

The right solution for every purpose

nora® rubber flooring for industry



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 extreme requirements in industrial areas

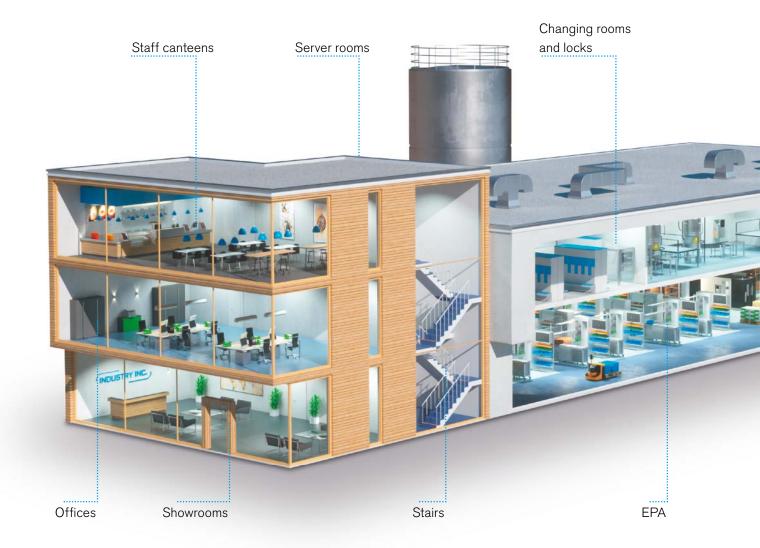
Choosing the right industrial floor is an important decision. After all, a good floor is a decisive factor for success. It can be the safe basis for your processes and contribute to a pleasant working environment for your employees. This is especially true for the production areas - the heart of every manufacturing company.

It is particularly important to create ideal conditions here at a crucial point in the value chain. Floors that cause expensive downtime due to maintenance are out of the question. Good industrial floors impress with their long-term performance, maximum safety

at work and minimal follow-up costs. Curious? You can find out more in an interview with our experts and on the following pages.

Up to every challenge

With many specific properties, nora floor coverings meet the extremely complex requirements of the industry: different thicknesses for the respective pressure load capacity required, electrostatic dissipative and conductive floors for areas where processes or people need to be protected, different surfaces that meet the hygienic requirements in laboratory and cleanroom areas, and last but not least, well thought-out solutions for the furnishing of stairwells. With nora, complete building complexes can be equipped with durable rubber floors, comprehensive service and many other benefits.



Be on the safe side with rubber

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.



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Exceptionally durable

Thanks to their extremely dense and closed surface, nora rubber floors are exceptionally durable and wear-resistant. The resulting service life has won over our customers for many decades. Depending on a suitable subfloor structure, the floors withstand a dynamic pressure load of up to 6 N/mm². Which floor is right for your needs? We will be happy to calculate the dynamic pressure load for your area of application and recommend the right solution for this.

"I have used nora floorings in many other projects and know from decades of experience that they are almost indestructible."

Peter Schweizer, Architect

Durable, safe and easy to maintain

When using forklift trucks, tyre marks caused by abrasion are almost unavoidable. These can be completely eliminated easily with the help of the nora pads. Damage that may be caused by protruding nails or sharp edges can also be easily repaired by partial replacement or with the help of nora joint sealing compound.



Seitec Elektronik GmbH, Elsteraue, Germany | © Dirk Wilhelmy

Reliable in the laboratory

Chemical resistance, electrostatic conductivity or dissipation, the highest hygiene standards or ergonomic workplace design the demands on floors in laboratories are manifold. nora rubber floors are largely resistant to chemicals. Even brief contact with solvents, diluted acids and alkalis leaves no marks. In addition, the floors are resistant to surface disinfectants from the list of the Disinfectants Commission of the Association for Applied Hygiene (VAH) and the German Robert Koch Institute (RKI).

"The comfort that nora floors offer was extremely important to us, because the staff in the laboratories often stand for a very long time."

