Certified quality products made of EVA and rubber, for health and industry

Product range 2023/2024



EVA solutions for health and industry www.nora-material.de | www.nora-material.com



Production site Weinheim

We are a **German manufacturer** of high-quality **closed cell** sheets made of **EVA** as well as products made of **rubber**.

Our **certified branded products** are used in the orthopaedic footwear, in orthopaedic technology, the shoe industry, by traditional shoemakers and in a wide range of industrial applications.

Since 2018, **nora systems GmbH** has been part of Interface Inc., with headquarters in Atlanta, USA.

For more than 80 years **Weinheim** in Germany is headquarters and **production site** of nora and currently the only production site for the high-quality EVA and rubber materials.

Carbon neutral company

Interface[®] is a **carbon neutral company** with carbon neutral products – third-party certified according to the recognised standard PAS 2060.

That means that we have offset all carbon dioxide emissions including all business activities and throughout our entire value creation chain. On the pathway to climate neutrality, we followed the principle of: measure, reduce, offset, validate. We place the greatest importance to ensure that all data is transparent, provable and third-party verified so that we can both make verifiable statements and also continue working on ourselves and record progress.

By 2040, we want to become a CO2-negative company with our Mission Climate Take Back™.



EVA and expanded rubber materials

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Tested quality guarantees safety for practitioners and patients

Under the **MDR** (Medical Device Regulation, EU Regulation 2017/745), materials used for the production of medical products must be provided, amongst others, with a **declaration of clearance** with respect to their toxicological properties.

✓ nora[®] products are free from constituents posing toxicological and carcinogenic risks as set down under EU Regulation 2017/745.

In addition, **nora**[®] EVA materials are free from phthalates and latex.

The closed-cell structure of the EVA materials minimises the risk of harm to health due to germ and bacterial colonies and facilitates complete hygienic cleaning and disinfection of the surface with standard commercial disinfectants.

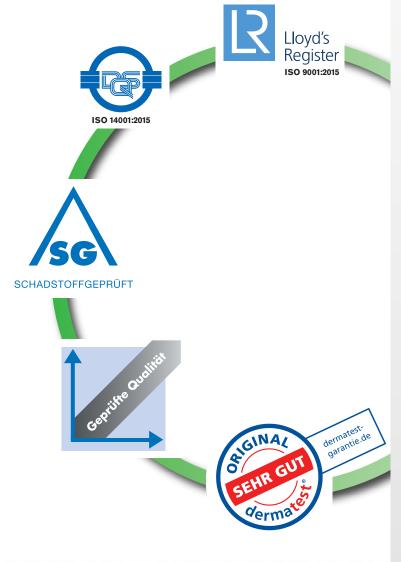
 Because of their characteristics, nora[®]
 materials are suitable for processing into Class 1 medical products.
 Compliance with the legal requirements is confirmed by a declaration of clearance.

Dynamic long-term loading tests, verified disinfectability, guaranteed batch tracking, cytotoxicity tested under ISO 10993 and proven skin compatibility round off our continuous quality assurance measures.

For us, as a manufacturer of products that are also used in medical products, certification under international standards is just as much a matter of course as adherence to the applicable regulations, such as REACH. As a German manufacturer, we assume special responsibility for consistent quality, innovative product developments, practicable diversity and the highest possible reliability and safety. QM certification according to ISO 9001:2015 and our environmental management system according to ISO 14001 are the foundations ensuring the consistent quality of our products. These are supplemented by a large number of voluntary measures. The Weinheim production site and regular quality control produce quality on a consistently high level.

nora

» Declaration of clearance



All **nora**[®] products are free from toxic heavy metals and carcinogenic aromatic amines contained in dyes. **nora**[®] products are also free from pentachlorophenol (PCP) and carcinogenic N-nitrosamines.

SG Certification Mark

Acknowledged throughout the sector, this pollutant test mark is awarded by approved test institutes following regular and thorough material analyses.

Alongside the testing of parameters prescribed by law, the SG package also confirms, for example, that no carcinogenic amines have been detected.

✓ Countless nora[®] products have been tested and certified since 1998 according to the catalogue of SG test criteria valid at the time.

The certificate: the crucial difference

The **SG pollutant test mark** is awarded following thorough material analyses. This test mark confirms that, according to current knowledge, there are no risks to health. It entitles the test institute to take samples at any time from ongoing production and does not constitute a once only test.

✓ nora[®] products are basically not just tested, but certified.

A simple test report does <u>not</u> confirm compliance with the SG mark.

The Dermatest seal proven skin compatibility

Since 1988, **nora**[®] materials have been regularly tested for skin compatibility. The dermatological tests are performed on human skin. Through the patch test, small patches of the material are applied to the skin and examined by dermatologists after a specified period.

✓ These products have been rated under the Dermatest seal as "very good". This guarantees skin compatibility and confirms that the material does not cause any toxic or irritating incompatibility reactions.

Further quality controls

Finally, permanent internal controls complete the quality assurance measures. For example, regular chemical physical tests are carried out, during everyday production, on **raw materials** and on the **finished products** in order to ensure consistently reliable high quality.



The **nora**[®] range offers practitioners of materials made of **closed cell EVA**, **rubber and light-cell rubber** a colourful variety of known qualities as well as innovative, solution-oriented product developments.

Expanded EVA foam sheets are used mostly as resilient **cushioning materials and lift sheets.** For that purpose, a broad spectrum of materials with **cushioning, bedding, permanently resilient, and stabilising** function is available for selection. The function assumed by each material depends on its specific composition, density, and hardness.

Conversion table: The manufacturing unit of measure is millimeters. For US customers: Please use this conversion table to find your material.

mm	inch decimal	inch fraction*	mm	inch decimal
1.5	0.0590	1/16	8	0.3150
1.8	0.0709		9	0.3543
2	0.0787		10	0.3937
2.5	0.0984		12	0.4724
2.7	0.1063		13.5	0.5315
3	0.1181	1/8	14	0.5512
3.5	0.1378		15	0.5906
4	0.1575		16	0.6299
4.3	0.1693		20	0.7874
4.5	0.1772		22	0.8661
5	0.1969	3/16	24	0.9449
6	0.2362	1/4	30	1.1811
6.5	0.2559		32	1.2598
7	0.2756		35	1.3780

* USA standard sizes and closest metric equivalent. These figures are approximate.

inch

fraction*

5/16

3/8

9/16

5/8

7/8

1.1/4

1.3/8



The **nora**[®] range is 100% vegan and latex-free. The materials are available in light natural hues, classic dark colours and modern shades and designs. **Coordinated colours across many products** make it possible to combine lifting and soling materials in matching colours.

The EVA materials are characterised by an excellent workability, especially in terms of **thermoplastic mouldability**, **bonding and grinding properties**.

