



# Quality that makes the grade

nora<sup>®</sup> rubber flooring for educational environments

**nora**<sup>®</sup>  
by **Interface**<sup>®</sup>

## Robust by origin – Rubber



### Inspired by nature, perfected by technology

Nature often provides the best ideas. This also applies to nora floor coverings, which are made of high-quality natural and industrial rubber. In addition, minerals from natural deposits and other components as vibrant colour pigments are added, forming the basis for an extremely robust yet permanently resilient classic "Made in Germany".

The special feature of rubber is its inherent elasticity. Vulcanisation makes the floor coverings permanently elastic, helping their unique functionality and aesthetics last for decades to come. The nora complete system is no less unique. With a comprehensive range of

accessories and unparalleled service, it delivers both consistent and cross-functional design across all surfaces, stairs and levels.



### For a good learning environment

Educational institutions have a high responsibility. They are the place where young people are prepared for their lives and the world of work. It is therefore important to create a motivating learning environment – and that starts with the flooring.

This must, of course, meet many criteria and the highest standards, and above all it should be healthy and low-emission. After all, only an optimal indoor climate ensures a good learning environment. Children also like to run around, so slip resistance is an important aspect. Just like robustness, this feature will pay off in the long run. A perfect floor is wear-

resistant and results in minimal follow-up costs. Get to know nora floor coverings – the following pages give you the opportunity to do so.



Vocational School, Hamburg-Eidelstedt, Germany | © Frank Aussieker

## Quality just like from the textbook

Architects, builders, users and processors worldwide rely on nora solutions when it comes to creating healthy and aesthetically pleasing interior design. As the market leader of unique rubber flooring, nora systems GmbH develops and produces premium quality "Made in Germany".

We consistently follow the vision of creating products with outstanding and lasting benefits for our customers. That's why we put all our innovation spirit into our product development. For us, innovation means constant learning – from our customers, the markets and ecological development.

We consider it our responsibility to think and act holistically and in a future-oriented way – for this we have enjoyed the trust of our customers since 1950.

### Contents

**06** Health & environmental sustainability

---

**08** Durability & longevity

---

**10** Ecology & economy

---

**12** Colour & design options

---

**14** Acoustics & learning environment

---

**16** Inclusion & accessibility

---

**18** Workshops & specialist rooms

---

**20** Sports & exercise rooms

---

**22** System solutions

---

# Top marks in the field of environmental protection

A healthy environment is of great importance for the wellbeing of students and teachers. Important foundations for a positive learning environment are already being created when planning an educational institution. The decisive factor here is the choice of flooring, which occupies the largest area in the room. nora rubber floor coverings are extremely low-emission and thus contribute to good indoor air quality. As such, these provide the best conditions for a positive learning environment and effective protection for those who need it most. Children in particular are sensitive to pollutants. This makes it all the more important to select optimal building materials.



