

# RUBBER FLOOR COVERINGS AND ACCESSORIES 2017

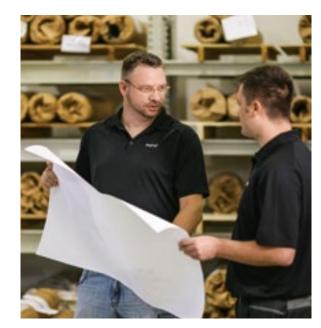
nora

























# Innovative sustainability – Made in Germany

We are driven by the idea of creating extraordinary and individual floor solutions that can withstand the most diverse and highest load patterns. We have found in natural rubber the ideal material and properties that can meet this claim.

Rubber has the unique capacity to withstand heavy loading permanently without sacrificing quality. We are rightfully proud of our expertise in having perfected this product of nature. nora® floor coverings are slip resistant and flame retardant, exhibit outstanding ergonomic properties, and absorb footfall sounds. Moreover, they are free of plasticisers (phthalates) and do not need coatings. These points are highly appreciated by our customers in the most diverse fields.

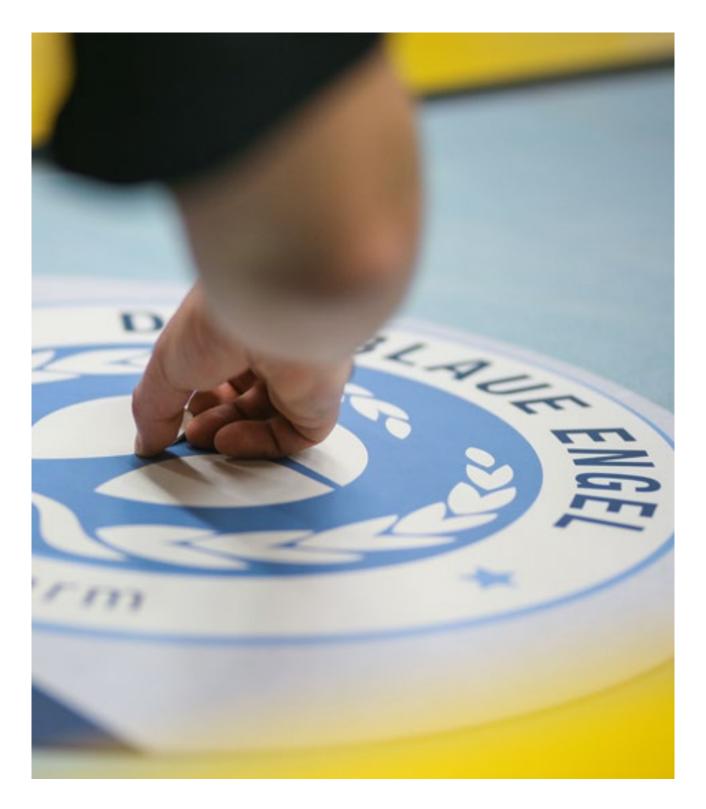
Accordingly, nora® floor coverings can be found everywhere in the world, for instance in

- hospitals and nursing facilities. There they are used in highly sterile areas subject to the strictest
  hygiene requirements like operating theatres, but also to provide a cosy ambience in patient rooms.
- Airports, trains, and railway stations areas that are frequented by millions of people every day and so must fulfil the highest requirements.
- Schools, universities, and nursery schools institutes that prioritise a natural indoor climate and healthy indoor air.
- Office, administration, and industrial buildings that must comply with special regulations and standards.

Fulfilling our customers' and partners' requirements is a matter of course to us. We would like to give you our assurance that your decision in favour of nora® floor coverings is the right one: today, tomorrow, and thereafter. This is our claim, and we guarantee it!

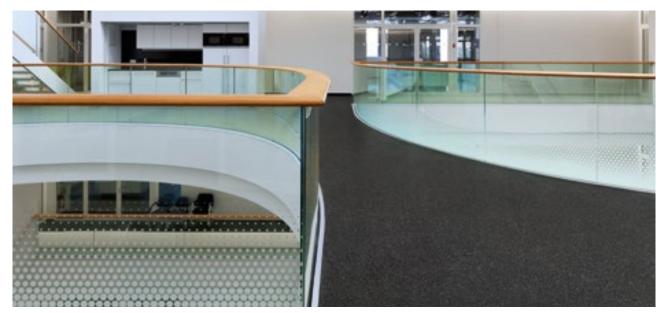
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# Two product lines – boundless possibilities

Everyone aspires to individuality. Why should this claim stop at the floor covering? Our two product lines norament® and noraplan® form a perfectly practical synthesis of design, functionality, and environmental compatibility. We are therefore convinced that we can offer our customers the perfect solution for every need and creative idea. Get to know our product portfolio on the following pages, and learn more about how you can set highlights with nora® floor coverings and system solutions.



Clariant innovation Center CIC, Frankfurt, Germany

#### norament®

This classic rubber floor covering is a convincing combination of sustainable quality and outstanding functionality. Pressed under high pressure, the tiles present a very dense, sealed surface. This makes them extremely resistant to wear and supports fast and easy cleaning. The product portfolio includes five designs. From the classical pastille, norament® 926/825, which has been in service for decades at Frankfurt Airport, the hub of European air traffic. To norament® 926 crossline, presenting a 3D structure for an agile, living effect. norament® floor coverings are suitable for projects that must fulfil extreme requirements, e.g. in ice rinks or oil rigs.



Wuppertal Suspension Railway, Germany

© Dirk Wilhelmy

# noraplan®

noraplan® floor coverings are available in rolls or tiles with a great many designs and colours for virtually unlimited design potential. The product range is made up of eight different designs. The new addition, noraplan® valua, is an excellent choice where a cosy ambience is important, e.g. in patient rooms, old people's homes, but also in representative fields. This is underscored by the living quality of its linear surface structure combined with the natural properties of rubber. Its functional properties make noraplan® floorings suitable for a wide range of needs. Excellent slip resistance and oil and grease resistant properties make noraplan® floorings a convincing solution in heavy duty areas.

# Outstanding quality nora® floor coverings and accessories



# Eco-labels, approvals, and Environmental Product Declarations

# The Blue Angel

One of the world's most famous and oldest eco-label, initiated by the Cabinet of Germany. This guarantees that products fulfil particularly stringent environmental, health, and performance requirements, including emission and constituent specifications.

Approval criteria: RAL-UZ 120 www.blauer-engel.de

Awarded to: norament® 926 and noraplan® standard floorings and nora® installation materials



# Greenguard Gold

Greenguard Gold Certification promotes the protection and safety of sensitive persons in regards to indoor air quality. Certified products fulfil stringent emission standards, affording an invaluable contribution to the quality of indoor air.

Approval criteria: UL 2818 Standard for Chemical Emissions for Building Materials www.greenguard.org

Awarded to: All nora® floor coverings and nora® installation materials and nora® accessories



# BRE "A+" rating

The BRE rating assesses the environmental impact of products. The environmental profiles of similar products in a category are compared with each other and assessed. The best products in a comparison group are awarded the "A+" rating.

Approval criteria: BRE Global Methodology for Environmental Profiles of Construction Products. www.bre.co.uk

Awarded to: noraplan® standard floorings with "A+" rating



#### Austrian eco-label

The Austrian eco-label is awarded by the Austrian Ministry of Agriculture, Forestry, Environment, and Water Management. It guarantees environmentally friendly products and services. Certified floor coverings exert as small an impact as possible on the environment and health over their whole life cycle. Approval criteria: UZ 56

Approval criteria: UZ 30 www.umweltzeichen.at

Awarded to: norament® 926 and noraplan® standard floorings



#### M1

The Finnish test mark M1 is regarded as the highest certification for building products in the Scandinavian region. Besides stringent emission thresholds for total volatile organic compounds (TVOCs), the label also includes a sensory odour test.

Approval criteria: Finnish Classification of Indoor Environment 2008

www.rakennustieto.fi/index/english.html

Awarded to: norament® 926 and noraplan® standard floorings



# Étiquetage

In France, building products are classified according to their potential for emissions. The object is to eliminate risks to the health of persons inside the building.

Approval criteria: French VOC label: Emissions dans l'air intérieur (Décret n° 2011-321) www.developpement-durable.gouv.fr/Chapitre-I-Mode-d-emploi-de-l.html

Awarded to: nora® floor coverings and nora® accessories have been awarded the top rating "A+"

# Byggvarubedömningen

# BYGGVARUBEDÖMNINGEN

The Swedish institute Byggvarubedömningen assesses the sustainability of building products with respect to their emissions, constituents, and production process. The products are classified as "Recommended", "Accepted", or "To be Avoided".

Approval criteria: Building Material Assessment Criteria

www.byggvarubedomningen.se

Awarded to: norament® 926 and noraplan® standard floorings are classified as "Recommended"

in a majority of cases



## EPDs from Institut Bauen und Umwelt e.V.

EPDs (Environmental Product Declarations) are issued on the basis of international standards. They document the ecological aspects of a product over its whole life cycle. An EPD is a neutral, but invaluable source of information in the choice of sustainable building products. All norament<sup>®</sup> and noraplan<sup>®</sup> floor coverings have been awarded EPDs by Institut für Bauen und Umwelt e.V. (IBU). www.bau-umwelt.de



#### Indoor Air Comfort GOLD

The Eurofins certification Indoor Air Comfort GOLD combines emissions requirements with the most important European quality mark, in one certificate. With this international label, planners, building owners and architects can specifically use products that do not compromise indoor air by giving off impurities. It means that more purposefully selected products can be used that have been certified thanks to their low emission levels and their sustainable properties.



# **Building certifications**

nora® rubber floor coverings, nora® accessories, and nora® installation materials can enhance the sustainability properties of buildings for DGNB (German Sustainable Building Council), LEED (Leadership in Energy and Environmental Design), BREEAM (BRE Environmental Assessment Method), and other certifications.

www.dgnb.de/de/ www.usgbc.org/leed www.breeam.de/

# Corporate certifications, memberships, and cooperation agreements

















# $norament^{\otimes}$

norament®, the pioneer among rubber floor coverings, represents absolute top quality and functionality. The standard square tile sizes of  $1004 \times 1004$  mm are available in a wide range of colour and surface designs. Get to know our norament® product portfolio on the following pages, and feel free to call your personal contact with any questions you may have. © Flughafen Wien AG/Roman Boensch



Beijing Eden Hospital, Peking, China



Kulturforum Hanau, Germany



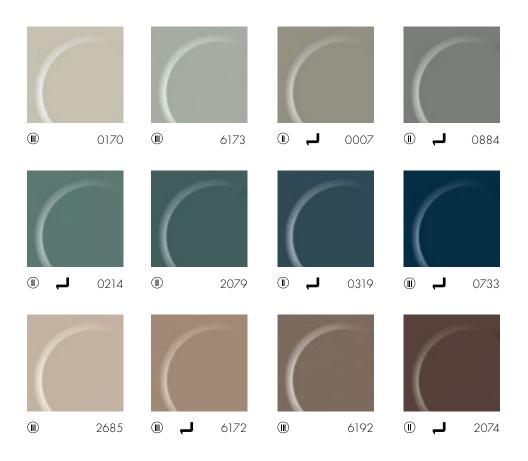
Kita am Seepark, Freiburg, Germany

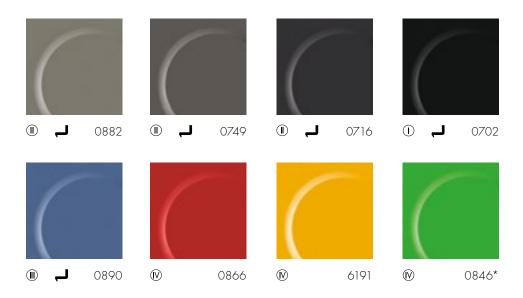


Deutsches Architekturmuseum, Frankfurt, Germany



One-coloured, classic round pastille for use in extremely heavy (926) and heavy traffic areas (825).



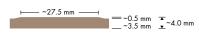


## norament® 926

**2**0

Art. 926/354

□ ~1004 mm x 1004 mm



nora® profile connection dimension: E + U Resists most oils and greases

These colours can also be delivered as:

Stairtread norament® 926, page 56

O = Price category

## norament® 825

**2**0

Art. 825/1902

\_ ~501 mm x 501 mm



nora® profile connection dimension: D + U

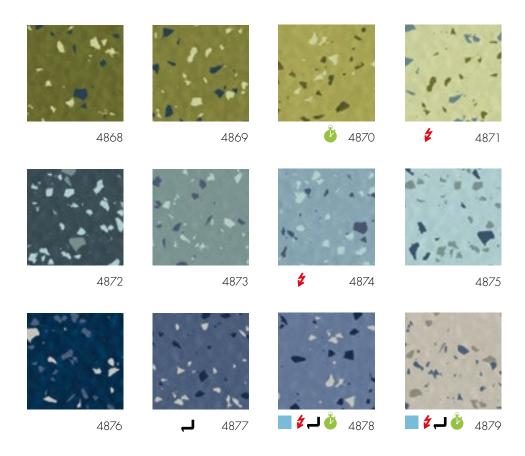
\*Colour design by Sir Norman Foster



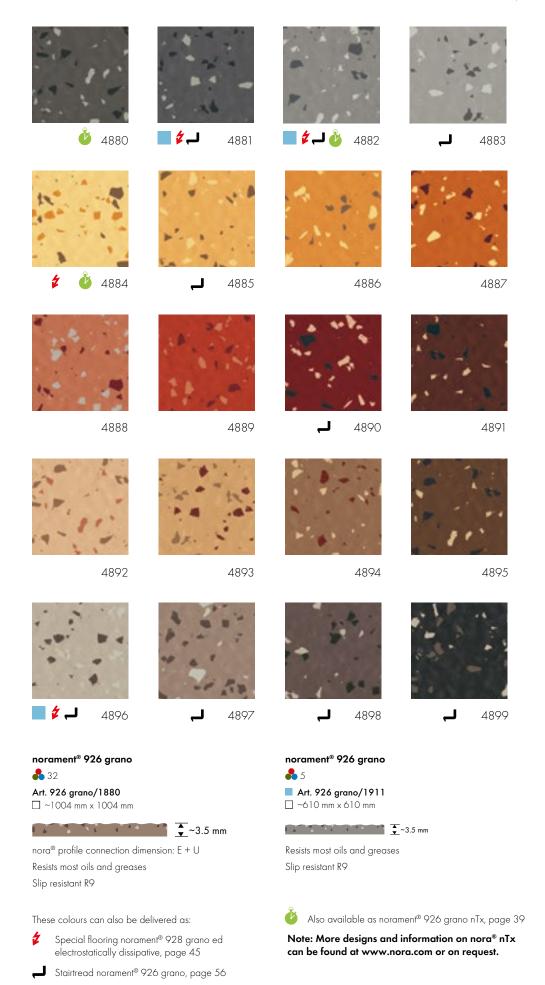
BMW AG, Leipzig, Germany



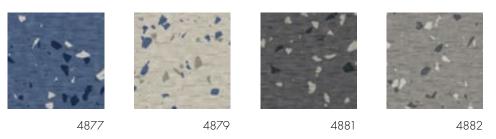
A granular design rich in contrast with a hammerblow surface or a cubic structure for use in extremely heavy traffic areas.