It has always been our goal above all to develop materials that **simplify everyday work, guarantee safety,** and offer new properties and **new solutions.**

That includes multilayer **composite sheets** for the simplified sandwich technique, a range of **milling materials** and materials with specific **functional characteristics**, which absorb shearing forces in movement, for example.

All sheets are available in various thicknesses, formats and colours. Thanks to their **closed-cell structure**, EVA materials are **hygienically washable** which facilitates complete hygienic cleaning and **disinfection** at the surface and no moisture can get inside.

Because of their high-quality properties, our materials are also used in many **industrial areas** where there is a need for **highquality foam.**

Overview of foot orthotics

Lift sheets and cushioning sheets

Product	Hardness approx. Shore A	Density approx. g/cm ³	thermo- formable	Page
Astro form 8	-	0.21	at 110°-130° C	14
Astro med 10	10	0.27	no	13
Lunatec motion	12	0.13	at 110°-130° C	13
Astro form 15	15	0.32	at 110°–130° C	14
Aero sorb M	-	0.16	at 110°–130° C	15
Aero sorb W	-	0.16	at 110°–130° C	15
Lunairmed	16	0.08	at 110°–130° C	11
Lunatur 18 Walnut	18	0.12	at 110°–130° C	17
Lunatec motion 20	20	0.18	at 110°–130° C	13
Lunairflex	22	0.12	at 110°-130° C	11
	,,			л,
Lunatec EP	23	0.21	at 110°-130° C	12
Lunalastik	25	0.20	at 110°–130° C	12
Lunatur 27 Walnut	27	0.23	at 110°–130° C	17
Lunasoft SLW	30	0.20	at 130° C	18
		·		
Lunasoft SL	40	0.20	at 130° C	19
Lunatec SE	45	0.29	at 130° C	21
Lunatur 50 Walnut	50	0.34	at 130° C	17
Lunasoft AL	53	0.26	at 130° C	21
Lunalight A	60	0.35	at 130° C	22
Lunacell	68	0.37	at 130° C	23
	n			,
Norit L	93	0.90	at 130° C	23
Norit	95	1.00	at 130° C	23

All sheets are available in different thicknesses, formats and colours. The recommended temperatures are guidelines that can vary depending on the thickness of the material. The softer the material, the more caution should be exercised with high temperatures!

Properties:
cushioning
bedding/shockabsorbing
bedding
permanently resilient
stabilising
Conversion table:
at 110°-130°C at 230°-266°F
at 110°C at 230°F



Product information and application tips:





composite sheets Lunatec combi

Product name Total thickness	Layers approx. mm	Hardness approx. Shore A	Density approx. g/cm³	Page	Figure
Lunatec combi 1	Lunalastik (6 mm)	25	0.23	24	
14 mm	Lunasoft AL (8 mm)	52	0.26		
Lunatec combi 2	Lunairflex (6 mm)	22	0.12	24	
16 mm	Lunasoft SLW (10 mm)	30	0.20		
Lunatec combi 3	Lunalastik (6 mm)	25	0.23	25	
16 mm	Lunasoft SLW (10 mm)	30	0.20		
Lunatec combi 4	Lunairflex (3 mm)	22	0.12	25	
9 mm	Lunalastik (6 mm)	25	0.23		
Lunatec combi 5	Lunalastik (3 mm)	25	0.23	25	
7 mm	Lunasoft SLW (4 mm)	30	0.20		
Lunatec combi 6	Lunasoft SLW (4 mm)	30	0.20	25	
14 mm	Lunasoft AL (10 mm)	52	0.26		
Lunates south: 17		20	0.00	0.6	
Lunatec combi 7 7 mm	Lunasoft SLW (3 mm) Lunasoft SL (4 mm)	30 40	0.20	26	
7 11111		40	0.20		
Lunatec combi 8	Lunatec EP (4 mm)	22	0.20	26	
12 mm	Lunatec SE (8 mm)	45	0.28		
	Y				
Lunatec combi cork 1	Lunalastik (6 mm)	25	0.23	27	A
14 mm	Lunatec cork H (8 mm)	50	0.35		1. 1. 1.
Lunatec combi CW	Lunatur 27 (6 mm)	27	0.23	17	and the state
14 mm	Lunatec cork H (8 mm)	50	0.35		
Lunatec combi motion 1	Lunatec motion (6 mm)	12	0.13	26	March March State
16 mm	Lunasoft SL (10 mm)	40	0.20		En la la
Lunatec combi T1	Lunasoft SLW (3 mm)	30	0.20	27	l
15 mm	Lunasoft Z (4 mm)	25	0.20	21	
	Lunasoft AL (8 mm)	52	0.26		
Lunatec combi motion T2	Lunatec motion (7 mm)	12	0.13	27	a substitute
20 mm	Lunasoft Z (5 mm)	25	0.16		
	Lunatec CAD 35 (8 mm)	35	0.20		

Global innovation: nora[®] Lunatec fusion

bonds directly without any adhesive ...

Lunatec fusion is a global innovation in expanded EVA materials which ensure a reliable, permanent bond without the additional use of adhesive. This allows fast, clean, environmentally friendly and healthy work at the highest level of quality that's made in Germany.

With **Lunatec fusion**, orthopaedic insoles and foot beddings can be made entirely without adhesive. These unique new materials bond directly with each other through thermoplastic moulding solely as a result of heat, time and pressure and fuse to create a permanent bond. The materials bond directly, without any glue or adhesive lamination.



The advantages are clear:

- massive savings on time and costs
- clean, fast and healthy friendly working
- no need to apply adhesive
- no discolouration or tangible hardening
- no contamination from glue
- no long drying and waiting times
- ready for use immediately after cooling down

The principle of bonding

The principle of "fusing" on the basis of EVA is well known in the industry and in the world of hand-crafting, and also from hotmelt adhesives. The EVA polymer provides stability here and ensures optimum bonding.

Lunatec fusion works in a similar way: The warmed EVA materials bond directly together permanently during the cooling phase, **without adhesive** and without any intermediate layer.

Lunatec fusion	Thickness	Heating time	Cooling time
1000	2 mm	30 sec.	1 min.
20	3 mm	45 sec.	1.5 min.
	4 mm	1.5 min.	3 min.
	2 mm	45 sec.	1.5 min.
30	3 mm	1 min.	2 min.
	4 mm	2 min.	4 min.
40	6 mm	3 min.	6 min.
	8 mm	4 min.	8 min.
	12 mm	6 min.	12 min.
	8 mm	4.5 min.	9 min.
50	12 mm	7 min.	14 min.

Processing instructions for a reliable bonding ...