### Our carbon plan is simple: Avoid. Reduce. Store. Inspire.

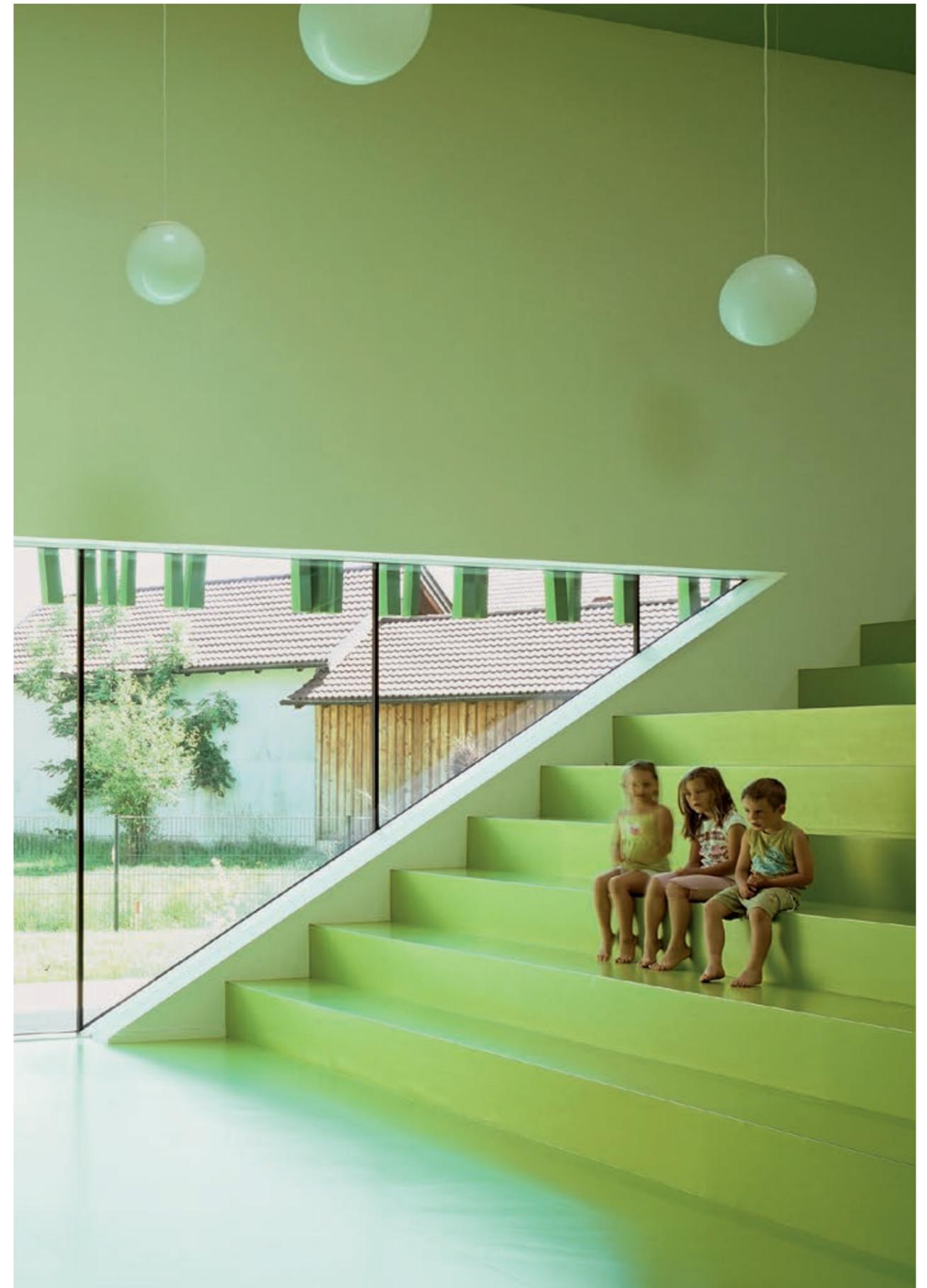
We have Science Based Targets to achieve by 2030, and a goal to be a carbon negative enterprise by 2040, both without offsets. We will continue to avoid, reduce, and store as much carbon as we can in the manufacture of our products, our business operations, and our supply chain. And we continue to inspire industry and partner with others to create a ripple effect, accelerating collective action and direct impacts.

## Eco-Labels



Details on eco-labels, approvals and Environmental Product Declarations can be found at [www.nora.com/certificates](http://www.nora.com/certificates).

