PAS68:2013 Standard  
Performed at Aisico srl.  
Crash test Center , Pereto (Aq) - Italy



### ROAD BLOCKER 1000

- 2.000.000 joules
- 700.000 joules

Esteemed  
PILOMAT s.r.l.  
Via Zanica, 17/P  
24050 Grassobbio (Bg) Italy.

Attention: **Mrs Alessandra Acerbis**

Rome, September 09, 2014

On September 02, 2014 at Aisico s.r.l. Test Laboratory were performed a test, based on the Reference Standard PAS 68:2013 on the product PILOMAT ROAD BLOCKER RB1000.

The PILOMAT ROAD BLOCKER RB1000, a road blocker, has received an impact rating of N3 Test Level to the center of the road blocker.

The N3 test level of the PAS68:2013 is evaluated using a 7,500 kg test vehicle travelling at a nominal speed of 80 km/h.

Description of the damages:

- **Test Vehicle:** The PILOMAT ROAD BLOCKER RB1000 completely disabled the test vehicle causing severe damage to the chassis and drivetrain. The maximum penetration was recorded dynamically on the passenger's side of the vehicle and it was 0.2 m.
- **PILOMAT ROAD BLOCKER RB1000:** The PILOMAT ROAD BLOCKER RB1000 sustained damage as result of the impact. The road blocker and foundation shifted, causing the road blocker to lean 10.0° in the direction of vehicle travel. Single item having a mass above of 25 kg, which, as a consequence of the impact has been entirely detached from the road blocker and has been projected beyond the original position of the road blocker for 10 m. The vehicle path remained blocked during and after the impact.

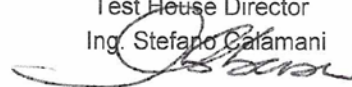
The performance classification of the PILOMAT ROAD BLOCKER RB1000 road blocker is: **PAS68:2013 Road Blocker V/7500(N3)/80/90:0.2/10.**

Complete information relating to the test can be found in report number **PAS68/010/14** and DVD serial number **PAS68/010/14** from AISICO Srl, including test conditions, test vehicle information, test article specifications, manufacturer drawings and any deviations from the drawings in the as tested configuration.

This letter should not be considered complete documentation of this test without consideration of the test report and deliverable DVD.

Best Regards.

Test House Director  
Ing. Stefano Calamani



## 6 Results

### 6.1 Weather conditions

WEATHER	Clear
TEMPERATURE	24°C

### 6.2 Test conditions

IMPACT SPEED	80,4 km/h
DIFFERENCE FROM NOMINAL SPEED	+ 0,4 km/h (+ 0,5 %)
APPROACH ANGLE	90°
IMPACT ANGLE	92°
DIFFERENCE FROM NOMINAL ANGLE	+ 2° (+2,0%)

### 6.3 Test article results and damages

As recommended in PAS 68:2013 the following full scale impact test was conducted to evaluate the impact performance of the PILOMAT ROAD BLOCKER RB1000 to the N3 level

The test article was positioned at an angle of ninety degrees (90°) to the direction of travel of the test vehicle, with the vehicle's centreline intersecting the center of bollard.

The test vehicle impacted the test article at a speed of 80,4 km/h with an angle of 92°.

The height of the impact point between the vehicle and the test article was 0,7 m.

The impact test was documented by four high speed digital color video cameras.

The test vehicle's forward motion was completely arrested by the PILOMAT ROAD BLOCKER RB1000. The maximum penetration was recorded dynamically on the passenger's side of the vehicle and was 0.2 m measured dynamically using high speed video.

The PILOMAT ROAD BLOCKER RB1000 sustained damage as result of the impact. The road blocker and foundation shifted, causing the road blocker to lean 10.0° in the direction of vehicle travel. Single item having a mass above of 25 kg, which, as a consequence of the impact has been entirely detached from the road blocker and has been projected beyond the original position of the road blocker for 10 m. The vehicle path remained blocked during and after the impact.

The foundation was in good condition without no visible cracks and shifted for 2 cm.

The PILOMAT ROAD BLOCKER RB1000 completely disabled the test vehicle causing severe damage to the chassis and drivetrain.

The performance classification of the PILOMAT ROAD BLOCKER RB1000 road blocker is: **PAS68:2013 Road Blocker V/7500(N3)/80/90:0.2/10.**

TEST ARTICLE BEHAVIOR	
HEIGHT OF THE IMPACT POINT	0,7 m
DYNAMIC VEHICLE PENETRATION	0,2 m
STATIC VEHICLE PENETRATION	0,1 m

<b>RB 1000</b>	
PLATFORM HEIGHT FROM THE GROUND	1000 mm
PLATFORM LENGTH	STANDARD: 2,00 m - 3,00 m - 4,00 m (non-standard sizes evaluable)
IMPACT RESISTANCE (WITHOUT DEFORMATION)	700.000 J
BREAKOUT RESISTANCE	2.000.000 J (PAS68:2013 ROAD BLOCKER V/7500(N3)/80 (K12) RATING)
MOVEMENT MECHANISM	HYDRAULIC
LIFTING TIME	8"
LOWERING TIME	5"
E.F.O. CIRCUIT FOR EMERGENCY LIFTING	YES (OPTIONAL)
PLATFORM FINISHING	POLYESTER POWDER PAINT
LOADING CLASS	STANDARD U.N.I. CLASS D400
LAYING DEPTH	400 mm
TYPE OF USE	INTENSIVE
POWER SUPPLY	230V - 50/60HZ

## ROAD BLOCKER 1000

- 2.000.000 JOULES
- 700.000 JOULES



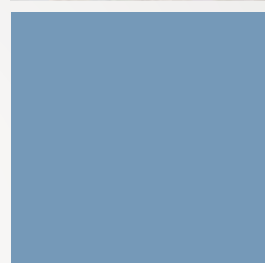
### BREAKOUT RESISTANCE

The resistance to breakage at a given threshold applies to the impact of a vehicle causing the Pilomat permanent damage in its active and structural mechanisms. The Pilomat, although damaged, provides the vehicle stop within a metre from the point of collision.

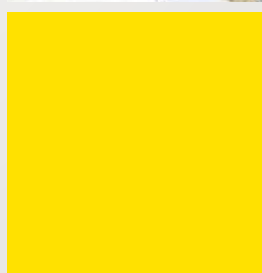
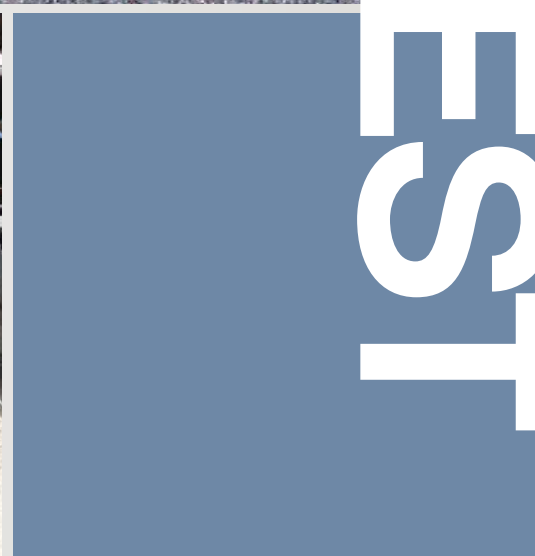
### IMPACT RESISTANCE

Resistance to impact at a given threshold indicates that the impact of a vehicle does not cause the PILOMAT blocking or damage to the structural and action mechanisms. The Pilomat's continued functionality and safety are guaranteed.





CRASH TEST



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100% MADE IN ITALY



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