

Press kit R+T 2015

Press release: roller shutter and roller door systems put to the test

## Undamaged despite impact of hail

**Institute for Fire Protection and Safety Research tests the hail resistance classes of heroal roller shutter and roller door systems**

**Stuttgart / Verl, February 2015. Over the last few years the intensity and frequency of storms has increased significantly. Current climate studies indicate that more frequent and severe weather extremes should be expected over the coming decades. Hail storms in particular very quickly cause massive damage to building shells. According to the German Insurance Association, the hailstorms between summer and early autumn 2013 alone brought about property insurance damages amounting to 3.1 billion euros. This makes the use of hail-resistant construction products increasingly important for building economical and futureproof constructions. heroal has therefore had the hail resistance of various roller shutter and roller door systems tested.**

These tests were very successful. The tested systems achieved hail resistance classes (HW) of between 3 and 7. During so-called hail resistance testing at the Institut für Brandschutzsicherheit und Sicherheitsforschung Ges.m.b.H., (IBS, Austrian Institute for Fire Protection and Safety Research), a hail simulation machine was used to pneumatically accelerate standardised balls of ice and "fire" them at the test objects. The speeds match the natural speed of falling hail stones. The tests carried out range from class HW 1 with a ball of diameter of 10 mm, up to class HW 7 with a ball of diameter of 70 mm and a maximum impact speed of 140 km/h. The hailstone size and impact speed are crucial considerations when determining the strain on the building shell.

### **Roller door systems: function remains unhindered**

Both the curtain and the guide rail were tested for the heroal RD 75 roller door system. During bombardment with a 70 mm ball of ice weighing 156 g, the guide rail achieved hail resistance class 7. The curtain was bombarded with a 60 mm ball of ice weighing 98 g and fired at 121 km/h, and was classified as HW 6. Normally, substantial economic

damages would result under these conditions. In this case however, the function of heroyal's curtain and guide rail was not impaired.

### **Roller shutter systems: highest resistance classes achieved**

For the heroyal roller shutter systems, the curtain, guide rail and porch box were tested. The porch box of the heroyal FMR 45° roll-formed box system was mechanically unaffected during bombardment with balls of ice that had diameters of up to 60 mm, and thus achieved hail resistance class 6. The extruded heroyal FME systems even achieved hail resistance classes above 7. A ball of ice weighing 58 g with a diameter of 50 mm was fired at the HTF guide rail. The mechanics achieved hail resistance class 5. The curtain for the heroyal RS 37 was tested with a ball of ice weighing 30 g and fired at a speed of 110 km/h. The curtain was not mechanically compromised and received HW 4 classification. The heroyal RS 37 RC 2 curtain slat was bombarded with balls of ice weighing 160 g with a diameter of 70 mm and fired at 133 km/h. It was awarded classification HW 6.

### **High-grade steel roller shutter neither visually nor mechanically affected**

For the RS 37 RC 3 burglar-resistant high-grade steel roller shutter, bombardment with a 160 g ball of ice at 134 km/h did not leave a mark. It was completely unaffected, visually as well as mechanically. This roller shutter reached the highest hail resistance class of HW 7.

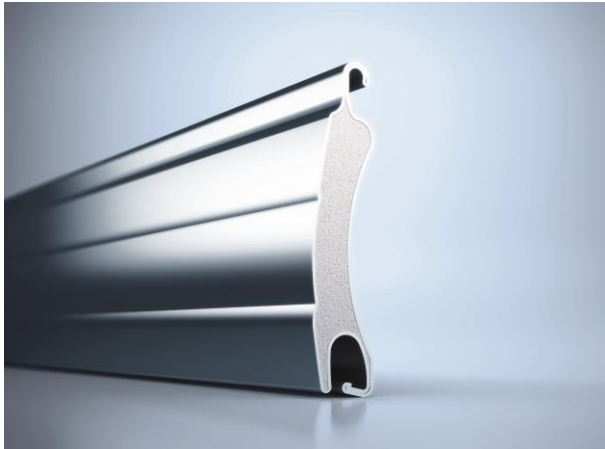
### **Hail resistance classes apply to the entire colour palette of the heroyal systems**

Thanks to the high-performance and award-winning heroyal surface coating, hail classifications apply regardless of the colour of roller door or roller shutter systems – this includes the highly weather-resistant (hwr) powder coating or 2-layer thick coating.

See the test video at:

<http://www.heroal.de/hagelschlag>

## Images



Photograph: heroal\_RS\_37\_RC\_3]

Photograph: heroal

Test passed without damage: the heroal RS 37 RC 3 burglar-resistant high-grade steel roller shutter achieves the highest hail resistance class HW 7.



[Photograph: heroal\_hail bombardment]

Photograph: heroal

Test under real conditions: heroal roller shutter and roller door systems are bombarded with balls of ice from a hail simulation machine to test their hail resistance.



[Photograph: heroal\_RD\_75]

Photograph: heroal

heroal roller doors: curtain and guide rail achieved the highest rail resistance classes HW 6 and HW 7.

#### **heroal – the aluminium systems supplier**

As a leading supplier of aluminium systems, heroal develops and produces perfectly coordinated systems for windows, doors, façades, roller shutters, roller doors and sun protection. Folding and sliding shutters, insect protection, terrace roofs and carports round off the product range. By minimising energy consumption during production, maximising energy conservation during usage as well as ensuring optimum profitability during system manufacturing and an increase in the value of the building, heroal system solutions make a significant contribution to sustainable construction.

#### **Innovation, service, design, sustainability**

The heroal brand represents system solutions that unite practical innovations, industry-leading service and high-quality design that can be sustainably integrated into any architecture.

Over 800 employees across the company work continually to further develop the systems and optimise the quality of heroal's service and performance.

The heroal brand stands for premium quality made in Germany – certified according to ISO EN 9001. heroal products and systems are produced and assembled exclusively at heroal's German production sites – at its headquarters in Verl and also in Hövelhof.

More information at [www.heroal.com](http://www.heroal.com)

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