## Memberships and other certifications



Sighartstein kindergarten, Neumarkt am Wallersee, Austria | © Angelo Kaunat



## Survives many education reforms

The fascinating material of rubber is ideal for the versatile requirements of school operations. Where many chairs, furniture and feet put stress on the flooring every day, durability is important. Maximum wear resistance and long-term elasticity ensure that the facility offers a safe environment for well-being and remains well maintained even after decades. Be it through optimal acoustics in study areas, ergonomic advantages or slip resistance for areas where things are sometimes a little wilder. Even in the event of a fire, the advantages of nora rubber floor coverings are apparent, as they are not only flame retardant (EN 13501), but also fire-toxicologically safe according to DIN 53436. That's how much safety should be provided in education.

nora floor coverings are comprised of the very efficient raw material of rubber. The dense and closed surfaces are extremely robust, resistant and durable. This makes them predestined for educational institutions and ensures a high-quality appearance for many decades.

“The floors are very durable and that is exactly what we need in a university, whose buildings are heavily frequented and used around the clock.”

Seppo Markku, Architect

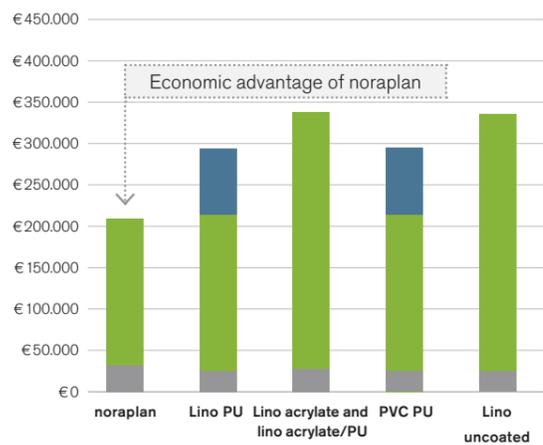
# Perfect for running around, easy to clean

When selecting floor coverings, the emphasis is being placed on life-cycle costs (LCC). A closer examination of the overall costs reveals that the majority of costs are incurred when the flooring is in use. This is consequently where the largest potential savings are. Criteria such as cleaning and maintenance effort as well as sensitivity to renovation are also significant. Particularly in long-term buildings such as highly frequented educational buildings, the low maintenance costs and durability of nora floor coverings have a positive effect on the LCC analysis.

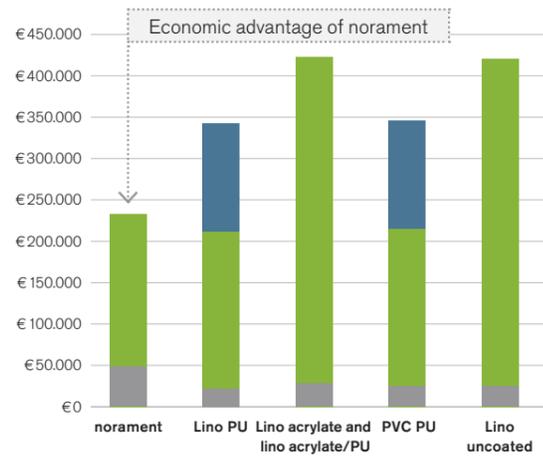
“With nora, we don't have to invest in long-term maintenance because it can be so easily maintained with just light detergent and water.”

Neysha Mejia, Project Manager at Pillar Property Management, Bronx - NY

Life-cycle cost (LCC) comparison: noraplan®



Life-cycle cost (LCC) comparison: norament®



Investment (grey), Operating and maintenance costs (green), Surface refurbishment costs (blue)

Presumed cleaning scenario for 1,000 m<sup>2</sup> area and 15 years.

Details and source: nora systems GmbH

noraplan: typical scenario for areas with average stress, such as a kindergarten.

norament: typical scenario for areas with heavy dirt influx and high mechanical load, for example in the school foyer.

With foresight and forward planning, a lot of money can be saved in the maintenance of school buildings. We will be happy to create your individual life-cycle cost analysis and show you potential savings specific to the building premises.



Völklingen kindergarten, Germany | © arus GmbH Willi Latz | Norbert Miguletz



Ladybird Early Learning Centre, Dubai, United Arab Emirates | © Gerry O'Leary

## Better learning

Educational spaces can become living spaces through creative design concepts that inspire learning. Flooring gives your rooms structure, personality and life. With nora 4you we offer customisable and unique products that give educational institutions a special character.