#### norament® | nora systems 13



# norament® 926 grano · with a cubic-structure



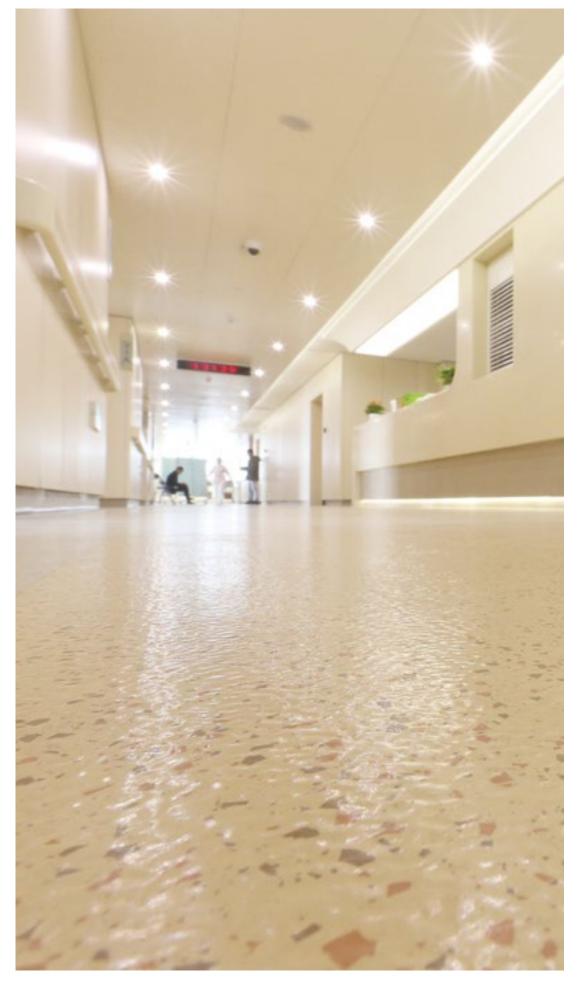
norament® 926 grano (with a cubic-structure)

**4** 

**Art. 926 grano/1870**□ ~1004 mm x 1004 mm

**→**~3.5 mm

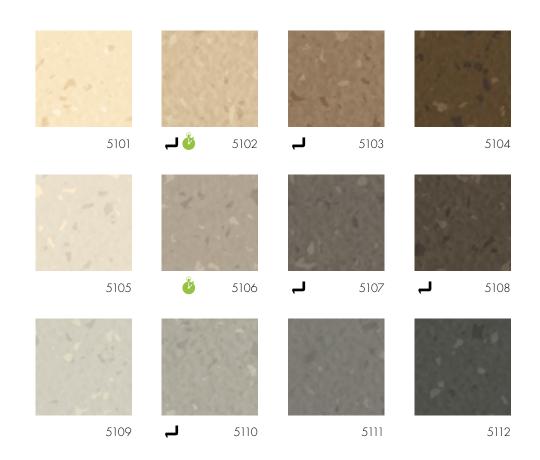
Slip resistant R10

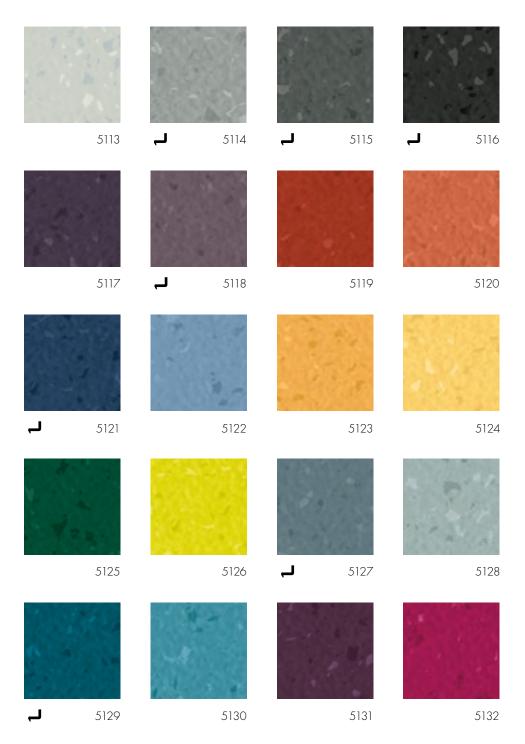


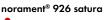
Zhejiang Provincial Hospital of TCM, Hangzhou, China



Tone-in-tone granular design with a hammerblow surface for use in extremely heavy traffic areas.









**Art. 926 satura/1880**□ ~1004 mm x 1004 mm



nora® profile connection dimension: E + U Resists most oils and greases These colours can also be delivered as:

Stairtread norament® 926 satura, page 58

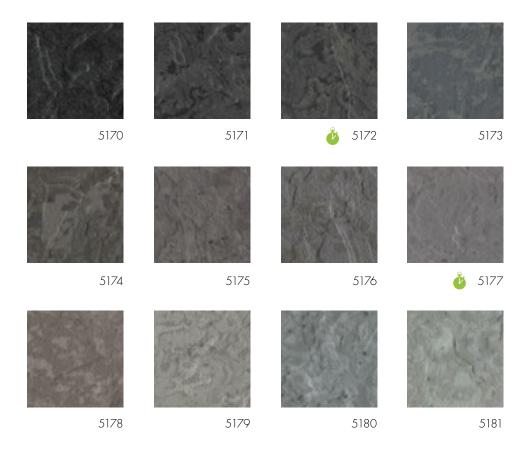


Also available as norament® 926 satura nTx, page 39

Note: More designs and information on nora® nTx can be found at www.nora.com or on request.



Flat, direction-oriented relief structure with fine grain design and modern marbling for maximum demands. No two tiles are the same – each square meter is totally unique.



# norament® 926 arago

**~** 12

**Art. 926 arago/3118**□ ~1004 mm x 502 mm

~ ~3.5 mm

nora® profile connection dimension: E + U Resists most oils and greases

#### norament® 926 arago with chamfered edges



Art. 926 arago/3119

□ ~998 mm x 497 mm

\_\_\_\_\_~~3.5 mm

nora® profile connection dimension: E + U Resists most oils and greases

Order-related smaller formats can be cut for individual installation combinations without minimum quantity requirements from norament® 926 arago tiles with the standard dimensions of 1,004 mm x 502 mm.

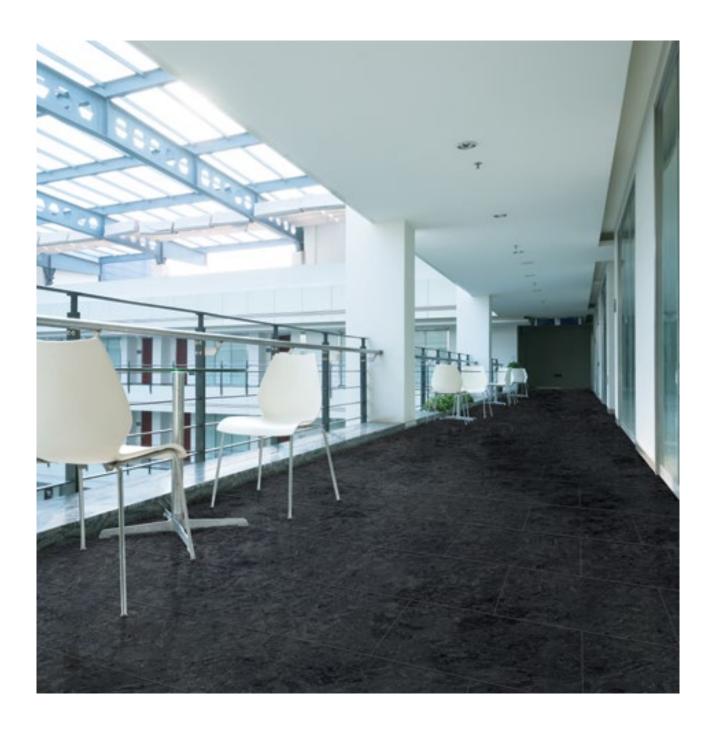
We supply tiles with chamfered edges on request such that the tile character of the installed floor covering is even more emphasized.

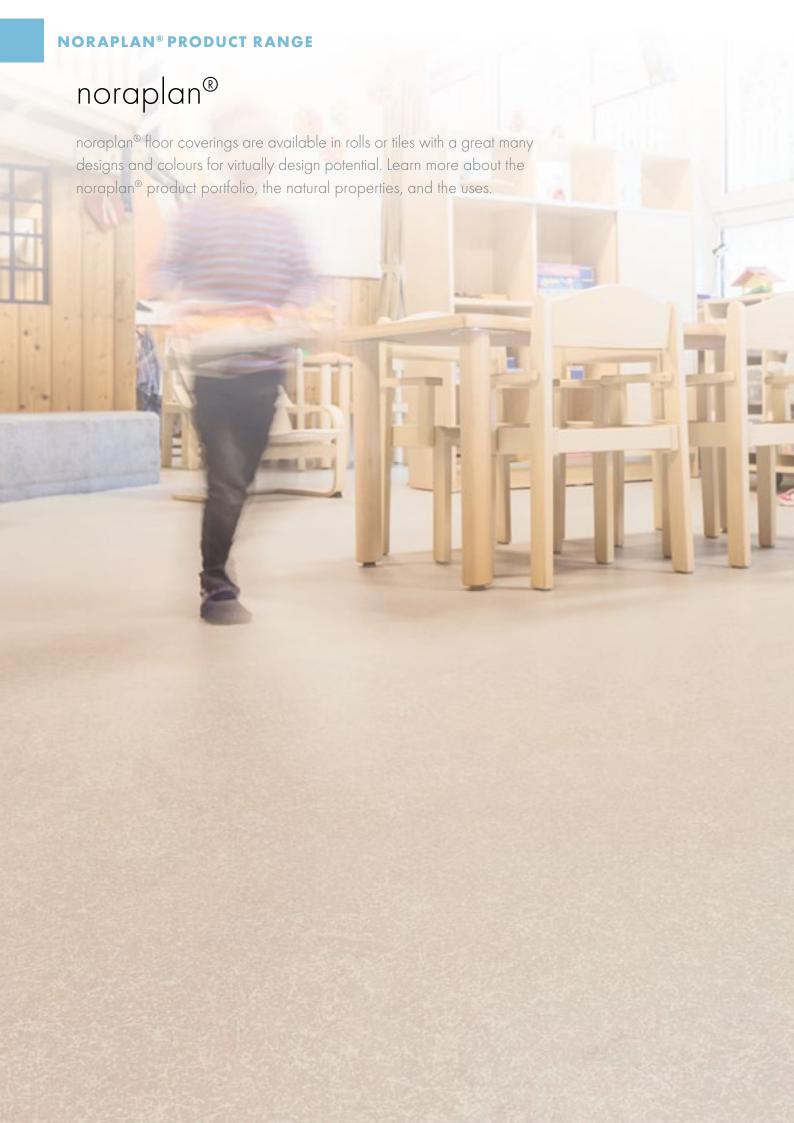
Variations in colour and design, even within one production batch, define the product's aesthetic character.



Also available as norament® 926 arago nTx, page 39

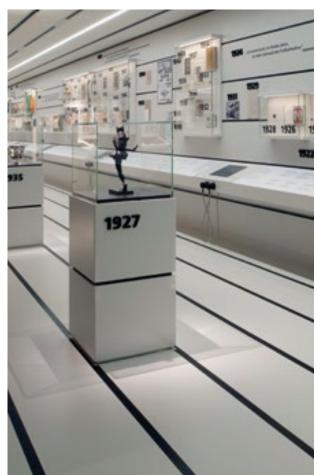
Note: More designs and information on nora® nTx can be found at www.nora.com or on request.







Hospital Crailsheim, Germany

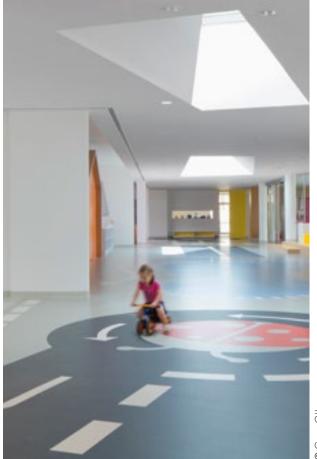


Football museum, Dortmund, Germany



Wuppertal Suspension Railway, Germany





Ladybird Early Learning Centre, Dubai, United Arab Emirates

© Gerry O'Leary



A changing base colour of harmoniously matched colour compositions in a smooth surface for heavy traffic areas.











#### noraplan® sentica

🚜 38

Art. 2700

□ ~610 mm × 610 mm

15 □ = 5.58 m² in one carton

nora® profile connection dimension: A + U

₹~2.0 mm

## noraplan® sentica

**♣** 12

Art. 1701

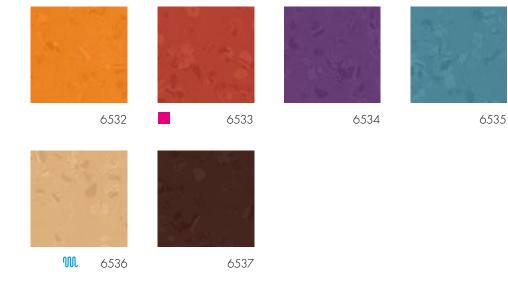
~1.22 m x 12.0 m

Art. 2701

 $\square$  ~610 mm x 610 mm 10  $\square$  = 3.72 m<sup>2</sup> in one carton

<u>→</u> ~3.0 mm

nora® profile connection dimension: D + U



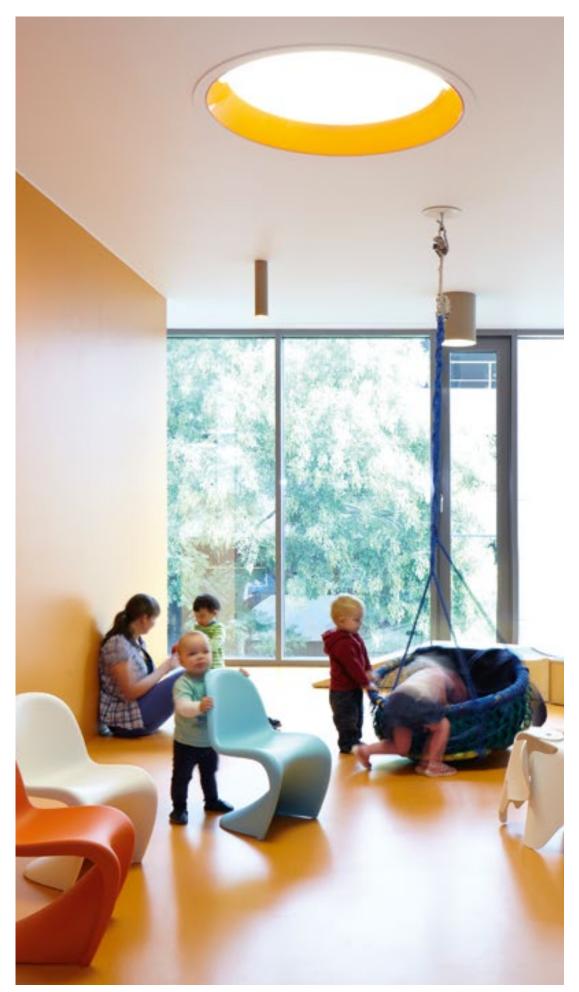
These colours can also be delivered as:

- Special flooring noraplan® sentica ed electrostatically dissipative, page 46
- M Special flooring noraplan® sentica acoustic footfall-sound-absorbing 20 dB, page 49
- Also available as noraplan® sentica nTx, page 39

Note: More designs and information on nora® nTx can be found at www.nora.com or on request.



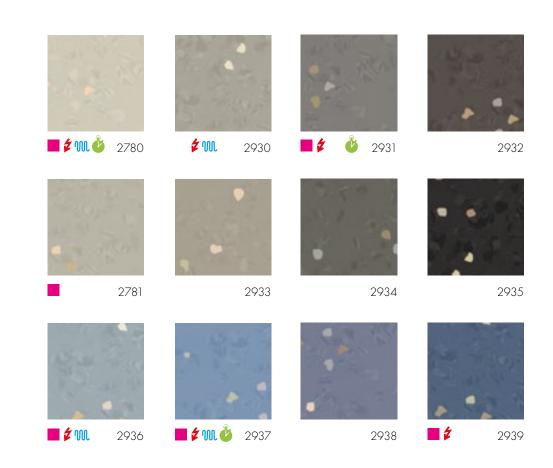
Universitätsklinikum Düsseldorf Strahlentherapie Linac 4, Germany







A changing base colour consisting of three harmoniously matched colour components and characteristic granule inclusions in a smooth surface for heavy traffic areas.



