

# Test Report

REPORT NUMBER:  
354784-2



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Init: UHI  
Order no.: 354784-2

**Customer:** Company: Raxit Seals ApS  
Address: Møllevvej 9, D2  
Town: DK-2990 Nivå

**Material:** RAXWOOL PRO is a rodent barrier composed of AISI 304 stainless steel fibres combined with synthetic polyester fibres. The material incorporates a non-curing, diamond-infused mastic, forming a soft internal core within the steel wool structure, which increases resistance to rodent gnawing and makes penetration more difficult.

**Sampling:** Raxit Seals ApS has produced the RAXWOOL PRO product.

**Method:** The purpose of this test is to evaluate the resistance of RAXWOOL PRO rodent barrier against rat intrusion under controlled laboratory conditions. The test is designed to simulate a realistic scenario where rats attempt to pass through a defined opening in order to reach a food source.

An experimental setup was prepared, which can be seen in Appendix 1. A live, active rat was used for the experiment. Photos of the product and from the test can be seen in Appendix 2.

Products included in this test program are

- Competing benchmark steel wool
- RAXWOOL PRO

The product is installed in an identical test opening and exposed to rats under the same conditions. This allows direct comparison of performance, durability, and resistance to gnawing and penetration. For comparative purposes, a commercially available steel wool barrier product from an established international manufacturer was also included in the test. This product represents a widely used benchmark solution within the professional rodent-proofing market.

**Period:** The experiment was conducted in October and November 2025, during which video recordings were made continuously. The test was carried out at Raxit in Nivå, and in addition to the video recordings, the Danish Technological Institute also visited to inspect the test setup.

**Result:** The test showed that the product from Raxit, type RAXWOOL PRO, was able to prevent the rat from passing through 27 hours and 32 minutes. The result for the competing steel wool was 52 minutes.

**Terms:** The testing is only valid for the tested specimen.  
The test report may only be extracted if the laboratory has approved the extract.

**Place:** 6<sup>th</sup> of February 2026, Danish Technological Institute, Pipe Centre, Taastrup

**Signature:** Test responsible  
Ulrik Hindsberger



## Appendix 1: Test set up

Test setup has been carried out according to principles from experiments with rats in sewer systems in Denmark in accordance with VAPG 2.9930-01 2017.11.24, see also <https://www.etadanmark.dk/media/11yka0l4/vapg-2-9930-01-spaerreeffekt-for-rotter-20171124.pdf>

**The test setup consists of three connected boxes and two pipe sections forming a linear passage:**

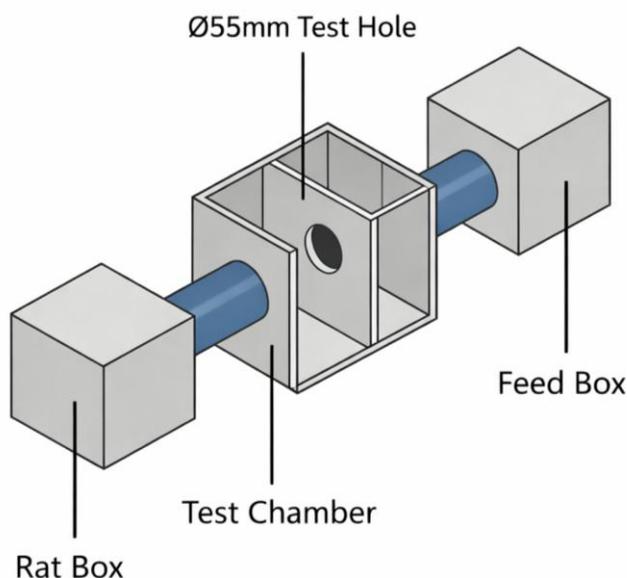
1. Rat box (250 × 250 × 250 mm)
2. Test box (600 × 600 × 250 mm)
3. Feed box (250 × 250 × 250 mm)

**The boxes are connected by Ø110 mm pipes:**

- A 1.0 m pipe between the rat box and the test box
- A 1.0 m pipe between the test box and the feed box

All three boxes are equipped with transparent plexiglass and/or steel mesh lids, allowing visual inspection while preventing escape.