### Inlays

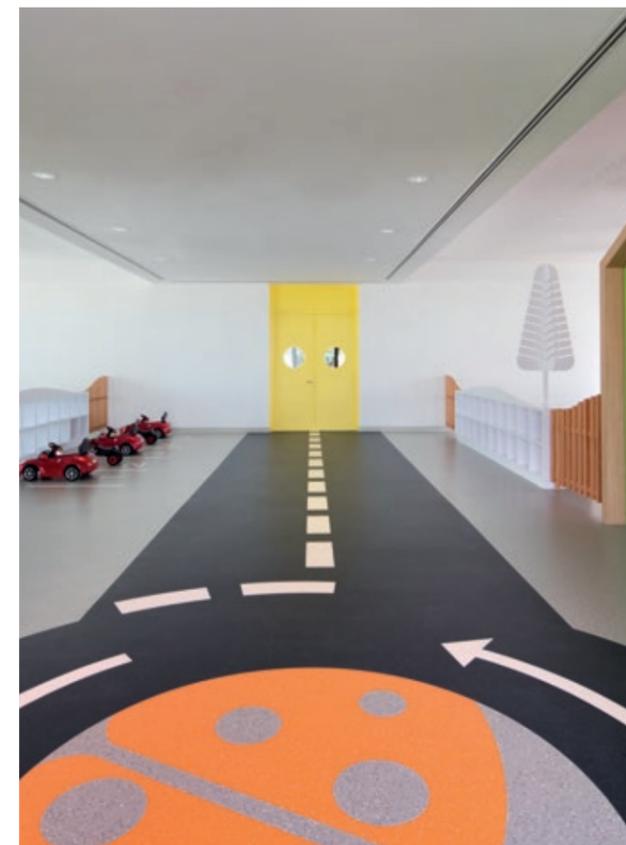
Playful design elements, helpful orientation and guidance systems, symbols or logos can be easily produced with inlays according to your ideas and wishes.

### Modular installation

You can choose between different plank and tile sizes in different colours and designs. The individual laying patterns decisively shape the ambience, giving the room a unique appearance.

### Custom colours

With more than 300 shades in different designs, we have a large standard range. If you are looking for a different shade, we will be happy to develop an individual colour for your project. We can implement almost any colour using samples or colour codes (NCS, RAL, Pantone) according to your wishes.



Ladybird Early Learning Centre, Dubai, United Arab Emirates | © Gerry O'Leary



Children's Hospital Colorado, US | © nora

### See the result now?

You won't know how design works in spaces until you've seen it. In the nora interior design studio, rooms can be individually and virtually redesigned. Experience a wide variety of colours and designs in real spaces. Or take a picture of your room, upload it and virtually install any nora rubber flooring in your spaces. You can also import the selected floor into your CAD or 3D modeling program. Further information can be found on our website.



Lecture Hall and Campus Center (HCC), University of Kassel, Germany | © Werner Huthmacher

## Level down, concentration up

Good acoustics are important for learning success. After all, noise distracts and is a stress factor for all involved. Good room acoustics are crucial for the innovative, open construction methods of education, with their new forms of learning and cooperation. Acoustic measures are intended to minimise unwanted sources of sound. In addition to soundproofing elements in walls and ceilings, the flooring can also make a positive contribution to better speech intelligibility and greater listening comfort.

### Footfall sound absorption

nora rubber floor coverings reduce walking noise by up to 20 dB.