# noraplan® signa

**4**8

Art. 1462

~1.22 m x 15.0 m Art. 2462

 $\square$  ~610 mm x 610 mm 15  $\square$  = 5.58 m<sup>2</sup> in one carton

₹~2.0 mm

nora® profile connection dimension: A + U

## noraplan® signa

**--** 17

Art. 1463

~1.22 m x 12.0 m

Art. 2463

 $\square$  ~610 mm x 610 mm 10  $\square$  = 3.72 m<sup>2</sup> in one carton

**→** ~3.0 mm

nora® profile connection dimension: D + U



These colours can also be delivered as:

- Special flooring noraplan® signa ed electrostatically dissipative, page 47
- Special flooring noraplan® signa acoustic footfall-sound-absorbing 20 dB, page 50
- Also available as noraplan® signa nTx, page 39

Note: More designs and information on nora® nTx can be found at www.nora.com or on request.





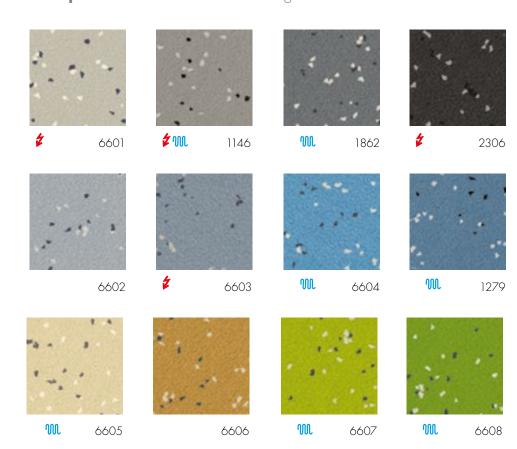
Hospital Crailsheim, Germany

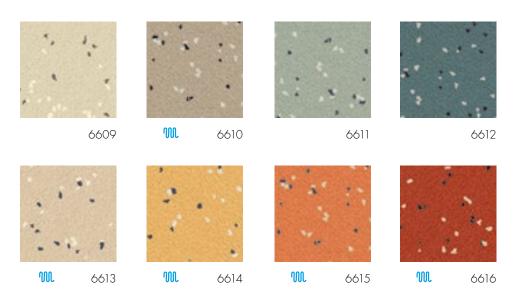


# noraplan® stone

Discreet, non-directional scatter design available in both reflection-breaking and smooth surfaces for heavy traffic areas.

# noraplan® stone · reflection-breaking surface





 $\textbf{noraplan}^{\textbf{®}} \textbf{ stone} \cdot \textbf{reflection-breaking surface}$ 

**2**0

Art. 149

~1.22 m x 15.0 m

Art. 249

□ ~610 mm x 610 mm

 $15 \square = 5.58 \text{ m}^2 \text{ in one carton}$ 

**▼** ~2.0 mm

 $nora^{\text{@}}$  profile connection dimension: A + U

These colours can also be delivered as:

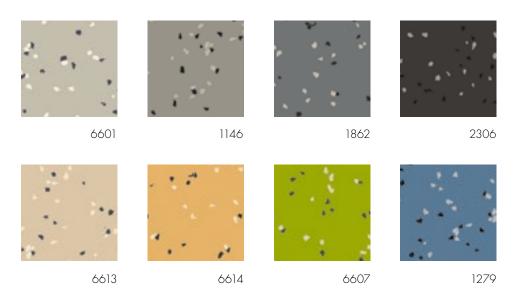
Special flooring noraplan® stone ed electrostatically dissipative, page 48

M Special flooring noraplan® stone acoustic football-sound-absorbing 20 dB, page 51

Also available as noraplan® stone nTx, page 39

Note: More designs and information on nora® nTx can be found at www.nora.com or on request. Minimum quantities required.

# noraplan® stone · smooth surface



 $noraplan^{\text{@}}$   $stone \cdot smooth$  surface

**~** 8

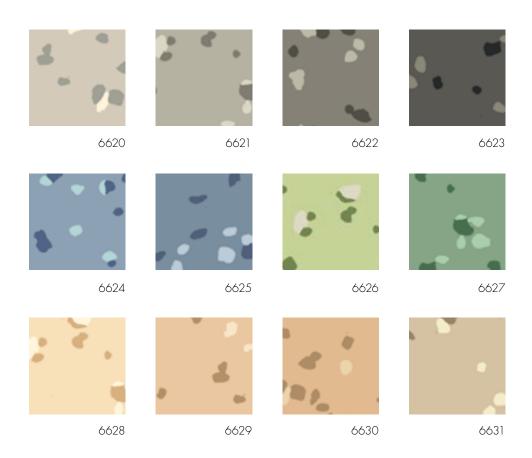
 Art. 2600

 $\square$  ~610 mm x 610 mm 15  $\square$  = 5.58 m<sup>2</sup> in one carton

**2.0** mm



Smooth tone-in-tone granular design in a smooth surface for heavy traffic areas.











6633 6632

6634 6635

# noraplan® eco



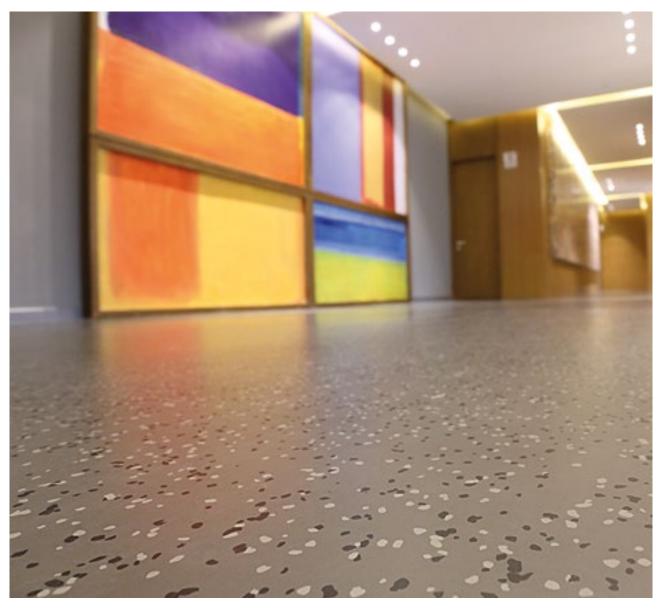
Art. 2490

**★** ~2.0 mm

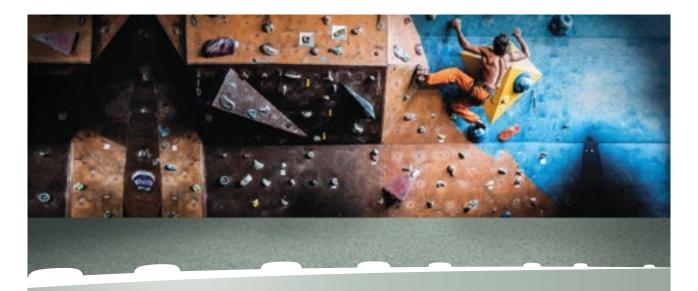
nora® profile connection dimension: A + U



Note: More designs and information on nora  $^{\! \scriptscriptstyle \otimes}$  nTx can be found at www.nora.com or on request. Minimum quantities required.

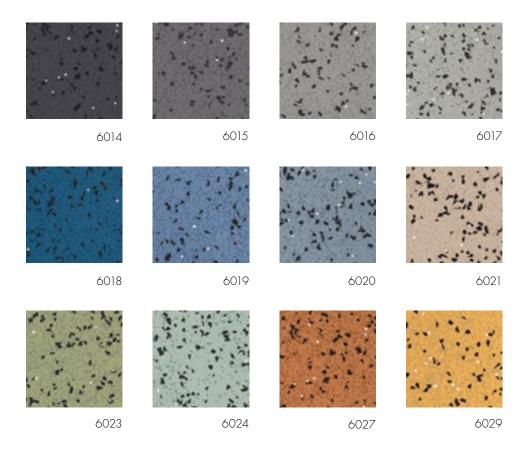


Hele Educational Institution, Zhenjiang, China



# noraplan® ultra grip

Safety floor covering with increased slip resistance, TRRL Pendulum Test 36+ in the wet and RZ value 20.1. Slip resistance R11 according to DIN 51 130 and BGR 181 or GUV-R 181, excellent environmental compatibility confirmed by BRE "A+" rating.



# noraplan® ultra grip

Design with discretely dispersed granite chips



**■** 2.0 mm

nora® profile connection dimension: A + U Resists most oils and greases

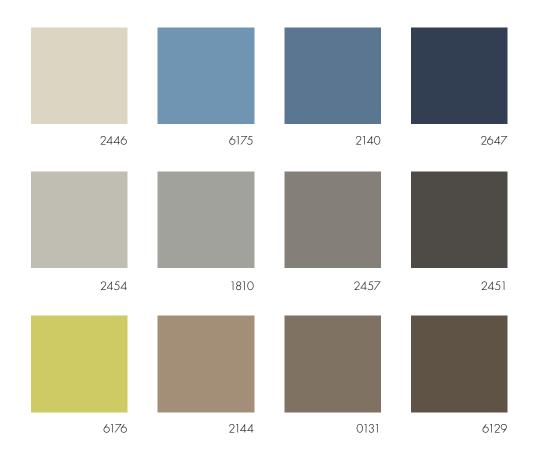


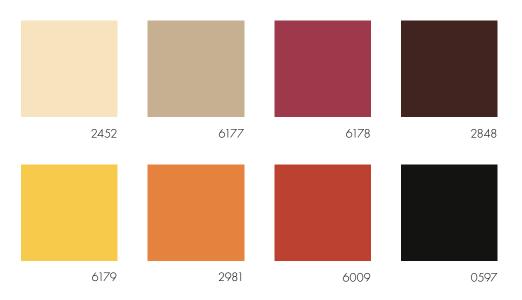
Also available as noraplan® ultra grip nTx, page 39

Note: More designs and information on nora® nTx can be found at www.nora.com or on request.
Minimum quantities required.



One-coloured with a smooth surface for heavy traffic areas.





# noraplan® uni

**2**0

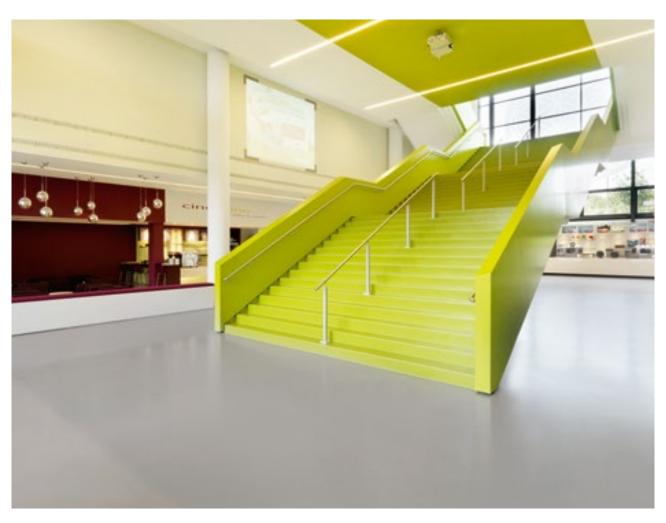
Art. 2461

**▼** ~2.0 mm

 $nora^{\oplus}$  profile connection dimension: A + U



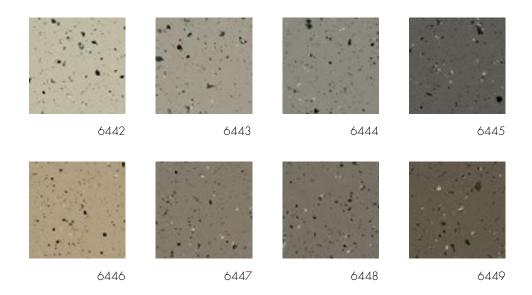
Note: More designs and information on nora® nTx can be found at www.nora.com or on request. Minimum quantities required.

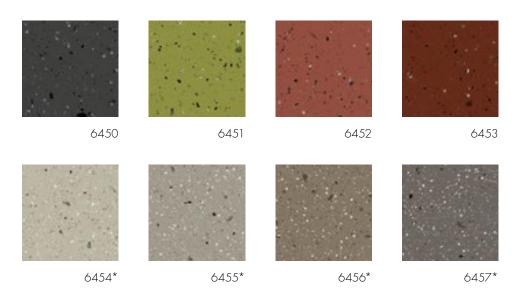




A perfect combination of materials, comprising permanently resilient rubber and randomly dispersed granite chips with a smooth surface for heavy traffic areas. Available in two timeless designs.







#### noraplan® unita

Design with discretely dispersed granite chips



Art. 1640

~1.22 m x 15.0 m

**₹** ~2.0 mm

 $nora^{\text{(8)}}$  profile connection dimension: A + U

Please note: Granite is a natural product. For this reason, slight colour deviations may occur in the stone even within the same batch.

#### noraplan® unita

Design with glimmering dispersed granite



Art. 1650\*

◯ ~1.22 m x 15.0 m

₹ ~2.0 mm

 $nora^{\text{(8)}}$  profile connection dimension: A + U

\* Art. 1650 is only available in colours: 6454, 6455, 6456 and 6457.



Also available as noraplan® unita nTx, page 39

Note: More designs and information on nora® nTx can be found at www.nora.com or on request. Minimum quantities required.



Technical University, Braunschweig, Germany

Imagine a floor covering that brings the beauty and comfort of the natural world indoors. A room that exudes the intuitive warmth, light and calm so hard to find in today's busy world. Envision a perfect moment tailored just to you. Perhaps it's a glimpse of blue sky out of your window. Or the glow of your living room, illuminated by morning light. Maybe it's the hush of the ocean nearby. Imagine a flooring that makes you feel at home.

# noraplan® valua · A variant of flowing vibrancy











6711



6712









 $\mathbf{\Xi}$  ~2.0 mm nora® profile connection dimension: A + U

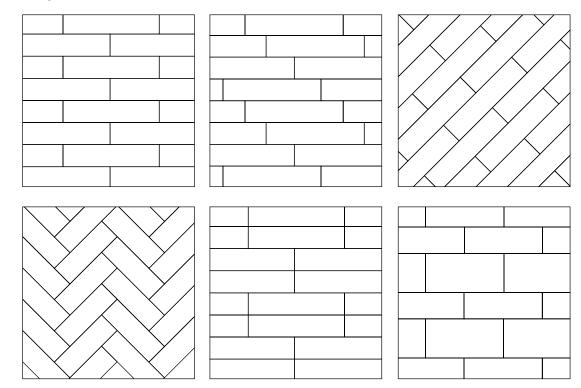
nora® profile connection dimension: D + U



# Three plank sizes. Unlimited possibilities

Planks		
610 mm x 205 mm	610 mm x 305 mm	1220 mm × 405 mm

## Example installations



## Planks

**~** 6

Art. 272A

 $\sim$ 610 mm x 205 mm 36  $\square$  = 4.50 m<sup>2</sup> in one carton

Art. 273A

 $\sim$  610 mm x 305 mm 24  $\square$  = 4.46 m<sup>2</sup> in one carton

Art. 274A

 $\sim$  1.220 mm x 405 mm 12  $\square$  = 5.92 m<sup>2</sup> in one carton

**₹**~2.0 mm

nora® profile connection dimension: A + U

🏚 Also available as noraplan® valua nTx, page 39

Note: More designs and information on nora® nTx can be found at www.nora.com or on request.
Minimum quantities required.