- **roughen** the materials used
- use a perforated material
- oven setting: 130° C // 266° F, stick to the recommended times
- make sure of sufficient pressure of the drawing bladder
- rule of thumb: heating time x 2 = ideal cooling time



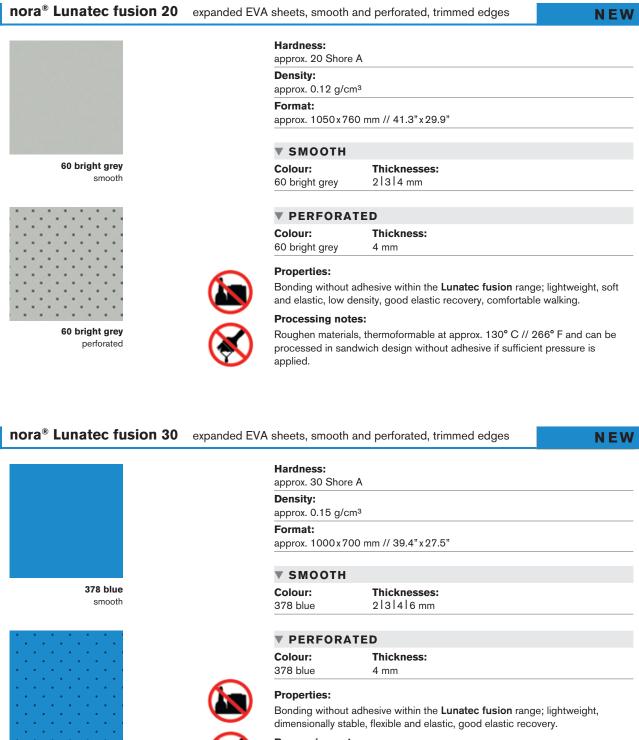
Nm

pressure

tin_e

With **perforated materials**, the heating time can be shortened by about a third as the heat spreads through the material faster. For the optimal cooling time, please consider the **total thickness** of the materials used.

EVA and expanded rubber materials



378 blue perforated



Roughen materials, thermoformable at approx. 130° C // 266° F and can be processed in sandwich design without adhesive if sufficient pressure is applied.

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Because vulcanised EVA sheets basically consist of hygienic closed cells, the process works best when a perforated material is used, and the trimmed materials are roughened by sanding before processing. This enlarges the surface to give full-surface bonding. This is a normal step even in traditional insole manufacture, intended to achieve better bonding and avoid air inserts.

In addition to various material layers, other material blanks (e.g. for reinforcing in the arch) can be positioned flexibly and bonded to each other in a single deep drawing process.

nora[®] Lunatec fusion 40 expanded EVA sheets, smooth and perforated, trimmed edges NEW Hardness: approx. 40 Shore A **Density:** approx. 0.20 g/cm³ Format: approx. 1040x625 mm // 40.9"x24.6" SMOOTH 09 white Colour: Thicknesses: smooth 09 white 4|8|12 mm PERFORATED Colour: **Thicknesses:** 09 white 418 mm **Properties:** Bonding without adhesive within the Lunatec fusion range; lightweight, dimensionally stable and elastic, good elastic recovery, comfortable walking. **Processing notes:** 09 white Roughen materials, thermoformable at approx. 130° C // 266° F and can be perforated processed in sandwich design without adhesive if sufficient pressure is applied. nora[®] Lunatec fusion 50 expanded EVA sheets, smooth and perforated, trimmed edges NEW Hardness: approx. 50 Shore A **Density:** approx. 0.30 g/cm³ Format: approx. 1020x675 mm // 40.2"x26.6" SMOOTH 27 light blue Colour: Thicknesses: smooth 27 light blue 8|12 mm PERFORATED Colour: Thicknesses: 27 light blue 418 mm **Properties:** Bonding without adhesive within the Lunatec fusion range; dimensionally

> 27 light blue perforated

stable and elastic, good elastic recovery.

Processing notes:

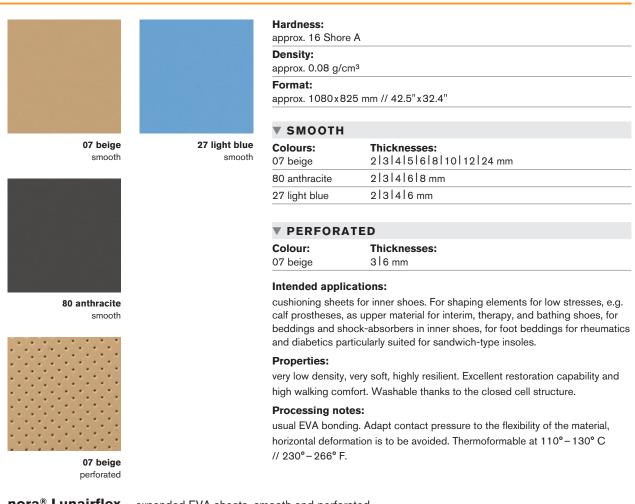
Roughen materials, thermoformable at approx. 130° C // 266° F and can be processed in sandwich design without adhesive if sufficient pressure is applied.

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The heated materials bond together permanently under pressure during the cooling phase. Once the materials have bonded with each other, the material is more likely to break if an attempt is made to separate them, rather than the cooled layers coming apart. This has been proved by testing the peel resistance according to DIN EN 1392 (Testing of bond strength of adhesives). This means that the bond created is actually stronger than the material itself.

Lunatec fusion materials were developed for particularly healthy and environmentally friendly working without the use of any adhesive at all. However, like all other EVA materials, they can also be used with adhesive.

nora[®] Lunairmed expanded EVA sheets, smooth and perforated



nora[®] Lunairflex expanded EVA sheets, smooth and perforated

27 light blue

smooth



smooth



07 beige perforated

Hardness: approx. 22 Shore A **Density:** approx. 0.12 g/cm³ Format: approx. 1200x750 mm // 47.2"x29.5"

SMOOTH

Colours:	Thicknesses:
07 beige	2 3 4 5 6 8 10 12 24 mm
27 light blue	2 3 4 5 6 mm

PERFORATED

Colour:	Thicknesses:	
07 beige	316 mm	

Intended applications:

cushioning sheets for inner shoes. For shaping elements for medium stresses, e.g. calf prostheses, as upper material for interim, therapy, and bathing shoes, for beddings and shock-absorbers in inner shoes.

Properties:

very low density, soft, highly resilient, good restoration capability. Washable thanks to the closed cell structure.

Processing notes:

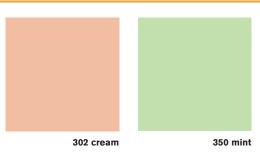
usual EVA bonding. Adapt contact pressure to the flexibility of the material, horizontal deformation is to be avoided. Thermoformable at 110°-130° C // 230°-266° F.