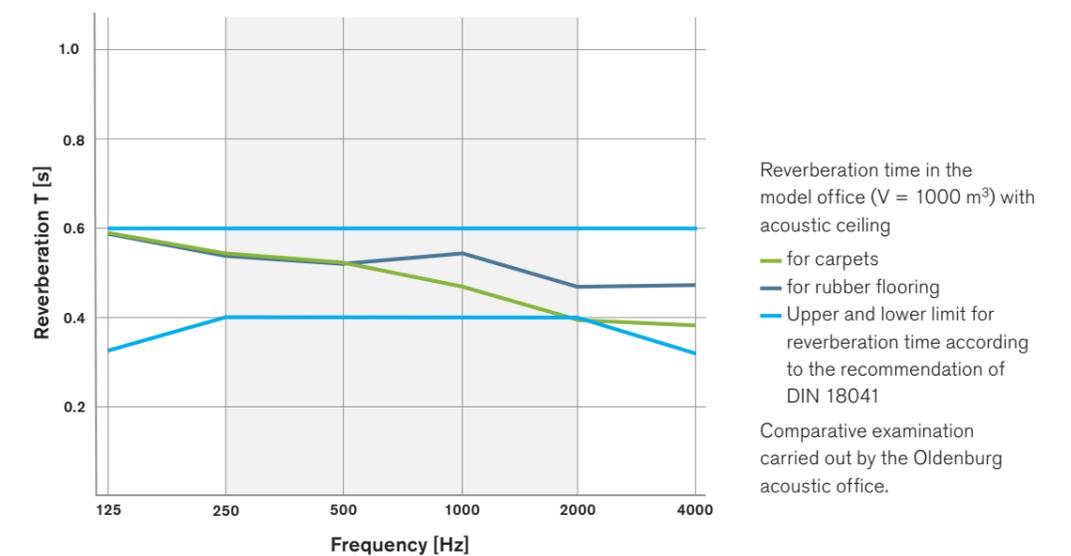
### Noise generation

The permanently elastic floor coverings contribute to lower noise generation when walking or rolling compared to harder materials.

### Reverberation times

In the case of rubber and textile coverings, the reverberation times in a room equipped with an acoustic ceiling in the relevant frequency range are comparable and correspond, among other things, to the recommendation of DIN 18041 (see comparative study by the Oldenburg acoustic office).

### Room acoustics: expected reverberation times



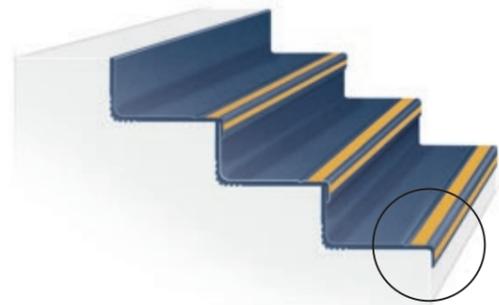
# Inclusion starts from the bottom

Inclusion in education is an immense challenge that all participants must face: Schools, teachers, pupils – but also architects and planners, who should pave the way for joint learning. When implementing accessible buildings in education, you receive holistic system solutions. For classrooms, stairwells and equal opportunities in daily learning. nora stands for unrestricted diversity – also in terms of design possibilities.

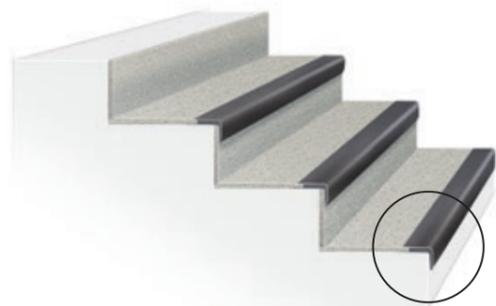
With more than 300 standard colours, a wide range of surface structures and stair solutions with contrasting colours and orientation guidance systems, nora floor coverings can make a pioneering contribution to successful inclusion. The service is included. We competently support accessible planning, for example with regard to contrast determination.

Even tactile guidance systems and attention markings can be installed on nora floor coverings. Recommended systems and further information are available upon request.