Art. 275A

 $\sim$ 610 mm x 205 mm 24  $\square$  = 3.00 m<sup>2</sup> in one carton

Art. 276A

 $\sim$ 610 mm x 305 mm 16  $\square$  = 2.97 m<sup>2</sup> in one carton

Art. 277A

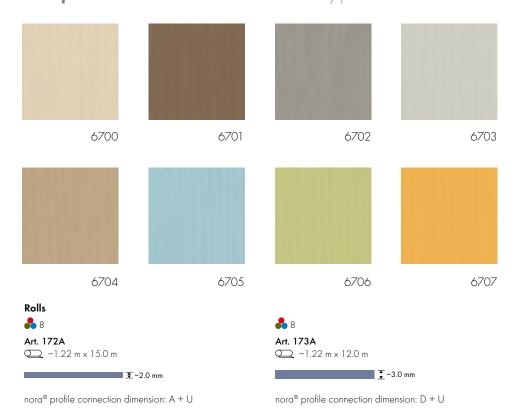
 $\sim$ 1.220 mm x 405 mm 8  $\square$  = 3.95 m² in one carton

0 \_\_\_ 0.75 III III one canon

₹~3.0 mm

nora® profile connection dimension: D + U

# noraplan® valua · A restful variant of virtually plain colour

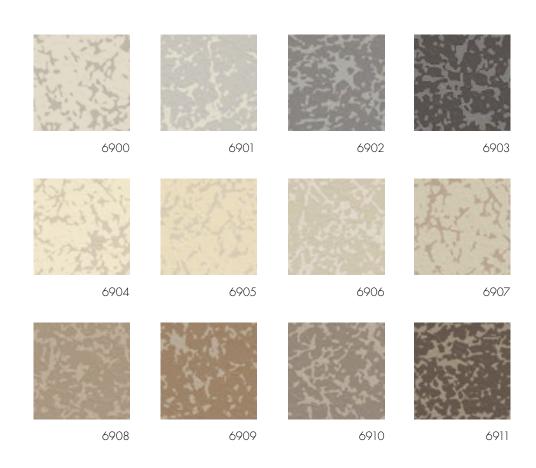


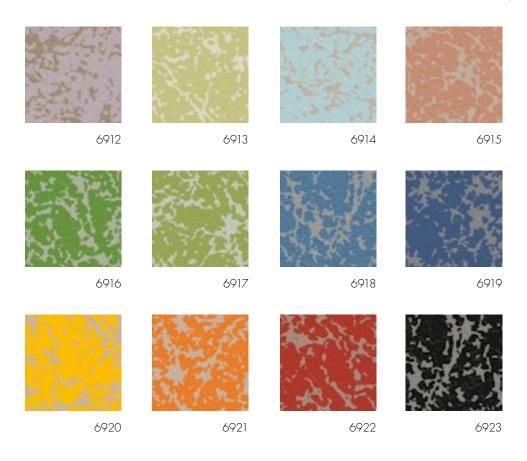


**36** nora systems | **nora**® **nTx** 



Rubber floor covering with a contrasting accent color in an elegant design. Matte de lux, slightly structured surface with visual depth.





noraplan® lona

**2**4

Art. 166B

 $\bigcirc$  ~1.22 m x 15.0 m

Art. 266B

□ ~610 mm x 610 mm

**₹**~2.0 mm

nora® profile connection dimension: A + U



Note: More designs and information on nora® nTx can be found at www.nora.com or on request.

Minimum quantities required.



nora® nTx is a new and unique technology for professional installers to lay nora® rubber flooring systems.

Because the powerful adhesive is factory-fitted, nora® nTx is as simple as it is ingenious. In a few simple steps, the flooring can be cleanly and safely installed and used immediately. It can be laid on all common concrete or cement screed

surfaces, as well as directly on top of existing floorings. Even high levels of residual moisture in the screed are no problem for nora® nTx.



The challenges of conventional laying processes – such as applying the correct amount of adhesive or ensuring sufficient wetting, drying and waiting time before and after laying – are all a thing of the past. The installation couldn't be easier: trim, remove protective film, roll on – done. And the result is just as durable, sturdy and safe as you would expect from nora® floor coverings.

nora also offers a comprehensive range of installation materials and tools to ensure clean and safe substrate preparation. ("nora® accessories", page 67)

### FAST



#### Fast installation

With nora® nTx you can lay flooring quickly and easily in a few simple steps – with no waiting time.

### **FFFICIENT**



#### **Efficient application**

nora<sup>®</sup> nTx flooring can be laid directly on existing surfaces – even with high levels of residual moisture – and can be used immediately.

### FCONOMICAL



#### **Economic safety**

Laying nora<sup>®</sup> nTx flooring reduces downtime, saves costs and minimises the risk of errors.

## Available designs with noraplan® nTx

### noraplan® signa nTx





2944









noraplan® signa nTx

noraplan® sentica nTx

○ ~1.22 m x 14.8 m

Art. 1633

₹~2.1 mm

### noraplan® sentica nTx

2780





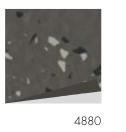


6522 6520

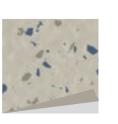
Please note: Further details on nora® nTx can be obtained at www.nora.com or on request.

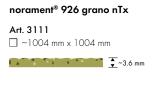
## Available designs with norament® nTx

### norament® 926 grano nTx







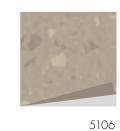






norament® 926 satura nTx

4878





norament® 926 satura nTx Art. 3111 □ ~1004 mm x 1004 mm ₹ ~3.6 mm

## norament® 926 arago nTx





norament® 926 arago nTx Art. 3122 □ ~1004 mm x 502 mm ~3.6 mm

## What is nora® nTx made of?

- nora® nTx consists of our norament® and noraplan® standard floor coverings fitted with an adhesive backing
- This adhesive backing is lined with a protective film
- Like our floor coverings, this adhesive is also based on natural rubber and is free from health hazards

## Installing nora® nTx floorings



### Grinding

The subsurface must be ground down. The best tools are the nora® nTx sanding discs and their sanding tools. The result is a level, sealed subsurface. Depending on the consistency, we recommend filling uneven patches or the whole surface.



Afterwards, apply the bonding agent nora® nTx 020. In doing so, avoid puddling without fail.



#### Laying tiles/sheets

Next, the tiles/sheets are laid properly. After individual adjustments, the protective film is removed and the flooring installed.



Finally, the flooring is rubbed and rolled on. Dwell times are no longer necessary. The floor covering can be used immediately afterwards.

Please note: For further details, please consult the noraplan® nTx and norament® nTx installation instructions.

## **SPECIAL FLOORINGS**

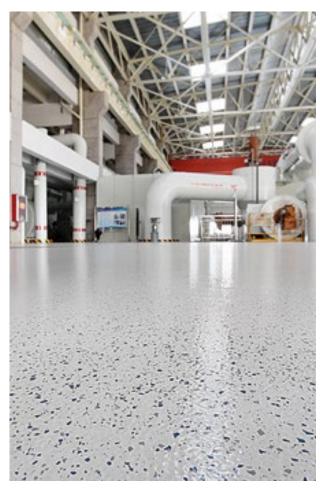
## Special floorings

We have developed our special floorings for areas subject to special technical standards and requirements. These include e.g. acoustic coverings with an impact sound improvement index of 20 dB, electrostatically rinks, golf facilities, and many more. Get to know the range of designs and variants on the following pages.





SanaCare, Alsbach-Hähnlein, Germany



Lu'an Power Plant, China



Clariant innovation Center CIC, Frankfurt, Germany

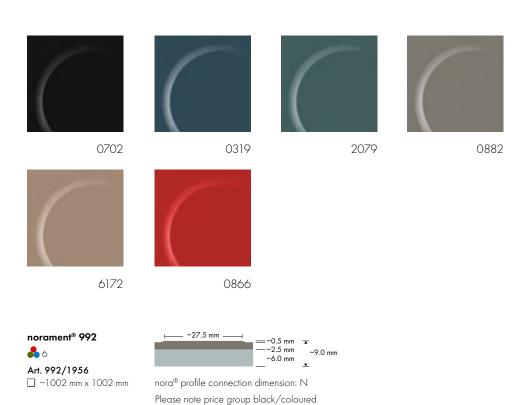


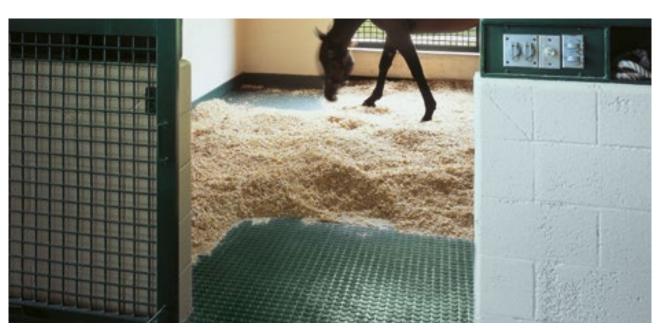
Albrecht Jung GmbH & Co. KG, Lünen, Germany

## norament® 992/992 grano

For areas with extreme requirements (e.g. ice rinks, golf clubs, animal stables, etc.).

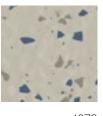
## norament® 992 Round pastille



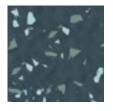


University of Florida, Gainsville, USA

# norament® 992 grano Hammerblow surface









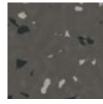


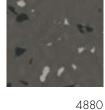
4882

4872

4876







norament® 992 grano



**Art. 992 grano/1955**□ ~1002 mm x 1002 mm



nora $^{\text{\tiny{(B)}}}$  profile connection dimension: N

Note: Variant with a hammer blow surface is not suitable for use at ice rinks as puddles may form, for example from melted ice water.



SAP-Arena, Mannheim, Germany

## norament® and noraplan® ec ≠



Electrostatically conductive "ec" floorings for optimum ESD protection of electronic devices and equipment. Suitable for areas with a risk of explosions and fork-lift-truck areas (norament® 927 grano ec). Largely resistant to acids and alkalis (norament® 927 grano ec).

## norament® 927 grano ec



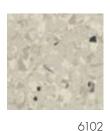
norament® 927 grano ec

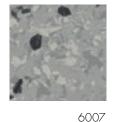
**Art. 927 grano ec/1880**□ ~1004 mm × 1004 mm

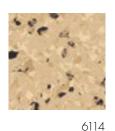
~3.5 mm

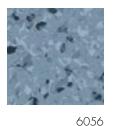
nora® profile connection dimension: E + U

## noraplan® astro ec









noraplan® astro ec



Art. 1466

~1.22 m x 12.0 m

Art. 2466

□ ~610 mm x 610 mm

 $15 \square = 5.58 \text{ m}^2 \text{ in one carton}$ 

**₹**~2.0 mm

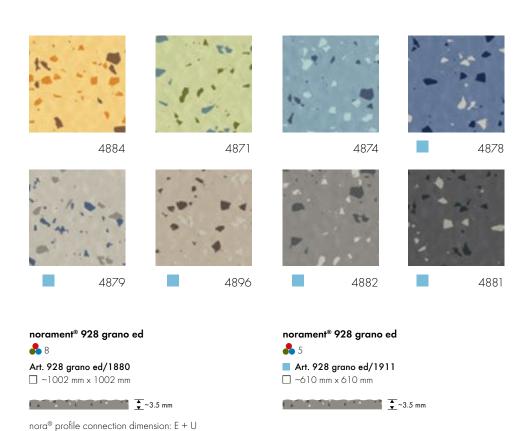
nora® profile connection dimension: A + U

## norament® ed 💈



Electrostatically dissipative "ed" floorings for optimum ESD protection of electronic devices and equipment. Protect against electrical shock, resist most oils and greases and are suitable for forklift truck areas.

## norament® 928 grano ed



## noraplan® ed 🕏



Electrostatically dissipative "ed" floorings for optimum ESD protection of electronic devices and equipment. Protect against electrical shock, resist most oils and greases.

## noraplan® sentica ed



### noraplan® sentica ed

**\$** 12

Art. 1702

 $\bigcirc$  ~1.22 m x 15.0 m

Art. 2702

□ ~610 mm x 610 mm

15  $\square$  = 5.58 m<sup>2</sup> in one carton

₹~2.0 mm

nora® profile connection dimension: A + U

### noraplan® sentica ed

**.** 12

Art. 1703

~1.22 m x 12.0 m

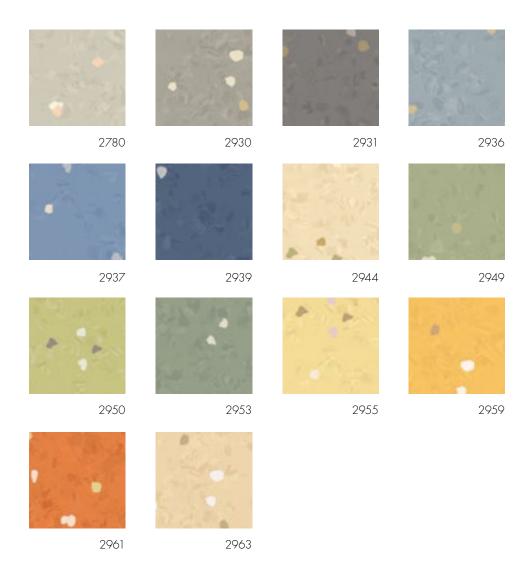
₹~3.0 mm

 $nora^{\text{(B)}}$  profile connection dimension: D + U

Please note: The colours 6504, 6505 and 6508 are only recommended for areas with a low incidence of stains and dirt (e.g. **not** for OP theatres or intensively frequented areas).

Please note: noraplan® ed floorings must be treated with the nora® joint-sealing compound.

## noraplan® signa ed



### noraplan® signa ed

**♣** 14

Art. 1390

 $\bigcirc$  ~1.22 m x 15.0 m

Art. 2390

□ ~610 mm x 610 mm

 $15 \square = 5.58 \text{ m}^2 \text{ in one carton}$ 

**₹**~2.0 m

 $nora^{\text{@}}$  profile connection dimension: A + U

### noraplan® signa ed

**~** 14

Art. 1523

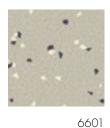
○ ~1.22 m x 12.0 m

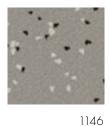
₹~3.0 mm

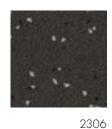
nora® profile connection dimension: D + U

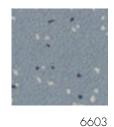
Please note: noraplan® ed floorings must be treated with the nora® joint-sealing compound.

## noraplan® stone ed · reflection-breaking surface









 $\textbf{noraplan}^{\text{(8)}} \textbf{ stone ed} \cdot \text{reflection-breaking surface}$ 

**4** 

Art. 229

 $\square$  ~610 mm x 610 mm 15  $\square$  = 5.58 m<sup>2</sup> in one carton

₹~2.0 mm

nora® profile connection dimension: A + U

Please note: noraplan® ed floorings must be treated with the nora® joint-sealing compound.



Hospital Siloah, Hannover, Germany

## noraplan® acoustic **M**

For high footfall sound absorption with a footfall sound absorption improvement of 20 dB.

## noraplan® sentica acoustic



### noraplan® sentica acoustic



Art. 1705

~1.22 m x 12.0 m



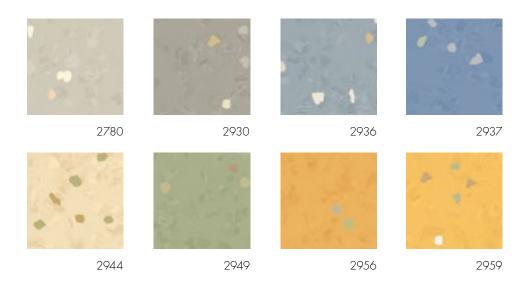
nora® profile connection dimension: E + U

Please note:  $noraplan^{\oplus}$  acoustic floorings must be sealed with  $nora^{\oplus}$  hot welding rod.

## noraplan $^{ ext{@}}$ acoustic $\ensuremath{\mathbb{M}}$

For high footfall sound absorption with a footfall sound absorption improvement of 20 dB.