Cushioning sheets

nora® Lunalastik expanded EVA sheets, smooth and perforated

		Hardness: approx. 25 Shor	e A
		Density:	
		approx. 0.20 g/c	cm ³
		Format: approx. 1150x7	'50 mm // 45.3"x 29.5"
		▼ ЅМООТН	
07 beige smooth	27 light blue smooth	Colours: 07 beige 27 light blue 81 black	Thicknesses: 2 3 4 5 6 8 mm
	경망성장관감물성	70 yellow	2 3 4 6 8 mm
		V PERFOR	ATED
		Colour: 07 beige	Thicknesses: 3 6 mm
70 yellow smooth	81 black smooth	shoes and in rea	cations: rial for soft bedding insoles in orthopaedic custom-made ady-made shoes, for cushioning for foot beddings, for cushio- the calcaneal spur.
			ning properties, excellent restoration capability. Washable used cell structure. Excellent tear resistance.
		Processing no easy to bond (po // 230° – 266° F	olychloroprene). Thermoformable at 110°-130° C
07 beige perforated			

nora[®] Lunatec EP expanded EVA sheets, smooth



Special properties for hygienic use

nora[®] **Lunatec EP** is an EVA material which was supplemented by further high-quality raw materials and thus now possesses new excellent properties. The material has a closed cell structure and especially high restoration capability, given a specifically light weight. Unlike open-cell materials made of polyure-thane (PU), sweat, ichor and other liquids cannot penetrate the material but can be removed hygienically from the surface.

Hardness: approx. 23 Shor	e A	
Density: approx. 0.21 g/c	cm ³	
Format: approx. 880 x 59	90 mm // 34.6"x23.2"	
Colours: 302 cream 350 mint	Thicknesses: 2 3 4 6 8 mm	

Intended applications:

cushioning sheets for inner shoes. For shaping elements for medium stresses, e.g. calf prostheses, as upper material for interim, therapy, and bathing shoes, for beddings and shock-absorbers in inner shoes.

Properties:

highly resilient, excellent restoration capability, low volume loss, smooth surface, closed cell structure, durable, hygienically washable.

Processing notes:

usual EVA bonding. Adapt contact pressure to the flexibility of the material, horizontal deformation is to be avoided. Thermoformable at $110^{\circ}-130^{\circ}$ C // $230^{\circ}-266^{\circ}$ F.

nora[®] Lunatec motion expanded EVA sheets, smooth, trimmed edges



for foot orthotics and damping in inner shoes, as a top

layer or for pressure relief, most of all for patients with

sensitive diabetic feet. As cushioning in classic orthoses

corsets. It reduces pain through minimising shear forces,

painful foot or joint diseases like rheumatism or for

and as a functional lining on support orthoses and

making it ideal for pressure sensitive areas.

Intended applications:

Hardness: approx. 12 Shore A **Density:** approx. 0.13 g/cm³ Format: Colours: approx. 1100x700 mm // 43.3"x27.5" 06 silk 56 stone grey Format: Colour: approx. 1400x1100 mm // 55.0"x43.3" 06 silk Thicknesses: 2|3|4|6|8 mm

Properties:

absorbs shearing forces and has extremely soft bedding properties. Can reduce pain and allows for new trust with every footstep. Excellent bedding and damping properties in the horizontal load plane. Closed cell structure, durable and hygienically washable.

Processing notes:

usual EVA bonding. Adapt contact pressure to the flexibility of the material. Thermoformable at 110°-130° C // 230°-266° F.

nora[®] Lunatec motion 20 expanded EVA sheets, smooth, trimmed edges



382 white

Intended applications:

for foot orthotics and damping in inner shoes, as a top layer or for pressure relief, most of all for patients > 100 kg with painful foot or joint diseases like rheumatism or for sensitive diabetic feet. As cushioning in classic orthoses and as a functional lining on support orthoses and corsets. It reduces pain through minimising shear forces, making it ideal for pressure sensitive areas.

Hardness: approx. 20 Shore A Density: approx. 0.18 g/cm³ Format: approx. 830x615 mm // 32.6"x24.2" Colour: **Thicknesses:** 2|3|4|6|8 mm 382 white

Properties:

Hardness: approx. 10 Shore A

Density:

Format:

Colour:

316 vanilla

approx. 0.27 g/cm3

absorbs shearing forces and has soft bedding properties. Can reduce pain and allows for new trust with every footstep. Excellent bedding and damping properties in the horizontal load plane. Hygienically closed cell structure and washable.

Processing notes:

usual EVA bonding. Adapt contact pressure to the flexibility of the material. Thermoformable at 110°-130° C // 230°-266° F.

nora[®] Astro med 10 light-weight expanded rubber



Processing notes: unlike nora® EVA material, nora® Astro med 10 is not thermoformable and is bonded in cold condition.

Intended applications:

approx. 1050x700 mm // 41.3"x27.6"

Thicknesses:

2|3|4.5|6|9 mm

cushioning in orthotics and prosthetics, heel and forefoot cushioning, continuous top cushioning layer of an insole, heel spur cavities for heel spur insoles, upper cushion for e.g. peroneal or ankle caps.

Cushioning sheets

	nora [®] Astro form 8	light-weight expanded rubber, trimmed edges
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	Density: approx. 0.21 g/cm ³		
	Format: approx. 770x560 mm // 30.3"x22.0"		
	Colour:Thicknesses:318 ice blue213141618 mm		
	Intended applications:		
318 ice blue	cushioning in orthotics and prosthetics, e.g. cushioning in forefoot replace- ment, Haglund heel cushioning, cushioning layer for diabetes-adapted footbed, heel spur cavities for heel spur insoles, upper cushioning, e.g. for peroneal or ankle caps.		
	Properties:		
	Extremely soft		
	Excellent recovery capability after compression		
	Low compression		
	Outstanding cushioning properties		
	Optimum shock absorbance		
	Thermoformable at a processing temperature of approx. 110° – 130° C // 230° – 266° F		
	 Hygienic & disinfectable due to the closed cellular surface 		
	Skin tolerability tested and certified by the Institute Dermatest		

Excellent bonding properties

nora® Astro form 15 light-weight expanded rubber, trimmed edges



339 sky blue

Hardness: approx. 15 Shore A Density: approx. 0.32 g/cm³ Format: approx. 840 x 520 mm // 33.1" x 20.5" Colour: Thicknesses: 339 sky blue 2|3|4|6 mm

Intended applications:

cushioning in orthotics and prosthetics, e.g. cushioning in forefoot replacement, Haglund heel cushioning, cushioning layer for diabetes-adapted footbed, heel pur cavities for heel spur insoles, upper cushioning, e.g. for peroneal or ankle caps.