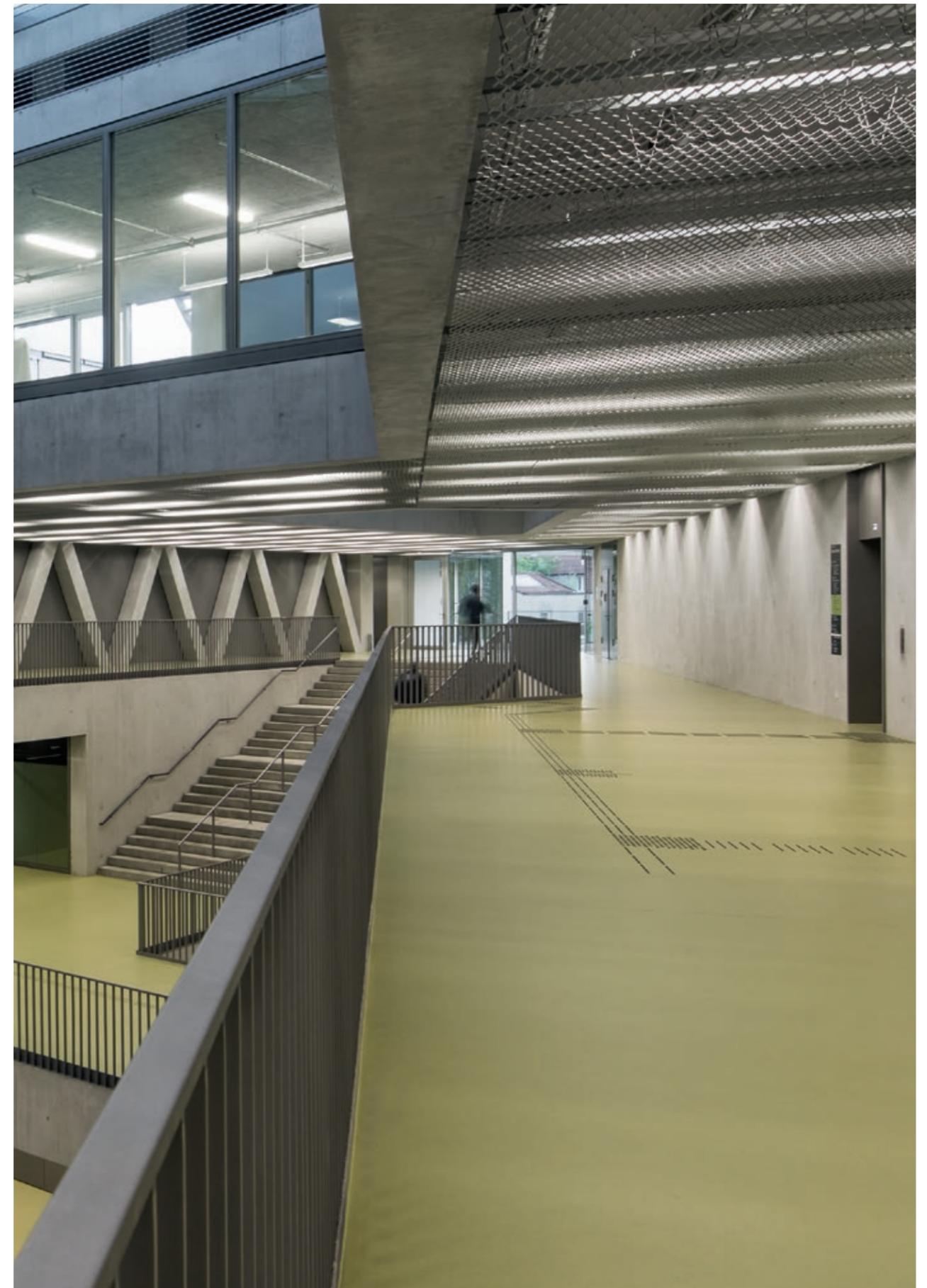
To make stairs more usable and to minimise obstacles, nora also offers solutions for people with visual limitations. This allows everyone to really participate in education.