## noraplan® signa acoustic



## noraplan® signa acoustic



Art. 1420

~1.22 m x 12.0 m

= ~1.6 mm - ~2.4 mm 
- ~4.0 mm

nora® profile connection dimension: E + U

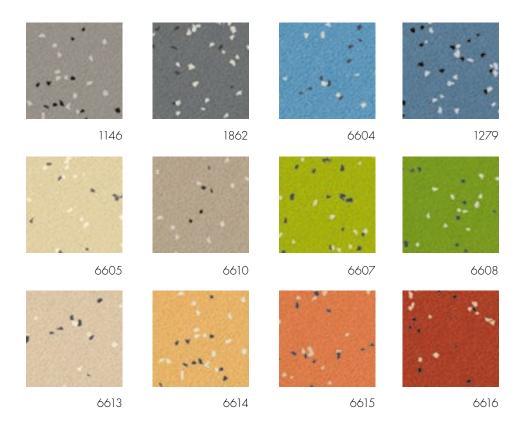
Please note: noraplan® acoustic floorings must be sealed with nora® hot welding rod.



Kindergarten Völklingen, Germany

© arus gmbh willi latz I photographer: Norbert Miguletz

## noraplan® stone acoustic · reflection-breaking surface



noraplan® stone acoustic · reflection-breaking surface

**♣** 12

Art. 148

~1.22 m x 12.0 m

nora® profile connection dimension: E + U

Please note: noraplan® acoustic floorings must be sealed with nora® hot welding rod.

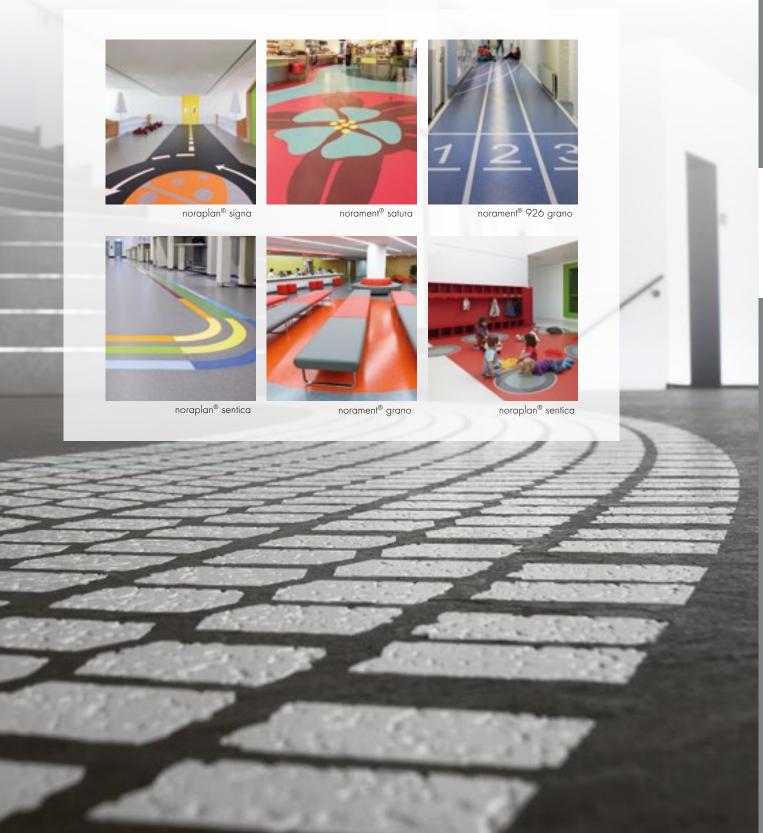
# Vibrant architecture inlays

Create inlays based on our templates or design compositions of your own imagination. At our inlay centre we can process your images, drawings or image files to create your own design. Our state-of-the-art ultrasound cutting machine cuts almost any motif into 100% matching pieces that can be laid without sealing the joints. To guarantee easy installation, we supply inlays up to a size of  $1.2 \times 1.6$  metres, fully assembled and ready for laying. For large-sized inlays, we provide the floor layer with detailed laying plans.



Dr. Erika Fuchs Haus, Germany

## There are no limits to individuality at nora®



## norament® stairtreads

Individual requirements for stairwells are best fulfilled from our extensive system programme, from the tailored norament® stairtread with integrated preformed stair nosing, riser, and tread to individual combinations of stair angles, stair nosings, and integrated safety stripes.

Our system range is rounded off with colour-matched skirting solutions, joint-sealing compounds, hot welding rods, and installation materials.

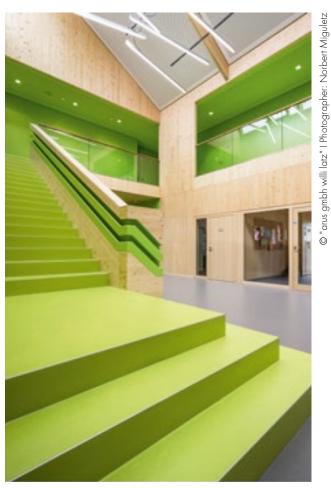




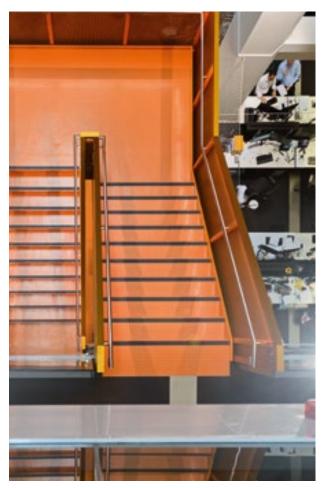
Macquarie Bank, London, England



Kulturforum Hanau, Germany



Kindergarten Völklingen, Germany



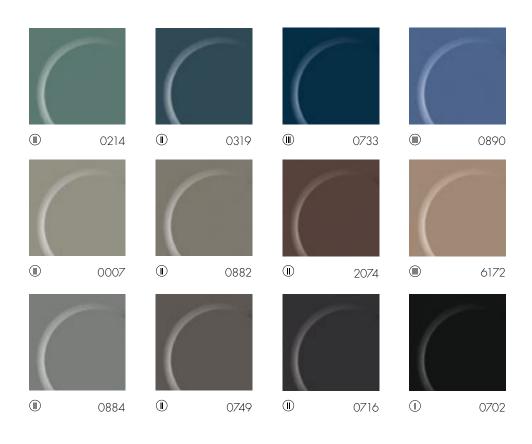
Macquarie Bank, Sydney, Australia

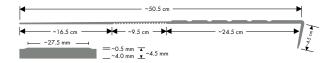
## norament® stairtreads

Pre-shaped stair coverings consisting of stair nosing, riser and tread all in one piece for straight steps with right-angled edge. For extremely heavy traffic stairwell areas.

## Stairtread norament® 926

One-coloured with classic round pastille, footfall sound absorption improvement of 12 dB

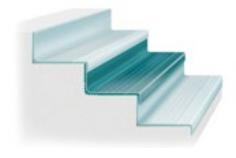




### Stairtread norament® 926

**5** 12

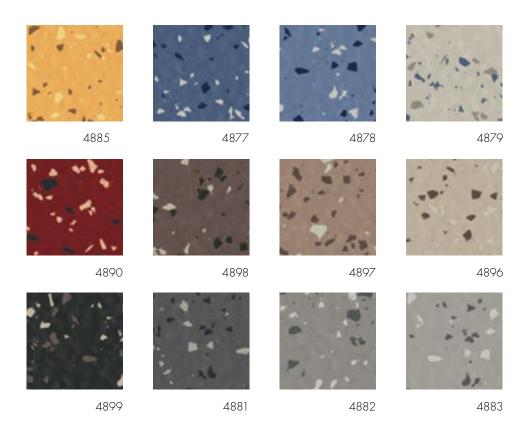
Art. 926/465 – width 1,285 mm Art. 926/466 – width 1,614 mm Art. 926/467 – width 2,004 mm

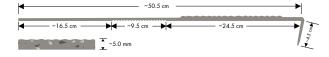


O = Price category

## Stairtread norament® 926 grano

Granular design rich in contrast with a hammerblow surface, footfall sound absorption improvement of  $12\ dB$ 





### Stairtread norament® 926 grano

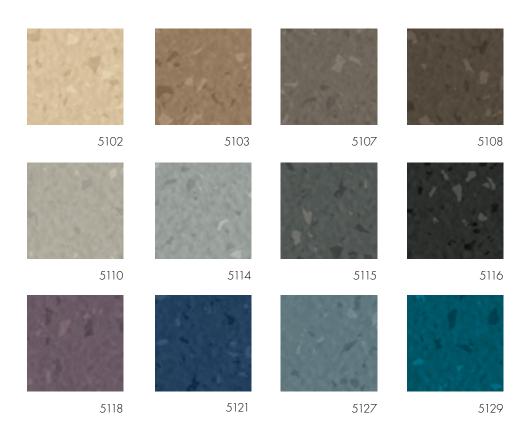
**1**2

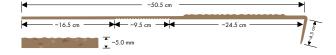
Art. 926 grano/479 – width 1,285 mm Art. 926 grano/468 – width 1,614 mm Art. 926 grano/469 – width 2,004 mm



## Stairtread norament® 926 satura

Tone-in-tone granular design with a hammerblow surface, footfall sound absorption improvement of 12 dB





### Stairtread norament® 926 satura

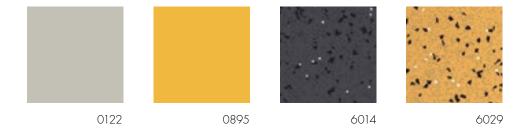


Art. 926 satura/479 – width 1,285 mm Art. 926 satura/468 – width 1,614 mm Art. 926 satura/469 - width 2,004 mm



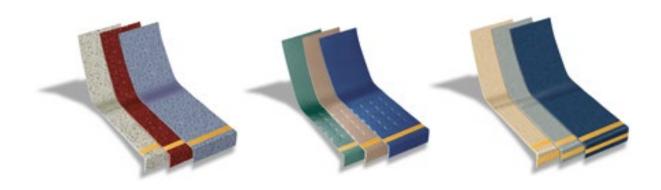
## norament® stairtreads with signal or safety stripes

norament® stairtreads can be equipped with the following signal or safety stripes:



- Signal stripes yellow, phosphorescent according to DIN 67 510, in a width of 2 cm, integrated into the tread area of the stair nosing
- Signal stripes uni, in a width of 2 or 3 cm in the colours 0122, light grey, and 0895, signal yellow, integrated into the tread area and alternatively also in the vertical part of the stair nosing
- Safety stripes ultra grip for increased slip resistance, in a width of 2 or 3 cm in the colours 6029, yellow, and 6014, grey, integrated into the tread area and alternatively also in the vertical part of the stair nosing

Signal and safety stripes in other widths and colours are available on request.



## nora® accessories for stairwell areas

Accessory range made of rubber matched to suit norament® and noraplan® floor coverings. Can also be used in combination with other types of floorings. nora® profiles are impact and shock-resistant, do not shrink, do not contain any plasticizers and retain their functional reliability long term.

## nora® stair nosings

With plug-in lip for quick and easy installation on all types of staircases.







Minimum order quantity: 5 r.m. Standard length: 2.5 r.m.

Delivery in 5 fixed lengths possible: 1.00/1.25/1.65/2.0/2.50 r.m.



Aluminium stair nosing for stairs made of norament® coverings Delivery unit: 2.7 r.m.

## nora® stair angles

For the smooth finishing of right-angled stairs to the wall and banister side.











Delivery unit: pieces

## nora® skirting and stringer profile





Multi-purpose skirting Delivery unit: rolls of 10 r.m.

Connection profile for nora® stair angles "TW"





For landings and ramps Delivery unit: in units of 2.5 r.m.

Connection profile for nora® stair angles "TG"

## nora® stair margin





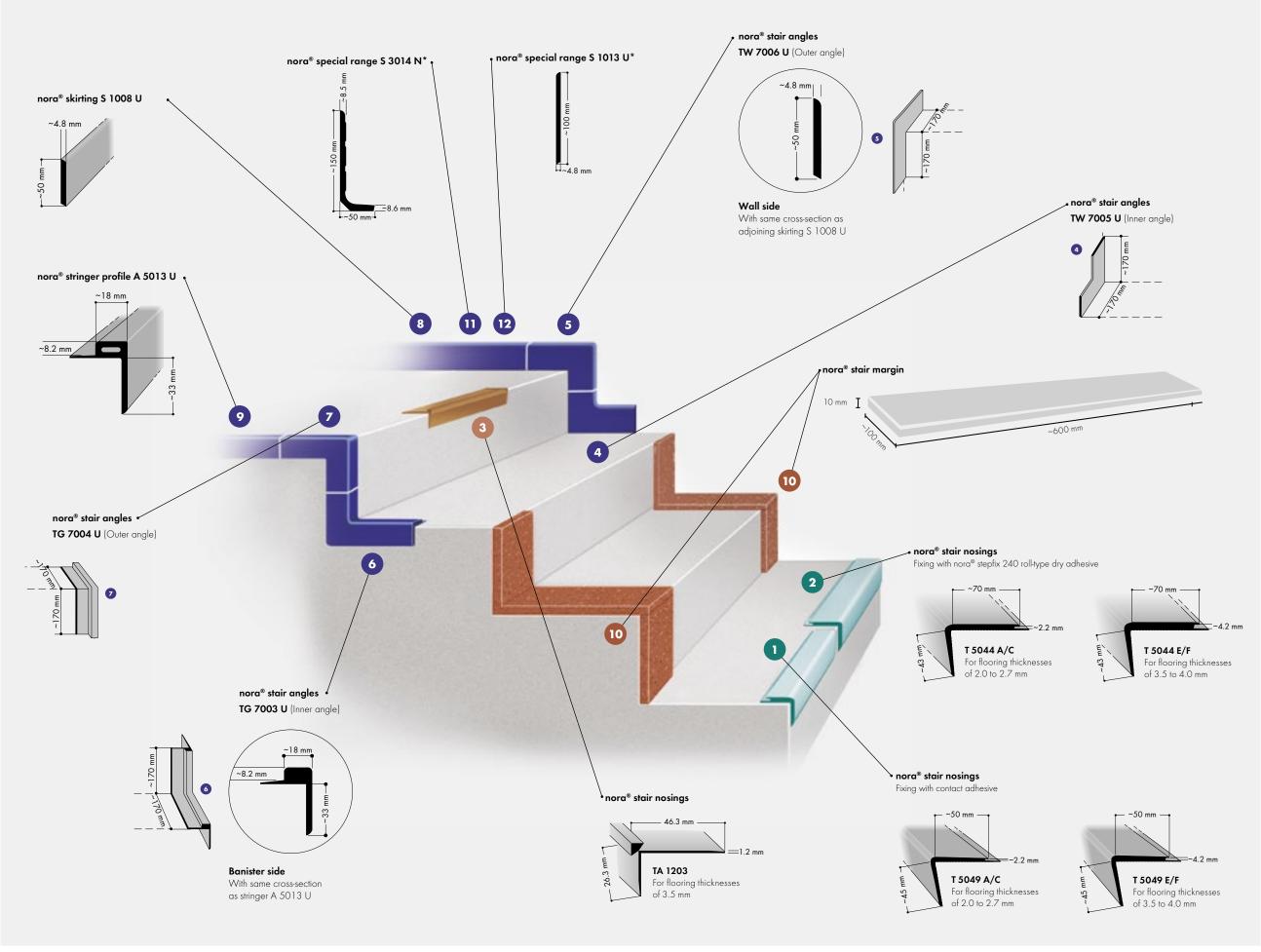
For wall and banister side. Hammerblow surface with granular design.