Bernd Junker, Architect of Technical Services Ludwigshafen (BASF)

The permanently elastic material rubber offers high walking and standing comfort, making it easier on the back and joints. This means the body suffers much less fatigue than on hard floors even after prolonged standing.

nora floors are complemented by an extensive range of accessories and offer the right solution for all requirements. With a cushioned-edged profile, wall coverings can easily be created. Special skirtings and skirting angles ensure hygienic connections to rising components. The nora joint sealing compound allows hygienic connection to drains or fixtures.



Southmead Hospital, Bristol, United Kingdom | © Tom de Gay & Nick Kane

Performance for Pharma and Life Sciences

More and more industries are researching, developing and producing in cleanrooms. The aim is to minimise contamination, production failures, quality fluctuations and inaccurate research results caused by contamination. Therefore, materials installed in these areas must meet the minimum requirements of ISO 14644-4 or GMP Guidelines.

Solutions in detail

nora offers a wide range of installation options for connecting raised components, pipes and drains.









Biotest Next Level (BNL), Biotest AG, Dreieich, Germany | © Dirk Wilhelmy

Long-lasting resistance, reliable results

nora flooring systems have been tested by independent testing institutes for the following properties:

- Particle emission behaviour
- Chemical resistance
- Outgassing behaviour (VOC and SVOC)
- Antibacterial efficacy
- Biological resistance
- Cleanability



The benefits at a glance

Particularly resistant:

- Even under high dynamic loads
- Impact-resistant surface
- High resistance to biological contamination, disinfectants and chemicals

Permanently elastic:

- Protection from falling objects
- Better walking and standing comfort

Extremely flexible:

- Easy adaptation to changing processes due to modular installation
- Homogeneous and free of coating
- Easy surface remediation of heavily stressed surfaces without waiting/drying times
- Hygienic connections to frames, pipes and drains

"The main advantage over other flooring materials is the chance to improve and replace damaged areas. During the routine three-week shutdown, this work can be done without any problems, and complex renovations are omitted in the meantime."

Michael Lapa, Head of Facility Management at Biotest AG

Comprehensive service

In the context of suitability in the different application areas, we guide and support you with personalised consulting tailored to your project. The assessment of the influence of different process media and the disinfectants used are just as much part of the service offering as the provision of samples or sample series for customer qualification and validation.

ESD protection with long-term warranty

Even the smallest electrostatic discharges can have serious consequences in the production and assembly of electronic components, in data centres or in research areas. Therefore, in these areas, electrostatic charges must be discharged in a safe and controlled manner, and charges of people must be avoided. nora rubber floorings are anti-static. In addition, conductive and dissipative special qualities protect against even the smallest uncontrolled discharges.

Conductive	Dissipative $10^6 \Omega - 10^9 \Omega$	Insulating ≥ 10 ⁹ Ω
≤ 10 ⁶ Ω		
ļ	······	
noraplan® ec	noraplan ed	noraplan
norament® 927 ec	norament 928 ed	norament 926

The benefits at a glance

- Volume conductivity (no fibres, strands or varnishes)
- Permanent ESD protection: 10 year warranty on the electrostatic properties
- Easy cleaning
- Mechanical-dynamic load capacity
- Ergonomic properties for standing and walking activities
- Precisely for application on raised access panels