**norament stairtreads  
with contrasting signal  
or safety stripes**



**Contrasting stair nosing  
with plug-in lip**



# Safety at all times

The requirements for educational spaces are as diverse as the learning content itself. nora floor coverings are particularly distinguished here, as they not only offer different surface structures for increased slip requirements, but also provide electrostatic conductive and dissipative variants for the greatest possible protection of people and devices. In addition, floors with extensive oil, grease and chemical resistance are also part of the product range. In all of this, safety is paramount for small and large-scale users – whether in specialist science rooms, workshops, changing rooms or teaching kitchens.

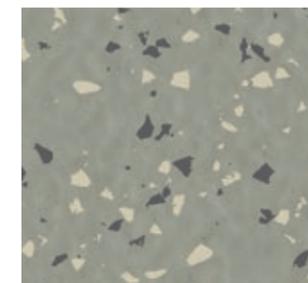


Integrated comprehensive school Erwin Fischer, Greifswald, Germany | © Stephan Falk



Biologikum, Johann Wolfgang Goethe University Frankfurt, Germany | © Oliver Heinemann

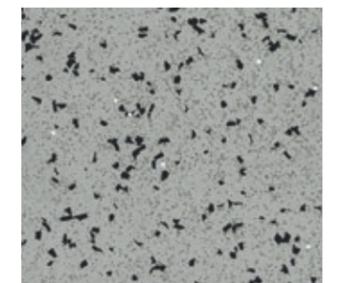
Where wood is chopped, splinters must fall. No problem for the nora range. Its extensive surface variants ensure that it meets greater requirements for slip resistance ratings (DIN EN 16165), which can be demanded in specialist workshops, for example.



**R9 assessment group**  
norament and noraplan  
standard floor coverings



**R10 assessment group**  
e.g. norament 926 grano  
(cubic structure)



**R11 assessment group**  
noraplan ultra grip

Please refer to our technical data sheets for other floorings with slip resistance R9, R10 or R 11.

## Strong in many disciplines

nora standard flooring also score points in the sports sector: It provides excellent anti-slip and cushioning properties. The risk of friction burns or skin damage due to falling is very low. The range also includes coverings for sports and multi-purpose halls. noraplan sentica is tested in accordance with EN 14904:2006-06 and meets the requirements for playing surfaces. The resistance to scuffing from shoes and wheels ensures an impeccable appearance – even after major sporting events.



Richardstraße Elementary School sports hall, Hamburg, Germany | © Jochen Stüber



Exercise room at the Kokon children and youth rehabilitation centre, Bad Erlach, Austria | © Bruno Klomfar

Whether playing, running around or exploring, the warm and permanently elastic rubber floor coverings are the ideal basis for play and sport. The 4 mm-thick noraplan acoustic coverings with their two-layer structure are particularly accommodating to the joy of movement. These not only provide excellent anti-slip and cushioning properties, but are also characterised by shock-absorbing properties. This can absorb impact forces and reduce the risk of injuries from falling. The flooring is therefore gentle on joints and is also ideally suited for gymnastics or aerobics areas.

# Like new – no matter how old

Since 1973, the norament floor with the characteristic pastille structure has been situated in the library of the Ruhr-University Bochum (RUB). "Selecting a resistant, long-lasting floor that was fire-resistant and non-slip was already a top priority at the time, in addition to the design aspect," says Dr. Erdmute Lapp, Director of the RUB.

“The norament floor has absolutely met the expectations over the decades (...)”