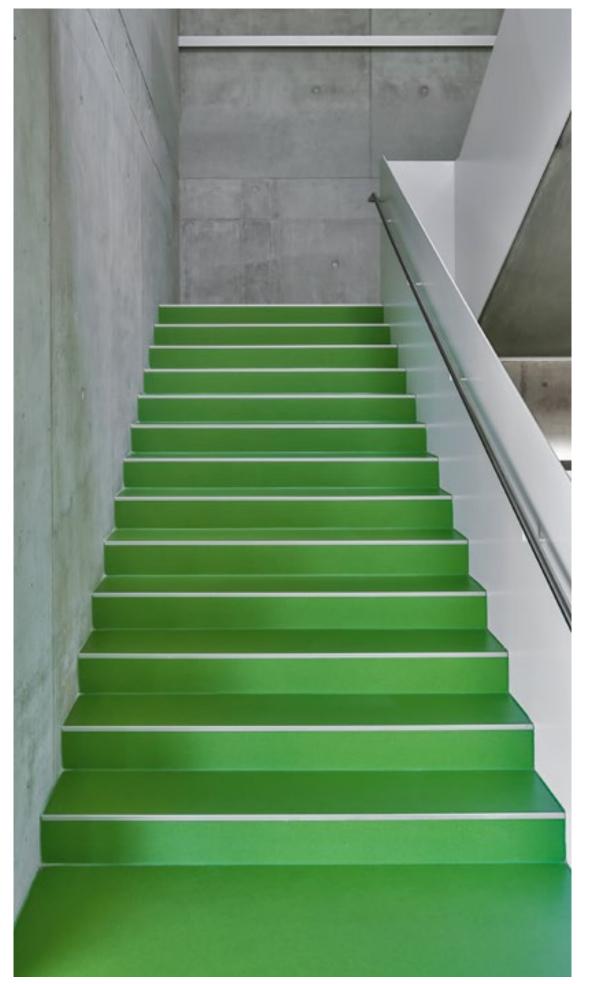
Art. 819

~600 mm x 100 mm

Thickness 10 mm

Supplied as: pieces





Hochschule für Kommunikation, Ulm, Germany

**62** nora systems | **Stair accessories** 

## nora® stepfix 240

Special roll-type dry adhesive

For quick installation of norament® stairtreads, stairwell installations with nora® stair nosing T 5044 and nora® stair margin.

The cost and eco-conscious adhesive innovation. Suitable for new buildings and renovation Advantages: 3–5 times as quick, odourless, can be walked on immediately, economic, eco-compatible, and reliable thanks to excellent bonding performance.

Art. 907

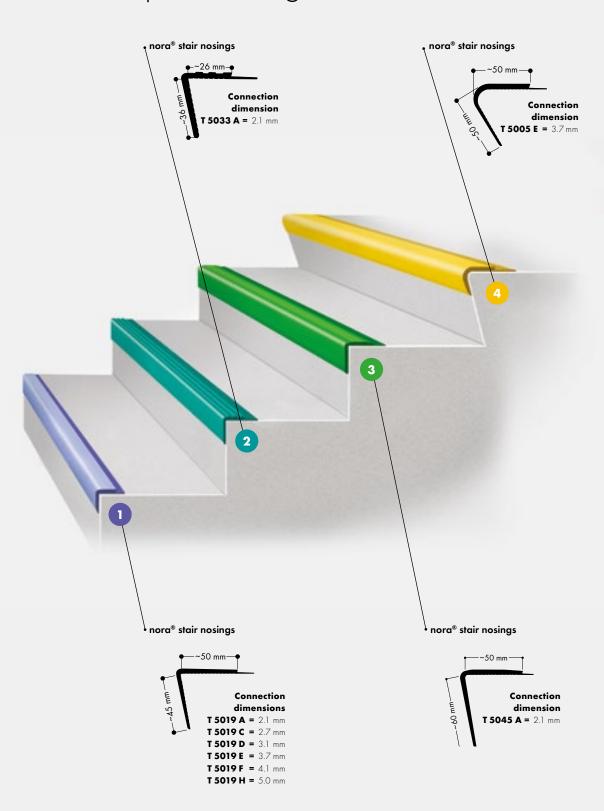
# nora® special range for stairwell areas

The special range offers profiles with different cross-sections for further applications. The profiles shown here are examples only. Further individual designs are available on request. Delivery units and minimum order quantities on request.

nora® stair nosings

T 5019/T 5033/T 5045/T 5005

# nora® special range



## nora® accessories

Accessory range made of rubber matched to suit nora® floor coverings for convincing solutions both in visual and functional terms. The materials are impact- and shock-resistant, do not contain any plasticizers and retain their functional reliability long term.

## nora® skirting and skirting angles

Easy to clean, suitable for areas with stringent hygienic requirements.

## 1 SA 7002 Skirting outer angle

\$\frac{1}{22}\*\$
\$A 7002 A

\$\frac{1}{22}\*\$
\$A 7002 D

♣ 7\* SA 7002 E

Suitable for Skirting S 3003

Art. 508

Delivery unit: as pieces

Connection dimensions:

A = 2.1 mm

D = 3.1 mm

E = 3.7 mm

\*Further colours on request

## 2 S 3003 Skirting

\$ 22\* \$ 3003 A

**♣** 22\*

S 3003 D

♣7\* \$ 3003 E

Matching with skirting angles SI 7001 and SA 7002.

Art. 726

Delivery unit: in rolls of 10 r.m.

Connection dimensions:

A = 2.1 mm

D = 3.1 mm

E = 3.7 mm

\*Further colours on request

## 3 SI 7001 Skirting inner angle

\$\frac{1}{22\*}\$
\$I 7001 A

\$ 22\* \$1,7001 D

♣ 7\* SI 7001 E

Suitable for Skirting S 3003

Art. 507

Delivery unit: as pieces

Connection dimensions:

A = 2.1 mm

D = 3.1 mmE = 3.7 mm

\*Further colours on request

## nora® skirtings



♣ 65\* \$ 1024 U

For areas with stringent requirements in terms of appearance. The permanently resilient sealing lip of \$ 1024 U reliably accommodates pastille heights of up to 1 mm. Also suitable as wall stringer with raised-access floors.

Art. 713

Delivery unit: in rolls of 10 r.m.

\*Further colours on request



Height 60 mm

\$ 109\* \$ 1023 U

For areas with stringent requirements in terms of appearance. The permanently resilient sealing lip of S 1023 U reliably accommodates pastille heights of up to 1 mm. Also suitable as wall stringer with raised-access floors.

Art. 712

Delivery unit: in rolls of 10 r.m.

\*Further colours on request



Height 50 mm

\$ 34\* \$ 1008 U

Multi-purpose skirting Adjoining skirting for nora® stair angles "TW"

Art. 705

Delivery unit: in rolls of 10 r.m.

\*Further colours on request

Accessories | nora systems 65

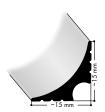
# nora® cushioned-edge profile

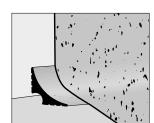
### H 9010

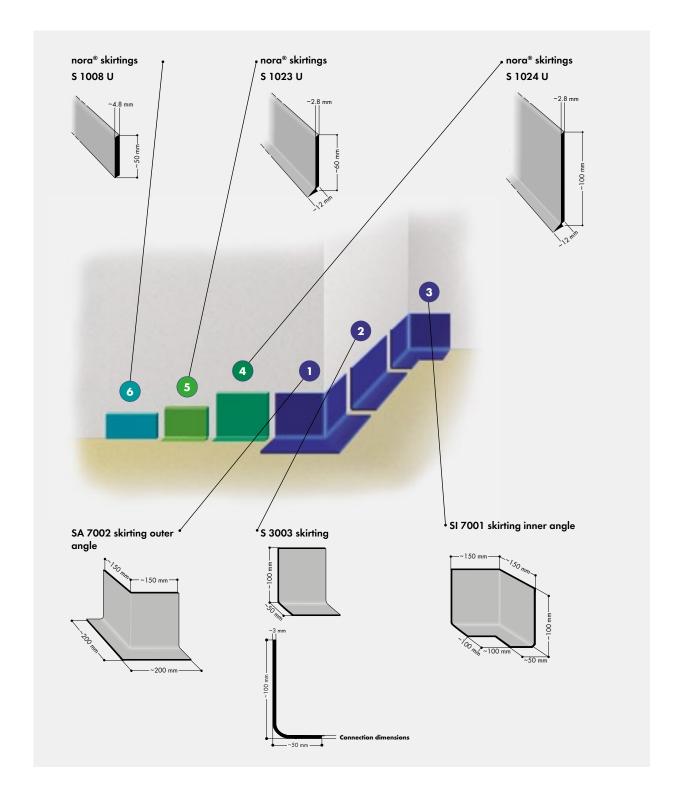
For optimum transition between the noraplan® floor coverings and the wall.

Delivery unit: 5 rolls of 10 r.m.

Art. 7731







## Stair nosings

0214	0702	0716	0749	0884	4877	4885	4890

## Stair angles

0007	0702	0749	0890	2074	4879/1150	4890	4898	5107	5115	5121
0214	0716	0882	1146/4882	2930	4881	4896	5102	5108	5116	5127
0319	0733	0884	1780	4877	4885	4897	5103	5114	5118	5129

## Stair margin



## S 1023 U

0007	1385	2409	2937	2968	6173	6508	6522	6608	6715	6917
0319	1581	2446			6178	6509	6523	6609	6717	6920
0702	1780	2454	2946	4873	6446	6510	6528	6611	6719	6921
0716	1862	2457	2949	4877	6448	6511	6529	6612	6721	6922
0749	2078	2491	2950	4881	6451	6512	6530	6616	6722	
0882	2098	2635	2951	4885	6500	6513	6532	6708	6723	
0884	2099	2636	2953	5109	6501	6514	6536	6709	6724	
1146	2143	2666	2954	5114	6503	6515	6537	6710	6725	
1150	2144	2680	2962	5115	6504	6516	6598	6711	6726	
1162	2380	2925	2963	5121	6505	6517	6604	6712	6728	
1279	2398	2930	2964	5122	6506	6518	6606	6713	6731	
1362	2402	2931	2966	5128	6507	6519	6607	6714	6915	

## S 1024 U

0007	0884	1780	2666	2944	2962	4877	6503	6511	6517	6529
0319	1146	1862	2680	2949	2963	4881	6506	6512	6518	6530
0702	1150	2099	2925	2950	2964	4885	6507	6513	6519	6532
0716	1279	2398	2930	2951	2966	6173	6508	6514	6522	6536
0749	1385	2635	2931	2953	2968	6178	6509	6515	6523	6537
0882	1581	2636	2937	2954	4873	6501	6510	6516	6528	'

## S 1008 U

0007	0716	0805	0890	1780	2681	4877	4898	5108	5115	5121
0214	0733	0882	1146	2074	2786	4881	5103	5110	5116	5127
0319	0749	0884	1150	2680	2930	4885	5107	5114	5118	5129
0702										

## S 3003 Skirting inner angle

#### SA 7002 A/S 3003 A/SI 7001 A SA 7002 D/S 3003 D/SI 7001 D

0882	2635	2931		2950	2963	4877	6508	6512	6516	6529
2398	2930	2937	2949	2953	2964	6504	6509	6513	6517	6530

### SI 7001 Skirting inner angle

### SA 7002 E/S 3003 E/SI 7001 E

				1		
1146	1150	1780	4871	4874	4881	

### Joint sealing compound

0007	1585	2786	2949	2969	5102/2786	5118	6442	6506	6522/2226	6601/1254
0131	2078	2787	2950	2970/4654	5103	5119	6443	6507	6523	6603/2940
0702	2099/2940	2930	2951	4654	5104	5120	6444	6508	6524	6613/1385
0716	2102/2947	2931	2953	4871		5121	6446	6509	6525	6615/2961
0733	2106/2752	2933	2954	4873	5106	5122	6448	6510	6526/2666	6915
0749	2306/0716	2934	2955	4874	5107	5123/6513	6449	6511	6527	6917
0866	2380/2932	2936	2957	4877	5108	5124	6451	6512	6528	6920
0882	2398/2959	2937	2958/2147	4878/1780	5109	5125	6452	6513	6529	6921
0884	2635/2961	2938	2959	4879/1254	5110	5126	6453/6385	6514	6530	6922
1146/1253	2636/2960	2939/4877	2962	4881	5111	5127	6457	6515	6531/4877	
1150/1254	2666	2941	2963/2633	4882/1253	5112	5128	6500	6516	6532	
1279	2779	2942/2142	2964	4884	5113	5129	6501	6517	6533/2962	
1385	2780		2965	4885/2956	5114	5130/6535	6502	6518	6534	
1578	2781	2945/2897	2966	4896/2680	5115	5131	6503	6519	6535	
1581	2784	2946	2967	4897/2681	5116	5132	6504	6520	6536	
1582	2785	2948	2968		5117	6178/6502	6505	6521/0882	6537	

66 nora systems | Accessories

## nora® hot welding rod for noraplan®

Can be delivered in all colours to match the noraplan® floor covering colours.

Because noraplan® floor coverings do not contain any plasticizers, there is no shrinkage after installation. This is why the floorings do not have to be sealed. Only noraplan® acoustic floorings have to be sealed with the nora® hot welding rod. For the other floorings, we recommend sealing the joints when the flooring has been installed on a moisture-sensitive subfloor, in rooms with continual and intensive wet cleaning, in areas with stringent hygiene requirements or for special requirements (e.g. in laboratories).

In operating theatres or on other small noraplan® surfaces the vertical joints of the skirtings are sealed with nora® joint sealing compound

Art. 946

Round,  $\varnothing$  4 mm, rolls of 100 r.m.

## nora® joint sealing compound

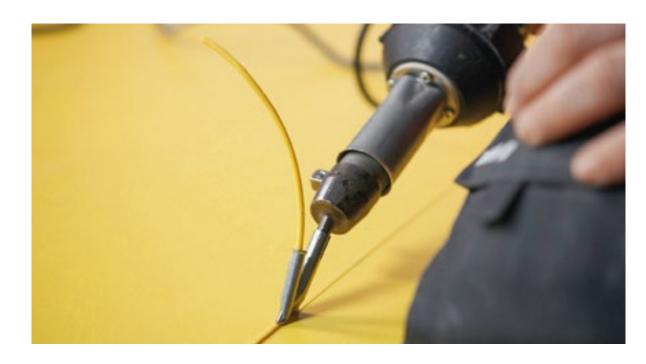
Since norament® and noraplan® floor coverings do not contain any plasticizers, there is no shrinkage after installation. This is why, with the exception of electrostatically dissipative norament® ed floorings, the floorings does not need to be sealed. It is, however, advisable to seal the joints in case of moisture-sensitive subfloors, in rooms permanently undergoing intensive wet cleaning or in areas with special hygienic requirements. For these special requirements, the sealing of all norament® and noraplan® floorings is suitable.

**Art. 928** 

300 ml cartridge

1 disposable cartridge, sufficient for 15-18 r.m.

Please note: Joint cutter (art. no. 116950) and nora® liquid wax (art. no. 109914) may be ordered from our company.



## nora® nTx installation materials

nora® nTx installation materials have been developed specifically for the nora® nTx floor coverings. The perfect matching between each installation material and the nora® nTx floor coverings provides functional reliability and ensures the highest standards of quality. Moreover, all nora® nTx installation materials can be applied to subsurfaces with higher residual moisture levels.

### nora® nTx 020

1C primer

#### Art. 6684

Primer for improved adhesion

## nora® nTx tools

### nora® nTx sanding disc incl nTx K3

Sanding disc for preparing substrates

#### nora® nTx K3

Sanding tool (fine)

### nora® nTx K2

Sanding tool (coarse)

#### Art. 6685

Suitable sanding discs for the machines: Mambo, Columbus, and Orkan. Already fitted with sanding tool nTx K3.