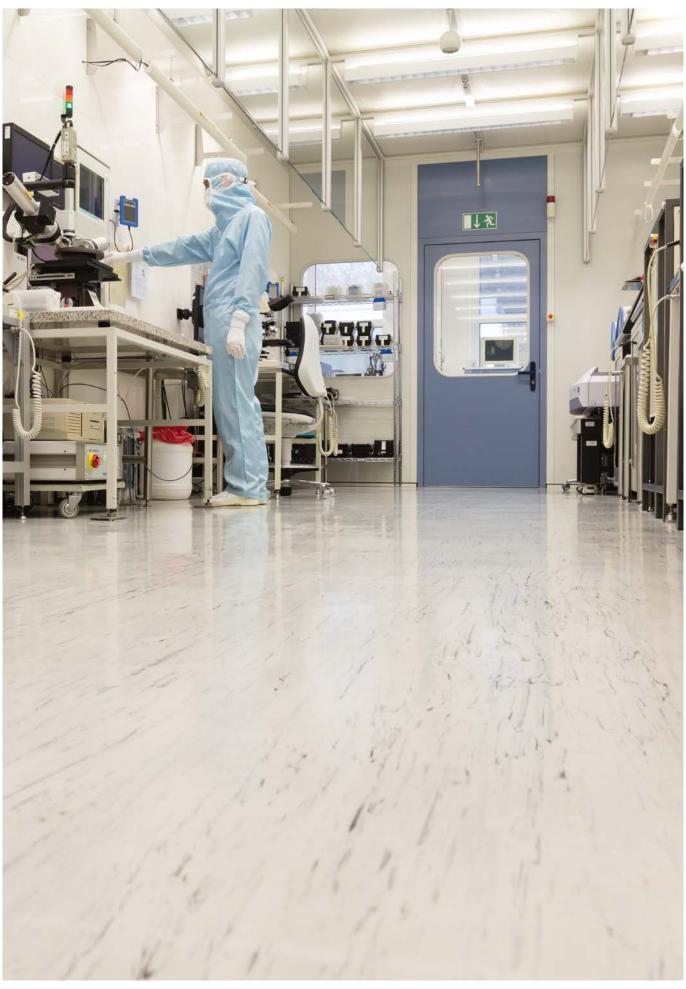
"We are extremely satisfied with the rubber floors in terms of their long shelf life, as even after this long usage time of nearly 30 years they are still within the limits defined by DIN EN IEC 61340, which is regularly verified with annual measurements and walking tests."

Raphael Ehrbrecht, Manager of Process & Tools 1 and ESD Coordinator at UMS

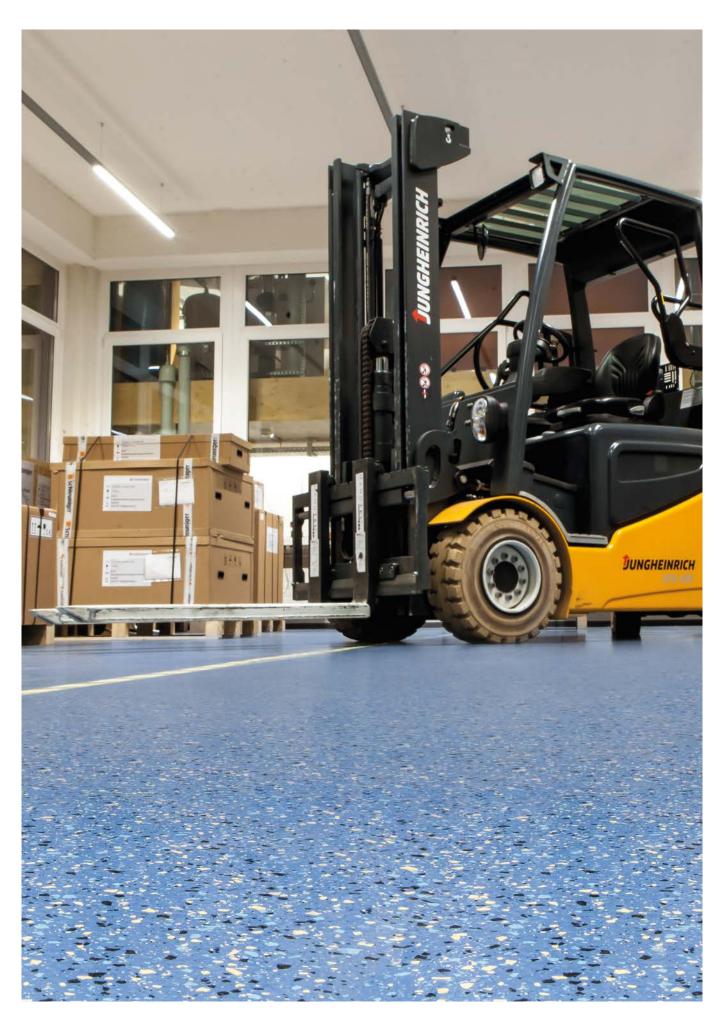
Long-lasting results - long-term warranty

You receive a 10 year warranty for the electrostatic properties of our ESD industrial floors. We will be happy to send you the exact terms of the warranty upon request.