Inside the test box, a removable test plate is mounted. This plate contains one circular opening (Ø55 mm). The same plate is used throughout both the acclimatisation period and the active test period.





### **Acclimatisation Period**

Rats are placed in the system for 5 days with free access to water and food located in the feed box. During this period:

- The test plate is mounted in the system
- The opening is not sealed
- Rats learn that the only path to food goes through the pipe system and the opening in the test plate

This phase ensures that the rats are fully familiar with the route and motivated to pass through the openings.

### **Active Test Period**

After 5 days, the selected test product is installed in the openings of the same test plate. No other elements in the setup are changed.

The active test begins immediately after installation of the product. The rats remain in the system and must attempt to reach the food by passing through the sealed opening. Throughout the entire test period, the animal has access to water and a controlled amount of food to ensure that the rat is treated humanely and in accordance with animal welfare principles.

The test runs for minimum period of 5 consecutive days, in accordance with the performance criteria defined by the Danish Technological Institute. The following is recorded:

- Attempts to gnaw or penetrate the product
- Visible damage
- Whether the rats succeed in passing the barrier
- Time until failure (if applicable)

### **This method ensures:**

- Identical conditions for all products
- Realistic rodent motivation
- Direct comparability between materials

**Result:**

<b>Product Name</b>	<b>Rats able to penetrate through yes/no</b>	<b>Visible damage, gnawing marks or deformation</b>	<b>Time to failure (if penetration occurs)</b>
Competing Steel Wool	Yes	Rapid and extensive damage observed. The rats immediately began gnawing, pulling and displacing the steel wool, creating an opening through the barrier.	<u>52 minutes</u>
RAXWOOL PRO	Yes	Clear gnawing and removal of the outer steel wool layer observed. Interaction with the underlying soft, non-curing mastic layer was limited, and further gnawing activity was reduced.	<u>27 hours 32 minutes</u>



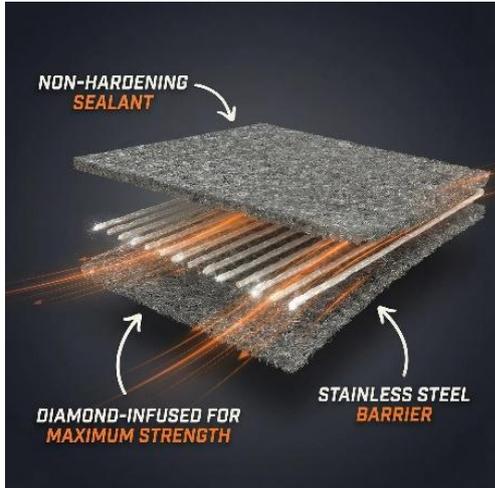
**Appendix 2: Pictures from the test set up**





**Appendix 2: Pictures of the product and from the test**

RAXWOOL PRO product



<b>Competing Steel Wool barrier</b>	
<p>Test start 14:04 -27/10 - 2025</p>	
<p>Test progress: After 38 minutes the rat chewed a hole in the steel wool barrier</p>	
<p>Test end: After 52 minutes the rat chewed through the steel wool barrier and passed to the other side of the hole</p>	

**Appendix 2: Pictures from the test**

<b>RAXWOOL PRO</b> Test start 15:40 – 3/11-2025	
Test progress: After approximately 4 hours, the rat had partially removed the outer steel wool layer, exposing the soft mastic core. Limited nibbling of the mastic material was observed after which the rat showed reluctance to continue gnawing.	
Test end: After 27 hours and 32 minutes the rat penetrated the steel wool barrier and passed through the hole.	