Properties:

- Extremely soft
- Excellent recovery capability after compression
- Low compression
- Outstanding cushioning properties
- Thermoformable at a processing temperature of approx. 110°-130° C // 230°-266° F
- Hygienic & disinfectable due to the closed cellular surface
- Tested and certified skin tolerability by the Institute Dermatest
- Easy to die-cut
- Excellent bonding properties

Excellent recovery capability and closed cell structure

The material **nora**[®] **Astro form** is made of light cellular rubber with a unique composition of properties. It is very soft and resilient, yet still keeps its shape! With **nora**[®] **Astro form 8** and **nora**[®] **Astro form 15**, this material is now available in two types. Both have a closed cell structure, are hygienically washable and optimally thermoformable, and also exhibit particular softness and high permanent resilience and recovery capability after processing.

Whereas **nora**[®] **Astro form 8** is so soft that the Shore A hardness is scarcely measurable, **nora**[®] **Astro form 15** is firmer and tighter with a Shore A hardness of about 15 and a density of 0.32 g/cm³,

and exhibits even greater recovery capability. The practitioner can choose between these two types depending on the load conditions, use and area.

The closed cell structure prevents wound secretion and sweat, and thus germs, bacteria and fungi, from penetrating the material. Secretions adhering to the surface can by hygienically removed using commercially available disinfectants.

nora[®] Aero sorb M light-weight expanded rubber, trimmed edges



319 velvet red

Softness:		
M = medium		
Density:		
approx. 0.16 g/cm	3	
Format:		
approx. 800 x 550	mm // 31.5"x21.7"	
Colour:	Thicknesses:	
319 velvet red	2 3 4 6 mm	

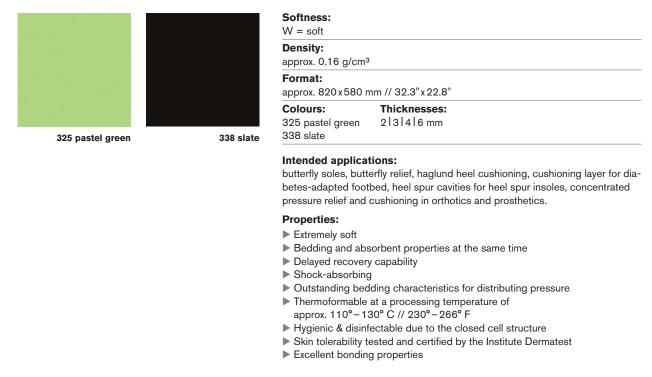
Intended applications:

butterfly soles, butterfly relief, haglund heel cushioning, cushioning layer for diabetes-adapted footbed, heel spur cavities for heel spur insoles, concentrated pressure relief and cushioning in orthotics and prosthetics.

Properties:

- Extremely soft
- Bedding and absorbent properties at the same time
- Delayed recovery capability
- Shock-absorbing
- Outstanding bedding characteristics for distributing pressure
- Thermoformable at a processing temperature of approx. 110°-130° C // 230°-266° F
- Hygienic & disinfectable due to the closed cell structure
- Skin tolerability tested and certified by the Institute Dermatest
- Excellent bonding properties

nora® Aero sorb W light-weight expanded rubber, trimmed edges



Extremely soft material with delayed recovery characteristics and closed cell structure

nora[®] **Aero sorb** is a material which is extremely soft and shockabsorbing in equal measure due to its markedly delayed recovery characteristics. This makes **nora**[®] **Aero sorb** suitable for installation in areas that have to remain free of pressure points or where pressure from concentrated loads has to be distributed as evenly as possible. **nora®** Aero sorb is a light cellular rubber with a unique composition of properties whose absorbent characteristics can make it ideal for reducing pain.

The closed cell structure prevents wound secretion and sweat, and thus germs, bacteria and fungi, from penetrating the material. Secretions adhering to the surface can be hygienically removed using commercially available disinfectants.

Naturally of ecological value: **LUNATUR WALNUT** RANGE

The annual global production of walnuts is about 1.5 million tonnes, and rising.

They taste good, and their health benefits are well-known. Compared with other nuts, the walnut has the highest content of an omega 3 fatty acid beneficial to the heart as well as valuable constituents like zinc, magnesium, iron, potassium, and many vitamins. The nuts are also said to have a prophylactic effect on diabetes, cardiovascular diseases, and cancer.

So what actually happens to the mass of shells encasing these valuable nuts?

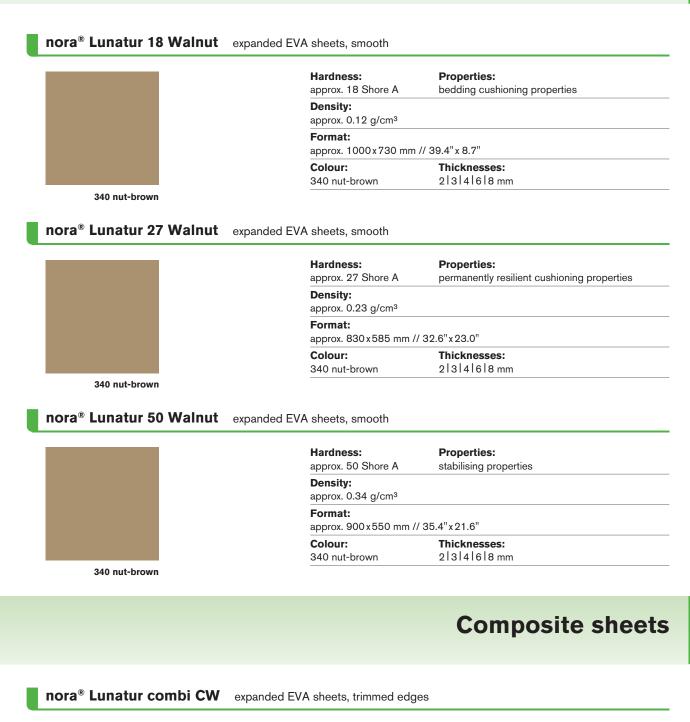
In regard to the sustainable and ecologically aware refinement of its EVA products, nora has made use of this valuable product to develop a range of materials that can be used to manufacture orthotics or insoles of great ecological value ...

The products in the **nora**[®] **Lunatur Walnut range** consist for a large part of finely ground walnut shells. We therefore use a natural, renewable raw material without interfering with the food chain. The goal of this development was to make practical use of a natural waste product and refine the EVA material with a valuable natural resource.

The outcome are **high quality EVA materials** of different properties that also generate a comfortable foot climate. The material's closed cell structure prevents

wound secretion and sweat, and thus germs, bacteria, and fungi, from penetrating the material. Secretions adhering to the surface can therefore be hygienically removed with a commercially available disinfectant.