NOTE Please specify the machine type in your order

#### Art. 6686

Sanding tool for nTx sanding disc

### Art. 6687

Sanding tool for nTx sanding disc



Sanding discs



Sanding tools

## nora system blue®

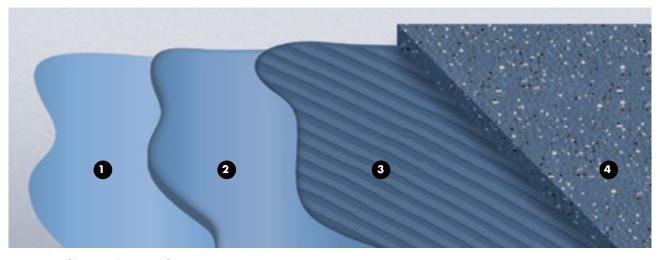
This matching, sustainability based, and certified overall concept combines nora® rubber floor coverings with select installation materials, both low emission. The system construction is subjected to the most stringent emission tests, and both selected nora® floor coverings and nora system blue® installation materials have been awarded the "Blue Angel" eco-label (RAL-UZ 120 and 113).

#### Your benefits:

- nora system blue® is the only floor covering system in the world whose overall concept has been certified. The emissions-free constituents safeguard a healthy indoor climate
- Reliable functionality assured by the symbiosis of the individual constituents
- Seamless supervision and documentation of the installation work by the application engineers from nora®
- Seven year product warranty when system components are laid by a qualified installer
- Competent consultation for preparing the call for tenders

Our nora pads® complete this end-to-end system range with an environmentally friendly and sustainable cleaning and care solution. Learn more on page 70.

### The system design



1 primer 2 filler 3 adhesive 4 floor covering



## nora system blue® installation materials

The perfect coordination of the individual system components provides functional reliability and ensures the highest standards of quality.

### nora® hybrid 310

Fiber-reinforced hybrid adhesive

#### nora® fiber 410

Fiber-reinforced acrylic adhesive

#### nora® fiber ESD 414

Fiber-reinforced, conductive acrylic adhesive

#### nora® level compound

Fast spreading filler

### nora® level compound FA

Fiber-reinforced filler

### nora® level compound SF

Stable filler

### nora® primer

Acrylic special primer

### nora® 2-K primer

Fast-drying acrylic special primer

### nora® epoxy ground

Two-component epoxy resin primer

#### Art. 6610

For bonding norament® floorings on non-absorbent and absorbent subfloors

#### Art. 6611

For bonding nora® rubber floor coverings

#### Art. 6612

For bonding "ed" (dissipative) and "ec" (conductive) nora® rubber floor coverings

#### Art. 6613

For filling and levelling subfloors

#### Art. 6625

For filling and levelling subfloors

### Art. 6626

For filling holes and patch-repairing transitions

### Art. 6614

Primer for cement screed, mastic asphalt and calcium sulphate screed and as a bonding course between layers of filler

### Art. 6615

Primer for cement screed, mastic asphalt and old encrusted and water-resistant adhesive residues

#### Art. 6616

Universal primer (e.g. for concrete and cement screed).

## nora® pads

nora® pads are suitable for daily cleaning and intensive cleaning on extremely soiled nora® rubber floor coverings. Cleaning and polishing are mechanical processes – just with water and absolutely no chemicals at all. nora® pads can be used with most standard types of machine and are available in different sizes.



Art. 6688			
nora® pad 0 – 10"		Ø 254 mm	delivery unit: 4 pieces in one carton
nora® pad 0 – 13"	nora® Pad 0	Ø 330 mm	delivery unit: 4 pieces in one carton
nora® pad 0 – 14"	for the cleaning with machines for structured noraplan® floor coverings and noraplan® uni, noraplan® unita as well	Ø 356 mm	delivery unit: 4 pieces in one carton
nora® pad 0 – 16"	noraplan <sup>®</sup> ultra grip:	Ø 406 mm	delivery unit: 4 pieces in one carton
nora® pad 0 – 17"		Ø 431 mm	delivery unit: 1 or 4 pieces in one carton
nora® pad 0 – 20"	For polishing cleaned floor coverings with a high speed machine for structured noraplan® floor coverings and noraplan® uni, noraplan® unita, and noraplan® ultra grip:	Ø 508 mm	delivery unit: 1 or 4 pieces in one carton
Art. 6627			
nora® pad 1 – 10"		Ø 254 mm	delivery unit: 4 pieces in one carton
nora® pad 1 – 13"	nora® Pad 1	Ø 330 mm	delivery unit: 4 pieces in one carton
nora® pad 1 – 14"	for polishing cleaned floor coverings with a high speed machine for structured noraplan® floor coverings and	Ø 356 mm	delivery unit: 4 pieces in one carton
nora® pad 1 – 16"	noraplan <sup>®</sup> uni, noraplan <sup>®</sup> unita, and noraplan <sup>®</sup> ultra grip:	Ø 406 mm	delivery unit: 4 pieces in one carton
nora® pad 1 – 17"		Ø 431 mm	delivery unit: 1 or 4 pieces in one carton
nora® pad 1 – 20"	For polishing cleaned floor coverings with a high speed machine for smooth noraplan® floor coverings and norament® floor coverings with hammerblow or cubic structure:	Ø 508 mm	delivery unit: 1 or 4 pieces in one carton
Art. 6628			
nora® pad 2 – 17"	nora® Pad 2 for intermediate and intensive cleaning with a single disk machine for smooth noraplan® floor coverings and norament® floor coverings with hammerblow or cubic structure:	Ø 431 mm	delivery unit: 1 or 4 pieces in one carton
Art. 6629			

Ø 431 mm

delivery unit: 1 piece in one carton

for intensive cleaning of heavily soiled and scratched floor

coverings with a single disk machine for smooth noraplan  $^{\tiny{\textcircled{\scriptsize 0}}}$ 

floor coverings and norament® floor coverings with

hammerblow or cubic structure:

nora® pad 3 – 17"

# nora® accessories

## nora® dry adhesives

## nora® dryfix · Dry adhesive supplied in rolls

For the permanent fixing of norament® and noraplan® floor coverings. The time-saving, cost- and eco-conscious adhesive innovation. Suitable for new buildings and renovations. Advantages: 5 times as quick, can be walked on immediately, odourless, economic, eco-compatible and reliable.

Art. 6556

## nora® profix · Dry adhesive tapes

### nora® profix 50

For quick installation of skirting S 1023 U.

Art. 992

#### nora® profix 90

For quick installation of skirtings S 1024 U, S 3003 as well as for pedestal formation through wall nosings (cushioned-edge profile).

Art. 993

## nora® stepfix 240 · Dry adhesive supplied in rolls

For quick installation of norament® stairtreads, stairwell installations with nora® stair nosing T 5044 and nora® stair margin.

Art. 907

## nora® special range

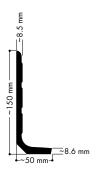
The special range offers profiles with different cross-sections for further applications.

Delivery units and minimum order quantities on request.

The profiles shown here are examples only. Further individual designs are available on request.

## nora® skirting **s 3014 N**

Special skirting for norament® 992 and norament® 992 grano



## 12 nora® skirting s 1013 u

Skirting 10 cm high, also suitable for the use on other floor coverings

Delivery unit: in rolls of 10 r.m.



## $norament^{\hbox{\scriptsize \it l}}$

	Test method	Requirements		Average test results fr	om running production		
			926	926 grano 926 satura 926 arago	825	992 992 grano	
CE conformity	EN 14 041		◀	— Manufacturer: nora systems	GmbH, D-69469 Weinheim —		
DoP-No.	EN 14 041		00	021	0004	0023	
Dynamic coefficient of friction	EN 13 893	DS	◀	Fulf	illed ———————		
Reaction to fire	EN 13 501-1	Not bonded	C <sub>f</sub>	-s1	C <sub>ff</sub> -s1	C <sub>il</sub> -s2	
Reaction to fire	EN 13 501-1	Bonded on mineral subfloor	B <sub>f</sub>	-s1	B <sub>if</sub> s1	C <sub>ir</sub> s1	
Properties acc. to EN 1817/EN	12 199						
Thickness	EN ISO 24 346	Mean value ± 0.20 mm according to EN 12 199	4 mm		3.2 mm	9 mm (Art. 1956)	
		Mean value ± 0.15 mm according to EN 1817		3.5 mm		9 mm (Art. 1955)	
Dimensional stability	EN ISO 23 999	± 0.4 %	4	± 0	3 %————————————————————————————————————		
Tear strength	ISO 34-1, method B, procedure A	Mean value ≥ 20 N/mm	35 N/mm	35 N/mm	30 N/mm	40 N/mm	
Cigarette-burn resistance	EN 1399	Procedure A (stubbed out) ≥ level 4 Procedure B (burning) ≥ level 3	4	Fulf	illed —		
lexibility	EN ISO 24 344, procedure A	Mandrel diameter 20 mm, no fissuring	<b>-</b>	Fulf	illed —		
Hardness	ISO 7619	≥ 70 Shore A (EN 12 199) ≥ 75 Shore A (EN 1817)	82 Shore A	82 Shore A	87 Shore A	70 Shore A	
Residual indentation	EN ISO 24 343	Mean value $\leq$ 0.25 mm at thickness $\geq$ 3.0 mm Mean value $\leq$ 0.20 mm at thickness $\leq$ 3.0 mm	0.15 mm	0.15 mm	0.15 mm	0.30 mm	
Abrasion resistance	ISO 4649, procedure A	≤ 250 mm³	115 mm³	115 mm³	130 mm <sup>3</sup>	90 mm <sup>3</sup>	
Colour fastness o artificial light	ISO 105-B02, procedure 3, test conditions 6.1 a)	At least level 6 on the blue scale; ≥ level 3 on the grey scale (= 350 MJ/m²)	•	Grey scale ≥ level 3	acc. to ISO 105-A02		
Classification	EN ISO 10 874	Residential/Commercial/Industrial	23/34/43	23/34/43	23/32/41	23/34/43	
Additional technical properties	<b>S</b>						
Toxicity of fire gases	DIN 53 436			ntion gases on-toxic	-	-	
Anti-slip properties	DIN 51 130	According to BGR 181	R 9	R 9 926 grano/Art. 1880 = R 9 926 grano/Art. 1870 = R 10 arago = R 10	R 9	R 9	
	DIN 51 097		A	arago = B	-	-	
mprovement in footfall ound absorption	ISO 10 140-3		12 dB	10 dB	9 dB	15 dB	
effect of chemicals	EN ISO 26 987		<b>←</b>	Resistant depending on conce	ntration and time of exposure*		
Thermal conductivity	EN 12 667		0.42 W/mK	0.42 W/mK Suitable for underfl	0.43 W/mK oor heating systems —	0.21 W/mK	
Electrical insulation properties	IEC 60 093, VDE 0303 T.30		•		0 Ohm —		
Electrical propensity when walked upon	EN 1815		4		se of rubber soles < 2 kV —		
Effect of a castor chair	FN 425		4	— Suitable if castor wheels type W	according to FN 12 529 are used —		
or a casior citali	EN 425 Suitable if castor wheels, type W, according to EN 12 529 are used						

 $<sup>^{\</sup>star}$  In case of increased impact of oils, grease, acids, alkalis and other aggressive chemicals please contact us.

EN 1817: Specification for homogeneous and heterogeneous smooth elastomer floor coverings EN 12 199: Specification for homogeneous and heterogeneous profiled elastomer floor coverings

Colour variations due to different production batches as well as technical alterations to improve the product have to be accepted.

# noraplan®

	Test method	Requirements	Average test results from running production						
			<b>uni</b> 2.0 mm	eco 2.0 mm sentica 2.0 mm signa 2.0 mm stone 2.0 mm valua 2.0 mm lona 2.0 mm	unita 2.0 mm	<b>ultra grip</b> 2.0 mm	sentica 3.0 mm signa 3.0 mm valua 3.0 mm	sentica acoustic signa acoustic stone acoustic	
CE conformity	EN 14 041		←	Manufacturer	: nora system	s GmbH, D-69	469 Weinheim —		
DoP-No.	EN 14 041		0018	0016		0010	0016	0017	
Dynamic coefficient of friction	EN 13 893	DS	<b>←</b> Fulfilled —						
Reaction to fire	EN 13 501-1	Not bonded	B <sub>ff</sub> s1	B <sub>ff</sub> s1, bonded		C <sub>ff</sub> s1	B <sub>ff</sub> s1, bonded	C <sub>ff</sub> s1	
Reaction to fire	EN 13 501-1	Bonded on mineral subfloor	B <sub>ff</sub> s1	B <sub>ff</sub> -s1		C <sub>fF</sub> s1	B <sub>ff</sub> s1	B <sub>ff</sub> s1	
Properties acc. to EN 1817/EN 1816									
Thickness	EN ISO 24 346	Mean value without foam backing ± 0.15 mm with foam backing ± 0.20 mm	2.0 mm -	2.0 mm -		2.0 mm -	3.0 mm -	- 4.0 mm	
Dimensional stability	EN ISO 23 999	± 0.4 %	<b>←</b>		±(	).3 % ———		<u>'</u>	
Cigarette-burn resistance	EN 1399	Procedure A (stubbed out) level ≥ 4 Procedure B (burning) level ≥ 3	<b>←</b>		Ful	filled ———			
Flexibility	EN ISO 24 344, procedure A	Mandrel diameter 20 mm, no fissuring	<b>←</b>	— Fulfilled — <b>&gt;</b>	Not fulfilled	Fulfilled	-	<b>←</b> Fulfilled —	
Hardness	ISO 7619	≥ 75 Shore A	94 Shore A	92 Shore A		92 Shore A	92 Shore A	85 Shore A	
Residual indentation		Mean value ≤ 0.15 mm at thickness < 2.5 mm	0.05 mm	0.05 mm		0.05 mm	-	-	
	EN ISO 24 343	Mean value ≤ 0.20 mm at thickness ≥ 2.5 mm	-	-		-	0.05 mm	-	
		acoustic: Mean value ≤ 0.25 mm	-	-		-	-	0.25 mm	
Abrasion resistance	ISO 4649, procedure A	≤ 250 mm <sup>3</sup>	130 mm <sup>3</sup>	150 mm <sup>3</sup>		90 mm³	150 mm³	130 mm <sup>3</sup>	
Colour fastness to artificial light	ISO 105-B02, procedure 3, test conditions 6.1 a)	At least level 6 on the blue scale; ≥ level 3 on the grey scale (= 350 MJ/m²)	4	Gre	y scale ≥ level 3	acc. to ISO 105	A 02 ————		
Classification	EN ISO 10 874	Residential/Commercial/Industrial	23/34/42	23/34/42		23/34/42	23/34/43	23/33/-	
Additional technical properties									
Toxicity of fire gases	DIN 53 436		<b>←</b>		Carbonisation g	ases are non-toxi	ic —	,	
Anti-slip properties	DIN 51 130	According to BGR 181	R 9	stone Art. 149/249: R Others: R 9	10	R 11	R 9	stone acoustic: R 10 Others: R 9	
	DIN 51 097		-	stone Art. 149/249: A	; B	A; B; C	-	-	
	BS 7976 TRRL Pendulum		-	-		36+ Wet & dry	-	-	
	SATRA TM 144		-	-		Wet: > 0.6 Dry: > 0.45	-	-	
Improvement in footfall sound absorption	ISO 10 140-3		6 dB	6 dB		7 dB	8 dB	20 dB	
Effect of chemicals	EN ISO 26 987		4	Resistant dep	ending on conce	ntration and tim	e of exposure*		
Thermal conductivity	EN 12 667		0.54 W/mK	0.61 W/mK		0.61 W/mK	0.61 W/mK	0.12 W/mK	
Electrical insulation properties	IEC (0 000 NDE 0000 T 00		4	———— Sui		loor heating syst	ems —		
	IEC 60 093, VDE 0303 T.30	1	-		> 10	10 Ohm ———			
Electrical propensity when walked upon	EN 1815		<b>←</b>	Antistati	c, charging in co	ase of rubber sole	es < 2 kV		

 $<sup>^{\</sup>star}$  In case of increased impact of oils, grease, acids, alkalis and other aggressive chemicals please contact us.