United Monolithic Semiconductors GmbH (UMS), Ulm, Germany | © Dirk Wilhelmy



Schleuniger AG, Thun, Switzerland | © Waldemar Hauke

Permanently reliable floors

For decades you can find nora floors in various areas of industry. Whether in offices, canteens, production areas or laboratories, you can rely on the functionality of the rubber floors. In all these areas, we are committed to providing safe flooring not only for your processes, but above all for you. Take advantage of our service and get individual advice.

"We are thrilled with the durability and resistance of the floors. Even 18 years of the heaviest burdens have not been able to harm them."

Marcel Pfammatter, Team Leader of Infrastructure/Rental at Schleuniger AG

Worldwide, our customers rely on long-lasting solutions. For example, Schleuniger AG in Thun (Switzerland). Even after eighteen years of daily, high-intensity use, they are satisfied with the functionality and appearance of the nora floor in logistics, exhibition and production areas.

Valuable in everyday life, inexpensive to maintain

In areas where work is carried out, the floor is often subjected to heavy loads: countless people walk over it, pallets are moved and sharp-edged objects fall onto it. It often becomes difficult to make the floor look good. norament and noraplan are made of rubber through and through and do not require any additional surface coatings thanks to their dense and closed surface. This not only reduces costs, but also simplifies maintenance enormously, as no complex recoatings are necessary. In addition, nora pads enable simple surface restoration.

Due to the elasticity of the rubber material, nora floors also resist impacts, for example from falling tools, hose couplings, clamps or other metal parts. In return, falling objects are protected by the cushioning properties of the floors.



Schleuniger AG, Thun, Switzerland | © Waldemar Hauke



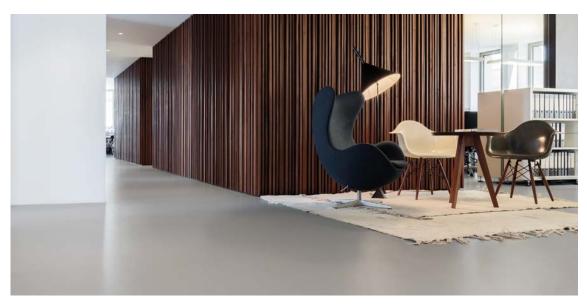
blocher partners architectural office, Mannheim, Germany | $\ensuremath{@}$ Daniel Vieser

For increased wellbeing

The health, satisfaction and productivity of your employees is significantly influenced by their working environment. Whether in production, administration or research areas: acoustics, climate and air quality as well as the nature of the room itself play a decisive role. In addition to the walls, the floors in particular characterise the style of a room. A good floor must not only be resistant, but also meet many other requirements in terms of functionality and at the same time impress with its design. nora floors meet these requirements and thus provide the ideal basis for productive work.

"I don't have any pain in the evening, even if I have been on my feet for many hours."

Pascal Hänni, Warehouser at Schleuniger AG



blocher partners architectural office, Mannheim, Germany | © Daniel Vieser

The benefits at a glance

Contribution to good indoor air quality:

- Low-emission products, awarded the Blue Angel (DE-UZ 120) and other eco-labels
- Free from PVC and phtalate plasticisers
- nora® one: this low-emission complete system is certified in line with Indoor Air Comfort GOLD.

Creating quiet working environments:

- Improvement in footfall sound absorption up to 20 dB
- Greatly reduced noise emissions when walking or rolling compared to hard materials

More comfort for walking and standing workstations:

- The ergonomic texture relieves joints and back
- Surfaces with slip classes from R9 to R11 provide greater tread resistance

Endless possibilities

One building, different application areas, one floor: With more than 300 colour, design and surface options in the standard range, nora floors offer the best possibilities for cross-functional design from a single source. Whether a cleanroom, stairwell or canteen, whether electrostatically dissipative or particularly non-slip: all rooms and requirements can be realised in the same floor design. A special colour request? No problem. We produce custom colours according to individual requirements.