The vulcanised combination of:



Format: approx. 1100x840 mm // 43.3"x33.1"

nora[®] Lunatur combi CW consists of nora[®] Lunatur 27 Walnut and nora[®] Lunatec cork H

(EVA layer with high cork content) and provides the ideal basis for orthopaedic footbeds of great ecological value and the permanent resilience and stabilisation of insoles, e.g. for counteracting abnormal strain on the musculoskeletal system from skew, flat, splay, or hollow feet.

nora® Lunatur 27 Walnut nora® Lunatec cork H permanently resilient cushioning stabilising properties properties Hardness:

approx. 27 Shore A Density: approx. 0.23 g/cm ³		approx. 50 Shore A Density: approx. 0.35 g/cm ³		
340 nut-brown	approx. 6 mm	205 cork	approx. 8 mm	

Intended applications:

nora[®] Lunatur combi CW shows outstanding edge stability for pressed insoles and has excellent grinding and bonding properties. Depending on the difficulty and type of treatment, Lunatur combi CW can be supplemented with additional, stabilising material, e.g. Norit, Lunacell, or Lunatur 50 Walnut or with a soft cushioning or bedding material, e.g. Lunatur 18 Walnut or Lunatur 27 Walnut at the heel and in the forefoot.

Processing notes:

thermoformable at 110°-130° C // 230°-266° F.

nora[®] Lunasoft SLW expanded EVA sheets, smooth

			Hardness: approx. 30 Shore Density: approx. 0.20 g/cn Format: approx. 1150x75 Colours: 07 beige	
07 beige	09 white	17 grey beige	81 black 09 white 17 grey beige 19 stone 35 medium brov 46 dark brown 56 stone grey	
			89 red 111 royal blue 351 petrol	2 3 4 6 mm
19 stone	35 medium brown	46 dark brown	insoles, foot bedc material for interin	ations: d shock-absorbing material for dings, and sport insoles, as upper n and bathing shoes, as shaping illient caps or as soft socket.
				nsionally stable, flexible and resi- nd hygienic thanks to closed cell
56 stone grey	81 black	89 red	Processing not thermoformable a	es: t 110°−130° C // 230°−266° F.
111 royal blue	351 petrol			

nora® Lunasoft SLW trendline expanded EVA sheets, smooth



4462 anthracite-orange

Hardness: approx. 30 Shore A

Density:

approx. 0.20 g/cm³ Format:

approx. 1300 x 900 mm // 51.2" x 35.4"

Colour:Thicknesses:4462 anthracite-orange2 | 3 mm

nora[®] Lunasoft SLW trendline is an attractive, patterned version of **nora[®] Lunasoft SLW.**

nora[®] Lunasoft SL expanded EVA sheets, smooth

07 beige	09 white	17 grey beige
19 stone	35 medium brown	46 dark brown
56 stone grey	78 dark blue	81 black

Hardness: approx. 40 Shore A	
Density: approx. 0.20 g/cm ³	
Format: approx. 1140x740 r	nm // 44.9"x29.1"
Colours: 07 beige	Thicknesses: 2 3 4 5 6 8 10 12 20
09 white 46 dark brown 81 black	2 3 4 6 8 10 12 and also 14 20 mm
 17 grey beige 19 stone 35 medium brown 56 stone grey 78 dark blue 	2 3 4 6 8 10 20 mm

nora® Lunasoft SL are very lightweight, smooth expanded EVA sheets which are used as lift and cushioning sheets as well as covering sheets.

Intended applications:

for beddings, insoles, sport insoles, soft sockets, and shaping elements of any kind.

Properties:

lightweight, flexible and dimensionally stable, good restoration capability, high walking comfort. Washable and hygienic thanks to the closed cell structure.

Processing notes:

usual EVA bonding. Adapt contact pressure to the flexibility of the material. thermoformable at 110°-130° C // 230°-266° F.

nora[®] Lunasoft SL color expanded EVA sheets, smooth

65 blue	69 orange	70 yellow
89 red	98 green	111 royal blue
348 lime	349 blackberry	

Hardness

Hardness:	
approx. 40 Shore	A
Density:	
approx. 0.20 g/cm	n ³
Format:	
approx. 1140 x 74	0 mm // 44.9"x29.1"
Colours:	Thicknesses:
65 blue	2 3 4 6 mm
69 orange	
70 yellow	
89 red	
98 green	
111 royal blue	
348 lime	
349 blackberry	
later de des alle	
Intended applic	ations:
elements. To cove	bles, sport insoles, and shaping er insoles, as midsole material
tor children's sho	es and as universal and skin-

for children's shoes and as universal and skinfriendly covering of surfaces or outer shell of a 2-layer socket.

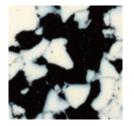
Properties:

lightweight, resilient, dimensionally stable. Washable and hygienic thanks to the closed cell structure.

Processing notes:

thermoformable at 110°-130° C // 230°-266° F.

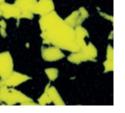
nora[®] Lunasoft SL color plus / quattro expanded EVA sheets, smooth



0281 white-black



3981 lilac-black



9581 lemon-black



4457 orange-blue



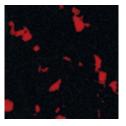
9681 pink-black



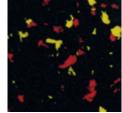
4444 four-coloured

Hardness: approx. 40 Shore A	
Density: approx. 0.20 g/cm ³	
Format: approx. 1280x890 mn	n // 50.4"x35.0"
Colours: 0281 white-black 9581 lemon-black 9681 pink-black	Thicknesses: 2 3 mm

nora[®] Lunasoft SL trendline expanded EVA sheets, smooth



4450 black-red



4451 black-red-yellow



4463 camouflage

Hardness:

approx. 40 Shore A **Density:**

approx. 0.20 g/cm³

Format: approx. 1280 x 890 mm // 50.4" x 35.0"

for beddings, insoles, sport insoles, and shaping elements. To cover insoles, as midsole material for children's shoes and as universal and skinfriendly covering of surfaces or outer shell of a

Colours: 4450 black-red 4451 black-red-yellow 4463 camouflage 4445 cork look

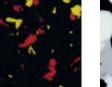
2-layer socket.

Intended applications:

Thicknesses: 213 mm

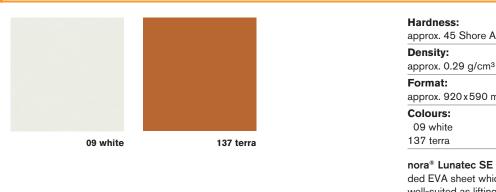


4445 cork look





nora[®] Lunatec SE expanded EVA sheets, smooth



Hardness: approx. 45 Shor	re A	
Density:		
approx. 0.29 g/d	cm ³	
Format:		
approx. 920 x 59	90 mm // 36.2"x 23.2"	
Colours:	Thicknesses:	
09 white	6 10 14 mm	
137 terra		

nora® Lunatec SE is a stable and resilient expanded EVA sheet which is above all particularly well-suited as lifting material for sports and street shoes as well as orthopaedic treatment. This high-quality lifting material is characterised by an excellent restoration capability and resilience as well as high dimensional stability.