Norma Schormann, Head of Building Maintenance, RUB



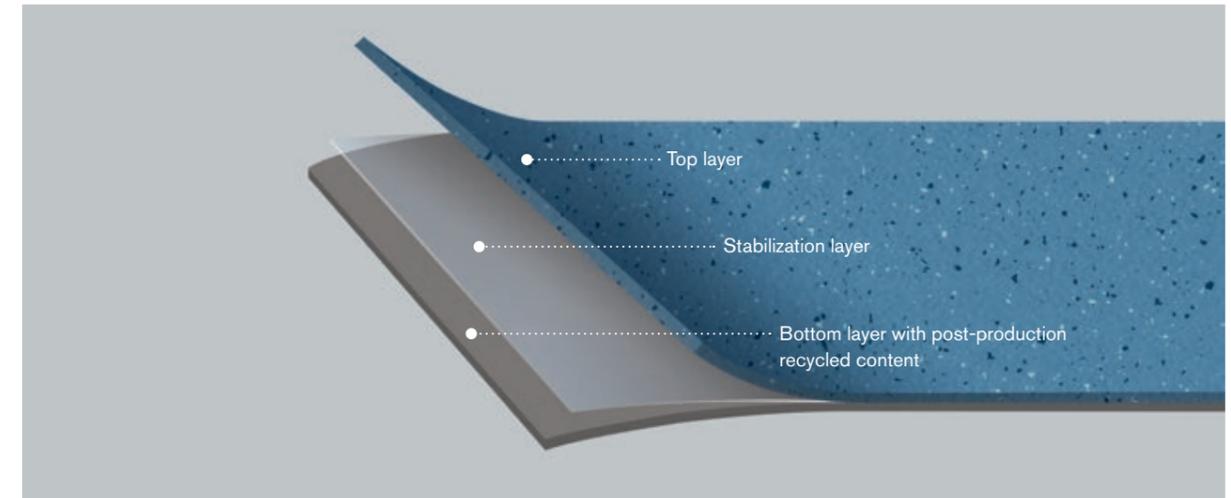
University Library at the Ruhr-University, Bochum, Germany | © Andreas Braun

# Future-proof installation

Quality work with a system – nora offers you different installation solutions that have one thing in common – you don't have to worry about anything.

## Removable floor covering: norament® 975 LL

This rubber floor covering can be quickly installed using a suitable tackifier and can be used as soon as it has been laid. It can also be removed and reused, which allows flexible use in a range of applications. It is suitable for new and renovated buildings as well as raised-access floors, temporary flooring and installation on existing old coverings. This product is made using recycled raw materials.



## Quick installation system: nora nTx

nora nTx is a unique technology for the professional installation of nora rubber floor coverings. It consists of our noraplan and norament standard floor coverings, which are equipped with an adhesive backing. The flooring is cleanly and safely installed in only a few steps and immediately ready for use. This can be done on concrete or cement screed subfloors typical in new construction, as well as over other existing floor coverings. Even increased residual moisture in the concrete or screed is no problem.



Reliable installation result



Immediate usability



High efficiency



For all types of subfloors

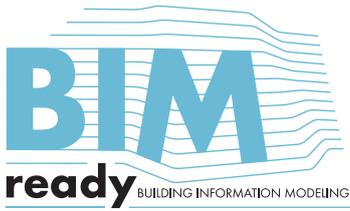


Use with residual moisture



Covering-over-covering installation





# Smart Navigators to the perfect floor



[www.nora.com/flooringfinder](http://www.nora.com/flooringfinder)



[www.nora.com/roomdesigner](http://www.nora.com/roomdesigner)

Photo page 2/3: © Markus Bachmann

Specifications are subject to change without notice. Errors and omissions excepted. No liability is assumed for the correctness, completeness or accuracy of the information. The product illustrations in this document may differ from the original. This document does not constitute a contractual offer and serves only as non-binding information.

The nora brand and any other registered trademarks used in this document are registered to the company, the country or a company affiliated to nora systems GmbH. Any other brand names used herein are the trademarks of their respective owners.

Contact details, local offices, authorized distributors and further information can be found at [www.nora.com](http://www.nora.com).

**Published by**

nora systems GmbH  
Höhnerweg 2-4  
69469 Weinheim | Germany  
[www.nora.com](http://www.nora.com)