Simply use the floor to strengthen your brand and bring it to the attention of potential customers or visitors: We manufacture customised floor inlays according to your requirements – for example for your reception, waiting area or showroom. Whether special symbols, self-designed motifs, logos or geometric shapes – there are no limits to your wishes.

"We see the possibility of individually designing the floor in the shade of our brand as a great advantage."

Dominik Langen of Vollack Group GmbH & Co. KG

The benefits at a glance

Cross-functional design options:

- Extensive design and colour palette with matching accessories
- Designs also in other qualities such as dissipative, R10 slip class and as a stairtread
- Homogeneous appearance due to installation without welding

Interior design according to corporate design:

- Customisable range of colours based on rubber samples or colour codes (NCS, RAL, Pantone)
- Use of brand-typical images or logos with the help of floor inlays

Integration of guidance systems:

- Inlays as a durable and wear-resistant solution for your guidance system
- Use our selection of standard symbols





Michelin Training Centre, Karlsruhe, Germany | © Andreas Förg

By choosing nora floors, you get more than just a floor. In the context of your project, we guide and support you with personalised consulting tailored to your project. The application-related parameters of the process environment are coordinated with your project. Support ranges from evaluating the influences of various process media to colour consulting – use our expertise and decades of first-hand experience.



© nora

"Even before the start of the project, we received comprehensive advice, and were then supported throughout the entire project by the experts at nora application technology."

Ronald and Marcel Fischer, Managing Directors of SanaCare

Welcome to the nora service world!

Our technical consultants and application engineers form the right competence team for your needs. Rely on the advice of our experts over the entire implementation time and useful life. We are happy to support you directly on site, give briefings and offer installation and cleaning seminars.

Future-proof installation

Quality work with a system - nora offers you various product solutions that have one thing in common: you don't have to worry about anything, nora one® is a certified complete system that supplies you with everything from a competent source. nora® nTx, a rapid installation system that makes floors immediately usable, is even simpler - to name just one of the many advantages.

nordNE - the safe complete solution

nora one consistently pursues the sustainable system concept: The combination of low-emission nora floors with suitable floor installation products and flooring installers specially trained by nora form a certified complete system that is unique in the field of floor coverings.





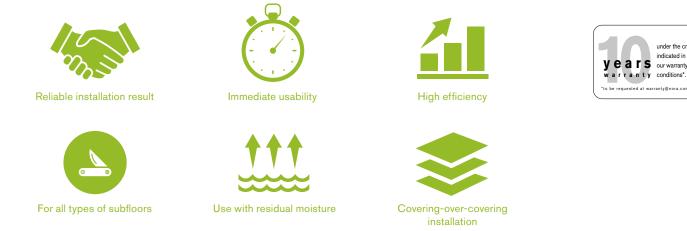
under the criteria indicated in

ranty conditions*

The advantages: maximum safety for users and planners as well as an extended warranty period of 8 years for the entire system. The main components are awarded Greenguard Gold and Emicode EC1PLUS. In addition, this low-emission complete system is certified in line with Indoor Air Comfort GOLD. This is also unique in the area of floor coverings.

norg nix - the revolutionary quick installation system

The adhesive strength of nora nTx is already factory fitted. In just a few steps, the floor is laid cleanly and safely and can be used immediately - and this can be done on the usual concrete or cement screed subfloors as well as on existing other floor coverings. Even increased residual moisture in the concrete or screed is no problem.



nora dryfix™ ed

nora dryfix ed is a double-sided conductive dry adhesive tape for the installation of electrostatically dissipative and electrostatically conductive nora floor coverings. It accelerates the installation with a high reliability and reduces downtimes significantly.



Smart Navigators to the perfect floor



www.nora.com/flooringfinder



www.nora.com/roomdesigner

Photo page 2/3: © Markus Bachmann

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