Intended applications:

for insoles, sport insoles and foot beddings as stabilising shaping element, e.g. to support the back-foot, for shaping elements (e.g. in case of arthroses, ankle caps, paralysis caps, and semirigid tongues) or as upper material for interim and bathing shoes.

Processing notes:

thermoformable at $120^{\circ} - 170^{\circ}$ C // $248^{\circ} - 338^{\circ}$ F, formable in single-block process (for foot beddings).

nora[®] Lunasoft AL expanded EVA sheets, smooth



Hardness: approx. 53 Shore A **Density:** approx. 0.26 g/cm³ Format: approx. 920 x 560 mm // 36.2" x 22.0" Colours: Thicknesses: 07 beige 6|10|20 mm 17 grey beige 19 stone 56 stone grey 09 white 6|8|10|20 mm 46 dark brown 6|10|14|20 mm 6|8|10|14|20 mm 81 black

nora[®] **Lunasoft AL** is a lightweight and stable expanded EVA sheet which is above all particularly suited as lifting material for sports and leisure shoes and flexible street shoes. This high-quality lifting material is characterised by low weight and high stability.

Intended applications:

for insoles, sport insoles and foot beddings as stabilising shaping element, e.g. to support the backfoot.

Processing notes:

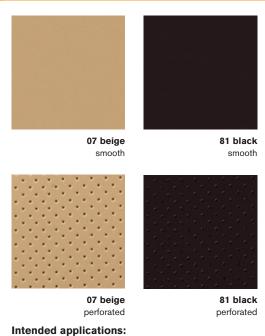
thermoformable at 120°-170° C // 248°-338° F.

81 black

nora[®] Lunalight A expanded EVA sheets, smooth

			Hardness: approx. 60 Shore A	
			Density: approx. 0.35 g/cm ³	
			Format: approx. 860 x 550 m	m // 33.9"x21.7"
			Colours: 07 beige	Thicknesses: 4 6 8 10 12 20 mm
05 light beige	07 beige	09 white	09 white 17 grey beige 19 stone 46 dark brown	
			56 stone grey 60 bright grey 78 dark blue	
			05 light beige 35 medium brown 41 pale brown 80 anthracite 89 red	6 8 10 20 mm
17 grey beige	19 stone	35 medium brown	352 jeans blue	
			81 black	3 4 5 6 8 10 12 14 and also 16 20 24 mm
			for elevation of outer midsoles, for shell b Properties:	les (for butterfly or joint rolls), r and inner edges, for ottoms. I rigid, dimensionally stable.
41 pale brown	46 dark brown	56 stone grey	usual EVA bonding, 120° – 170° C // 24	thermoformable at
60 bright grey	78 dark blue	80 anthracite		
81 black	89 red	352 jeans blue		
OT DIACK	03 100	552 Jeans Dive		

nora® Lunacell expanded EVA sheets, smooth and perforated



Hardness: approx. 68 Shore A

Density: approx. 0.37 g/cm³

SMOOTH

Format: approx. 850x540 mm // 33.5"x21.3"			
Colours: 07 beige	Thicknesses: 2 3 4 5 6 8 10 12 mm		
81 black	10 20 mm		

SMOOTH AND PERFORATED

Format:	
approx. 1080 x 8	350 mm // 42.5"x33.5"
Colours:	Thickness:
07 beige	1.5 mm

Colours:	I hickness:	
07 beige	1.5 mm	
81 black		

Properties:

anti-slip, scratch- and tear-resistant, highly stable, and unsusceptible to deformation, particularly hard and rigid, excellent trim properties. particularly durable for thin insoles.

Processing notes:

usual EVA bonding, thermoformable at 120°-170° C // 248°-338° F, depending on thickness.

nora® Norit L Semi-expanded sheets, smooth

covering material for smooth or formed insoles. Lift

Thomas heels with frontal median, for ladies' block

parts; for insoles and foot beddings as high-stress

heels, for wedge bottoms, for midsoles and stabilising

sheets for working shoes with high demands, for



reinforcing element.

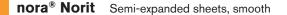
336 sandy

Hardness: approx. 93 Shore A Density: approx. 0.90 g/cm³ Format: approx. 1000x800 mm // 39.4"x31.5" Colour: **Thicknesses:** 336 sandy 213 mm

Properties:

high dimensional stability and resilience, excellent fatigue bending properties, ideal for forming, stitching, punching, cutting, and polishing to a velvet finish.

Processing notes: excellent gluing properties, thermoformable at $110^{\circ}\text{--}130^{\circ}\,C$ // $230^{\circ}\text{--}266^{\circ}$ F; after forming, leave to cool down completely.



Hardness: approx. 95 Shore A	
Density:	
approx. 1.00 g/cm ³	
Format: approx. 1000x795 n	nm // 39.4"x31.3"
Colour: 25 leather coloured	Thicknesses: 2 3 mm

25 leather coloured

Intended applications:

stabilising material for orthopaedic shoe elements, e.g. stiff tongues, ankle supports, peroneal caps, heel caps, and insoles; as a lasting allowance; or for last repairs. Also ideal as a place holder on lasts.

Properties:

high dimensional stability and resilience. Excellent bending endurance, can be excellently sewn, cut, milled, and ground. Wearresistant and washable.

Processing notes: easy to bond with polychloroprene adhesive, thermoformable at 120°-150° C // 248°-302° F.

Composite sheets

nora[®] Lunatec combi sheets are vulcanised compositions of proven nora[®] qualities. Permanently bonded ...



nora[®] **Lunatec combi** is an innovative product development in composite sheets: two or three different materials are vulcanised together already during the manufacturing process and guarantee secure strength, without any bonding.

nora[®] Lunatec combi is the ideal basis for the manufacture of foot beddings and insoles in orthopaedic shoe engineering.

Permanently bonded ... these are your benefits:

- No gluing required.
- ▶ No displacement of the different materials when processing.
- A higher retention of volume because you save at least one deep drawing.
- The composite sheets are thermoformable between 120°-130° C // 248°-266° F.
- Further advantages as compared to glued products: No bubble formation at the joints and no hardening because of the adhesive film.

Benefit from the efficient insole manufacture thanks to time and cost savings.