EN 1817: Specification for homogeneous and heterogeneous smooth elastomer floor coverings EN 1816: Specification for homogeneous and heterogeneous smooth elastomer floor coverings with foam backing

 $Colour\ variations\ due\ to\ different\ production\ batches\ as\ well\ as\ technical\ alterations\ to\ improve\ the\ product\ have\ to\ be\ accepted.$ 

## $nora^{\mathbb{R}} nTx$

	Test method	Requirements		Average test results f	rom running production		
			noraplan®	noraplan®	noraplan®	norament <sup>®</sup>	
			eco nTx** sentica nTx signa nTx stone nTx** unita nTx** valua nTx**	uni nTx	uhra grip nTx	926 grano nTx 926 satura nTx 926 arago nTx	
CE conformity	EN 14 041		←	Manufacturer: nora system	s GmbH, D-69469 Weinheim		
Dynamic coefficient of friction	EN 13 893	DS	4	Ful	filled-		
Reaction to fire	EN 13 501-1	Cfl-s1, bonded	Cfl-s1, bonded	Bfl-s1, bonded	Cfl-s1, bonded	Cfl-s1, bonded	
Thermal conductivity	EN 10 456	$\lambda = 0.17 \text{ W/(m*K)}$	◀	Ful	filled-		
DoP-No.	EN 14 041		0027	0028	0029	0031	
Properties acc. to EN 1817							
hickness	EN ISO 24 346	Mean value ± 0.15 mm of nominal value	2.1 mm or 3.1 mm	2.1 mm	2.1 mm	3.6 mm	
Dimensional stability	EN ISO 23 999	± 0.4 %	<b>←</b>	± 0	.3 % —		
Cigarette-burn resistance	EN 1399	Procedure A (stubbed out) ≥ level 4 Procedure B (burning) ≥ level 3	•	Ful	filled—————		
-lexibility	EN ISO 24 344, procedure A	Mandrel diameter 20 mm, no fissuring	Fulfilled (Exception: unita)	<b>-</b>	Fulfilled —		
Hardness	ISO 7619	≥ 75 Shore A	92 Shore A	94 Shore A	92 Shore A	82 Shore A	
Residual indentation	EN ISO 24 343	noraplan $^{\circ}$ nTx:  Mean value $\leq 0.15$ at thickness $< 2.5$ Mean value $\leq 0.20$ at thickness $< 2.5$ norament $^{\circ}$ nTx:  Mean value $\leq 0.25$ at thickness $\leq 3.0$ Mean value $\leq 0.25$ at thickness $\geq 3.0$	0.05 mm	0.10 mm	0.15 mm	0.15 mm	
Abrasion resistance at 5 N load	ISO 4649, procedure A	≤ 250 mm <sup>3</sup>	150 mm³	150 mm <sup>3</sup>	90 mm³	130 mm <sup>3</sup>	
	ISO 105-B02, procedure 3,	At least 6 on the blue scale, $\geq 3$ on the	4	Grev scale ≥ 3 a	cc. to ISO 105-A02		
artificial light	test conditions 6.1 a)	grey scale (= 350 MJ /m²)					
Additional technical data			22 22/1/2				
Veight	EN ISO 23 997		2.1 mm: ~ 3.36 kg/m² 3.1 mm: ~ 5.08 kg/m²	~ 3.55 kg/m²	~ 3.30 kg/m²	~ 5.40 kg/m²	
Tear strength	ISO 34-1, method B, procedure A		28 N/mm	n. a.	n. a.	34 N/mm	
Slip resistance	DIN 51 130		R 9* (smooth surface) R 10* (finely-structured surface)	R 9*	R 11*	R 9* R 10* (serra)	
mprovement in footfall sound absorption	ISO 10 140-3		2.1 mm: 3 dB 3.1 mm: 4 dB	3 dB	3 dB	8 dB	
ffect of chemicals	EN ISO 26 987	Depending on concentration and time of exposure	<b>-</b>	Resis	stant <sup>(A)</sup>		
Electrostatic behaviour when being walked on	EN 1815	o.quosuro	•	Antistatic, charging in co	use of rubber soles < 2 kV		
effect of a castor chair	EN 425		≺	Suitable if castor wheels, type W	, according to EN 12 529 are used ———		
Cira hahmilanı /amaka hahm		Eulfille the requirements					
Fire behaviour/smoke beha	EN 13501-1	Fulfills the requirements	Cfl-s1, bonded	Bfl-s1, bonded	Cfl-s1, bonded	Cfl-s1, bonded	
Fire behaviour	EN 45 545	Hazard Level	HL1*	DIFST, DOLLGED	n. a. —	Lirst, politica	
Fire behaviour	ASTM E-648 / ISO 9239-1		Class 1 (≥ 0.50 W/cm²)*	4	n. a. —		
Smoke density	ASTM E-662	Federal Railroad Administration	After 1.5 minutes <100, after 4 minutes <200*	•	n. a. —		
Adhesive characteristics							
Description			<b>←</b>	Pressure-sensitive	Le hot melt adhesive	I	
Density			<b>←</b>		).92 g/cm³ —		
Softening range	Kofler bench		•		ı. 105 °C—		
Viscosity			<b>←</b>	45,000 mPas at 170 °C t	till 13,000 mPas at 190 °C —————		
Solid body content			<b>←</b>	-8	7% ————		
VOC		-0%					

 $Colour \ variations \ due \ to \ different \ production \ batches \ as \ well \ as \ technical \ alterations \ to \ improve \ the \ product \ have \ to \ be \ accepted.$ 

Tested and certificated by an independent testing institute.

Minimum quantities required.

In case of increased impact of oils, greases, acids, alkalis and other aggressive chemicals as well as light oils and fuels please contact us.

## nora® ESD floor coverings

	Test method	Requirements		Average test results from running production				
			nora	ment®	noraplan®			
			928 grano ed	927 grano ec	sentica ed 2.0 mm signa ed 2.0 mm stone ed 2.0 mm	sentica ed 3.0 mm signa ed 3.0 mm	astro ec	
CE conformity	EN 14 041		<b>←</b> M	anufacturer: nora systen	ıs GmbH, D-69469	Weinheim —	-	
DoP-No.	EN 14 041		0005	0022	0001	0001	0011	
Dynamic coefficient of friction	EN 13 893	DS	◀	Fu	Ifilled ———			
Electrical behaviour	EN 1081	$ed = \le 10^9 \text{ Ohm}$	<b>←</b> Fulfilled →	→ Fulfilled —		illed ——		
		ec = ≤ 10 <sup>6</sup> 0hm		Fulfilled			Fulfilled	
Reaction to fire	EN 13 501-1	Not bonded	C <sub>ff</sub> -s1, bonded	C <sub>il</sub> -s2	<	( <sub>fi</sub> -s1	<b>&gt;</b>	
Reaction to fire	EN 13 501-1	Bonded on mineral subfloor	B <sub>ff</sub> s1	C <sub>ff</sub> s1	B <sub>if</sub> s1 (		C <sub>ff</sub> s1	
Properties acc. to EN 1817/EN	12 199							
Thickness	EN ISO 24 346	Mean value ± 0.20 mm according to EN 12 199						
		Mean value ± 0.15 mm according to EN 1817	3.5 mm	3.5 mm	2.0 mm	3.0 mm	2.0 mm	
Dimensional stability	EN ISO 23 999	± 0.4 %	4	±	0.3 % —	1	<b></b>	
	ISO 34-1,		-					
Tear strength	method B, procedure A	Mean value ≥ 20 N/mm	45 N/mm	30 N/mm		-		
Cigarette-burn resistance	EN 1399	Procedure A (stubbed out) ≥ level 4 Procedure B (burning) ≥ level 3	<b>←</b>	Fulfilled				
Flexibility	EN ISO 24 344, procedure A	Mandrel diameter 20 mm, no fissuring	4	Fulfilled —	<b></b>	_	Fulfilled	
Hardness	ISO 7619	≥ 70 Shore A (EN 12 199) ≥ 75 Shore A (EN 1817)	<b>≪</b> — 84 Shore A — <b>&gt;</b>	90 Shore A	<b>-</b>	—95 Shore A ——	<b></b>	
Residual indentation		Mean value $\leq$ 0.15 mm at thickness $\leq$ 2.5 mm Mean value $\leq$ 0.20 mm at thickness $\geq$ 2.5 mm		-	0.05 mm			
	EN ISO 24 343	Mean value $\leq 0.25$ mm at thickness $\geq 2.5$ mm  Mean value $\leq 0.25$ mm at thickness $\geq 3.0$ mm  Mean value $\leq 0.20$ mm at thickness $\leq 3.0$ mm	0.0	5 mm	-			
Abrasion resistance	ISO 4649, procedure A	≤ 250 mm³	80 mm <sup>3</sup>	70 mm <sup>3</sup>	150	mm <sup>3</sup>	150 mm <sup>3</sup>	
Colour fastness to artificial light	ISO 105-B02, procedure 3, test conditions 6.1 a)	At least level 6 on the blue scale; ≥ level 3 on the grey scale (= 350 MJ/m²)	◀	Grey scale ≥ level 3 acc. to ISO 105-A02			<b>&gt;</b>	
Classification	EN ISO 10 874	Residential/Commercial/Industrial	23/3	23/34/43 23/34/42 23/34/43		23/34/43	23/34/42	
Additional technical properties	<b>s</b>							
Toxicity of fire gases	DIN 53 436		Carbonisation gases are non-toxic - Carbonisation gases are n		ation gases are non-	toxic		
Anti-slip properties	DIN 51 130	According to BGR 181	R 9 stone ed: R 10 Others: R 9			R 9		
Improvement in footfall sound absorption	ISO 10 140-3		10 dB	10 dB	6 dB	7 dB	6 dB	
Effect of chemicals	EN ISO 26 987		<b>←</b>	Resistant depending on conc	entration and time of	exposure* —	<b>→</b>	
Thermal conductivity	EN 12 667		0.40 W/mK	0.56 W/mK	0.54	'	0.45 W/mK	
Effect of a castor chair	EN 425			Suitable for underfloor heating systems — Suitable if castor wheels, type W, according to EN 12 529 are used —				
Electrical behaviour**								
Resistance to EPA ground	ESD STM 7.1/	Measuring the installed floor at 23 °C ( $\pm$ 2 °C) and $\geq$ 25 % r.h.	10 <sup>6</sup> - 9 x 10 <sup>7</sup> 0hm < 10 <sup>6</sup> 0hm		106 - 9 x 107 Ohm		< 106 Ohm	
Nossanto lo Em groona	IEC 61 340-4-1	Measuring the installed floor at 23 °C (± 2 °C) and < 25 % r.h., installed on an appropriate subfloor build up	106 - 109 Ohm***	< 106 Ohm	10° - 10° 0hm***		< 106 Ohm	
Operator system – Resistance to ground	ESD STM 97.1/ IEC 61 340-4-5	For the system floor/conductive footwear ( $R < 5 \times 10^6$ Ohm) measuring the installed floor at 23 °C ( $\pm 2$ °C) and $\geq 25$ % r.h.	≤ 3.5 x 10 <sup>7</sup> 0hm	≤ 3.5 x 10° 0hm		10 <sup>7</sup> Ohm	< 3.5 x 10 <sup>7</sup> Ohm	
Body voltage generation	ESD STM 97.2 IEC 61 340-4-5	Tested with defined conductive footwear with 21 °C and 20 % r.h.	10' Uniii					
Resistance to earth	EN 1081	WIIII Z1 C AND ZV % T.N.	106 - 9 x 107 Ohm			107 Ohm	< 106 Ohm	
Insulation resistance	VDE 0100 - 600 electrode 1; 500 V		10° - 9 x 10° Ohm				< 10° 0hm	
	VDE 0100 - 600 electrode 2; 220 V wet		≥ 1 x 10 <sup>5</sup> 0hm	-	≥ 5 x 10 <sup>4</sup> 0hm	≥ 1 x 10 <sup>5</sup> 0hm	-	

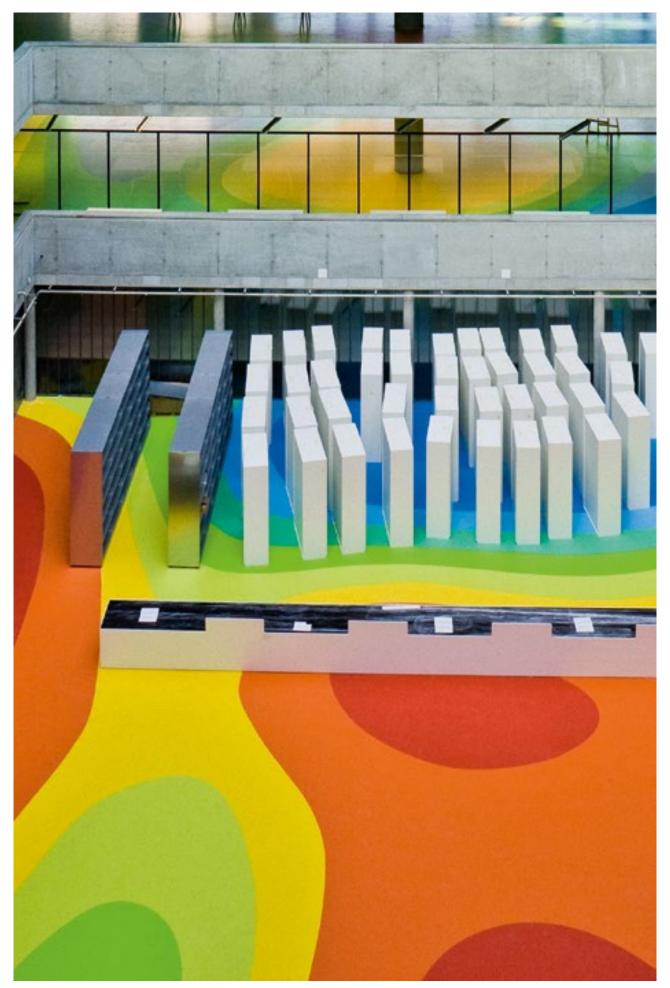
 $Colour\ variations\ due\ to\ different\ production\ batches\ as\ well\ as\ technical\ alterations\ to\ improve\ the\ product\ have\ to\ be\ accepted.$ 

In case of increased impact of oils, grease, acids, alkalis and other aggressive chemicals please contact us. If installed electrically dissipative and conductive in conformity with our installation instruction and according to the recommendations of the adhesive manufacturer.

The used adhesive has to have a permanent resistance of  $R < 3 \times 10^5$  Ohm according to EN 13 415.

\*\*\* If extremely low humidity values (< 25 % relative air humidity (- r.h.) are expected for a longer period, please contact nora systems  $\mathsf{GmbH}$ ,  $\mathsf{Technical}$   $\mathsf{Service}$ , for advice.

EN 1817: Specification for homogeneous and heterogeneous smooth elastomer floor coverings EN 12 199: Specification for homogeneous and heterogeneous profiled elastomer floor coverings



Technische Nationalbibliothek, Czech Republic

Votes	
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Notes			

### Please note:

norament® and noraplan® have been developed for indoor installation. nora® floor coverings are not suitable for installation in outdoor applications or in areas with constant and direct wet loads.

The particulars given in this brochure are for informational purposes only concerning the products presented. They represent descriptions or designations, but not any warranted qualities. This information cannot cover all possible service conditions which our floor coverings may encounter.

If the floor covering is going to be exposed to out-of-the-ordinary service conditions and stresses (e.g. extreme UV radiation, chemical substances or other aggressive media), please contact us for advice.

We will be pleased to supply you on request with flooring samples to enable you to carry out in-house tests. We reserve the right to alter technical values as part of an ongoing product improvement process.

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