

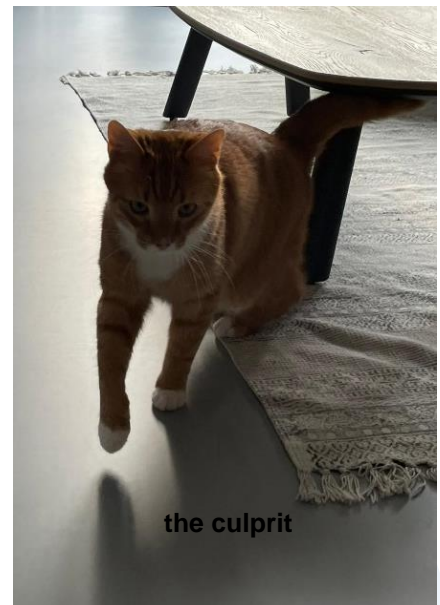
Scratch resistance floors (DIN 55656) / pets.

Publication: The Dutch Floor Testing Company

Preventing scratch formation in casting floors starts with choosing the right casting floor!



the advisor / inspector



the culprit

Example of a new PU casting floor in a home shore D 33 with a scratch resistance of 1 N.

Introduction:

When inspecting floors, e.g. to draft an expert report, we often come across casting floors with scratches. Measurements then show that the scratch resistance is 1 - 2 N. This also applies to the floor in the above picture. When choosing a floor, this aspect is generally overlooked. This publication explains how to deal better with the topic of scratches in floors.

Advice per usage situation, minimum scratch resistance in N, based on our experience:

Floors in homes	3
Floors in homes - pets	6
Floors in homes - children	6
Floors in utilities	5
Floors in industry	5

Sometimes, irregular scratch formation enhances the robust look of a floor; in this case a scratch measurement of the floor does not make sense. Scratches are desired here!

Prevention is better than cure!

Our advice is to apply a floor with a scratch resistance level that is suited for its use.

- Provide in any case all furniture that is being moved regularly with material of e.g. Scratchnomore. (These protective devices last for many years and can be cleaned)
- Provide wheeled office chairs with 'soft' wheels that are suitable for hard floors.
- Use door mats.

Remove loose sand and other sharp materials from the floor on a regular basis. Periodically clean the floor with suitable substances and materials.



How is the scratch resistance measured?

The measurement is carried out with a sclerometer. This is an instrument to measure the hardness and scratch resistance of surfaces. A hard tip is drawn across the surface in a controlled way and the surface is assessed. The force at the tip is adjustable between 0 - 30 N. As a rule, the settings 0 - 10 N are used for floors.

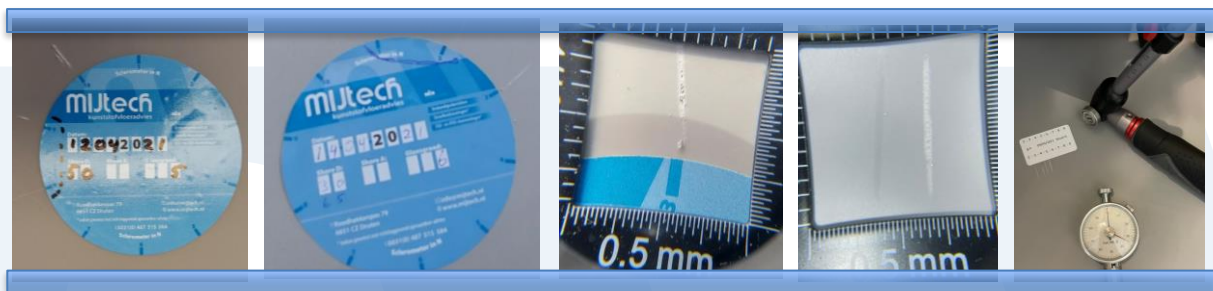
The DIN standard 55656 describes the measuring method, but it does not provide limit values.



Examples of measurements:

A scratch resistance of 6 N refers to the force in N, whereby fraying occurs along the scratch flank - /- 1 N.

If the scratch resistance is 6 N, fraying thus occurs at a force of 7 N. (Friction marks and gloss differences are allowed.)



Scratch resistance 8 N

Scratch resistance 2 N

At a force of 3 N fraying occurs. The scratch resistance is 2 N.

Left: friction mark
Right: fraying

Measurement scratch resistance and shore D

How scratch resistant is my floor?

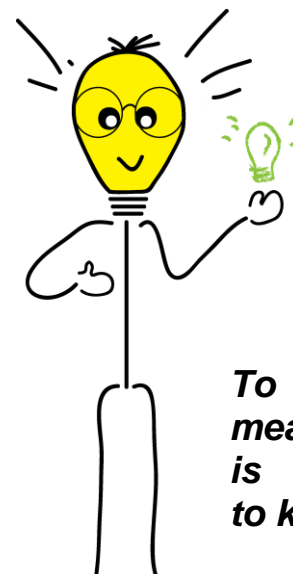
- Client: How scratch resistant is my floor?
- Flooring company: How scratch resistant are the flooring systems that we offer?
- Manufacturer: How scratch resistant are the flooring systems that I supply?

We are happy to measure the hardness, the scratch resistance and gloss grade of your floor and record the results in a report and/or in a certificate.

How can we help you:

- Giving advice
- Carrying out measurements
- Damage investigation and/or recording
- Expert reporting

THE DUTCH FLOOR TESTING COMPANY	
Flooring system:	
Measurements	Result
Scratch resistance in N DIN 55656	
Shore D hardness	
Shore A hardness	
Gloss grade in gloss units	



To measure is to know!