In orthopaedics shoe engineering, different material combinations are used depending on diagnosis, symptoms, and weight of the patients. We already vulcanised a lot of different combinations of materials with bedding, permanently resilient, or stabilising functions for you. And you decide which composite sheet is suitable for the individual case and which materials are to be added to guarantee an ideal treatment.

nora[®] Lunasoft AL stabilising properties

approx. 52 Shore A

approx. 0.26 g/cm³

Thickness:

approx. 8 mm

Hardness:

Density:

Colour:

09 white

nora® Lunatec combi 1 expanded EVA sheets, trimmed edges

The vulcanised combination of:

25 Shore A 52 Shore A 14 mm

Format: approx. 925x580 mm // 36.4"x22.8"

nora[®] Lunalastik permanently resilient properties	cushioning
Hardness: approx. 25 Shore A	
Density: approx. 0.23 g/cm ³	
Colour: 07 beige	Thickness: approx. 6 mm

Intended applications:

basis for orthopaedic foot beddings and insoles with permanently resilient and stabilising function for increased stress. Suitable for geriatric foot, diabetes, and rheumatism, but also suitable as basis for sports insoles.

nora[®] Lunatec combi 2 expanded EVA sheets, trimmed edges

The vulcanised combination of:



Format: approx. 880x600 mm // 34.6"x23.6"

nora®	Lunairflex	

bedding cushioning properties		permanently resilient cushioning properties	
Hardness:		Hardness:	
approx. 22 Shore A		approx. 30 Shore A	
Density:		Density:	
approx. 0.12 g/cm ³		approx. 0.20 g/cm ³	
Colour:	Thickness:	Colour:	Thickness:
07 beige	approx. 6 mm	17 grey beige	approx. 10 mm

Intended applications: basis for orthopaedic foot beddings, in particular diabetes-adapted foot beddings with bedding and at the same time permanently resilient function. Suitable for moderate stress given sensitive feet (e.g. geriatric foot), rheumatism, and advanced-stage diabetes.

nora[®] Lunatec combi 3 expanded EVA sheets, trimmed edges

The vulcanised combination of: nora[®] Lunasoft SLW nora[®] Lunalastik permanently resilient cushioning permanently resilient cushioning 25 Shore A properties properties approx. Hardness: Hardness: 16 mm 30 Shore A approx. 25 Shore A approx. 30 Shore A Density: **Density:** approx. 0.23 g/cm³ approx. 0.20 g/cm³ Format: approx. 870x580 mm // 34.3"x22.8" Colour: Thickness: Colour: Thickness: 07 beige 19 stone approx. 10 mm approx. 6 mm

Intended applications:

basis for orthopaedic foot beddings, in particular diabetes-adapted foot beddings with permanently resilient function. Best suitable for medium stress for the management of geriatric foot, and advanced-stage diabetes and rheumatism.

nora[®] Lunalastik

approx. 25 Shore A

properties

Hardness:

permanently resilient cushioning

Thickness: approx. 6 mm

nora[®] Lunatec combi 4 expanded EVA sheets, trimmed edges

The vulcanised combination of:



// 34.3"x21.3"

nora® Lunairflex

bedding cushioning properties

Hardness: approx. 22 Shore A

Density:		Density:	
approx. 0.12 g/cm ³		approx. 0.23 g/cm ³	
Colour:	Thickness:	Colour:	
07 beige	approx. 3 mm	09 white	

Intended applications:

basis for orthopaedic foot beddings, in particular diabetes-adapted foot beddings with bedding and at the same time permanently resilient function. Best suitable for increased stress for the management of geriatric foot, and advanced-stage diabetes and rheumatism. The combination with a stabilising nora® Luna product, e.g. Lunasoft AL, Lunalight A or Lunacell is recommended.

nora[®] Lunatec combi 5 expanded EVA sheets, trimmed edges

The vulcanised combination of:

	25 Shore A 30 Shore A	approx. 7 mm
Format: approx. 950 // 37.4"x23		

nora® Lunalastik

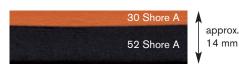
nora [®] Lunalastik		nora [®] Lunasoft SLW	
permanently resilient cushioning		permanently resilient cushioning	
properties		properties	
Hardness:		Hardness:	
approx. 25 Shore A		approx. 30 Shore A	
Density: approx. 0.23 g/cm	J ³	Density: approx. 0.20 g/cm	1 ³
Colour:	Thickness:	Colour:	Thickness:
60 bright grey	approx. 3 mm	111 royal blue	approx. 4 mm

Intended applications:

basis for efficiently finished, thin, permanently resilient insoles, e.g. a long-soled insole with optimal soft bedding in the forefoot. Suitable for the cushioning of orthoses, prostheses, and soft sockets.

nora[®] Lunatec combi 6 expanded EVA sheets, trimmed edges

The vulcanised combination of:



Format: approx. 880x560 mm // 34.6" x 22.0"

nora[®] Lunasoft SLW

Colour: 137 terra

permanently resilient cushioning properties	stabil
Hardness:	Hard
approx. 30 Shore A	appro
Density:	Dens
approx. 0.20 g/cm ³	appro

nora[®] Lunasoft AL

ilising properties

dness: ox. 52 Shore A sitv:

) g/cm ³		approx. 0.26 g/cm ³		
	Thickness:	Colour:	Thickness:	
	approx. 4 mm	81 black	approx. 10 mm	

Intended applications: basis for efficiently finished sporty and modern insoles or foot beddings, e.g. long-soled sports insoles.

Composite sheets



expanded EVA sheets, trimmed edges

properties Hardness:

Density:

Colour:

07 beige

approx. 30 Shore A

approx. 0.20 g/cm³

The vulcanised combination of:

	30 Shore A	T ''		
	40 Shore A	🔰 7 mm		
Format: approx. 1180x840 mm				
// 46.5"x33.1'				

nora® Lunasoft SLW

Thickness:

approx. 3 mm

nora® Lunasoft SL stabilising properties

Hardness:

approx. 40 Shore A	
Density: approx. 0.20 g/cm ³	
Colour:	Thickness:
19 stone	approx. 4 mm

Intended applications:

permanently resilient cushioning

ideal basis for the efficient manufacture of an insole, soft-wall funnel-shaped sleeve or a soft socket. In combination with other nora® Luna products, this material is the perfect basis for orthopaedic foot beddings for the management of geriatric feet, diabetes and rheumatism.

nora[®] Lunatec combi 8 expanded EVA sheets, trimmed edges

The vulcanised combination of:



Format: approx. 880x560 mm // 34.6" x 22.0"

The vulcanised combination of:

Format: approx. 1200x960 mm

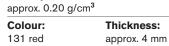
// 47.1"x37.8"

nora® Lunatec EP

permanently resilient cushioning properties

Hardness: approx. 22 Shore A

Density:



nora® Lunatec SE

stabilising properties

Hardness:

approx. 45 Shore A **Density:** approx. 0.28 g/cm³ Colour: Thickness: 81 black

approx. 8 mm

Intended applications:

basis for efficiently finished sporty and modern insoles or foot beddings with high restoration capability, e.g. long-soled sports insoles.

nora[®] Lunatec combi motion 1

12 Shore A

40 Shore A

approx.

16 mm

expanded EVA sheets, trimmed edges

nora[®] Lunatec motion nora® Lunasoft SL bedding properties stabilising properties Hardness: Hardness: approx. 12 Shore A approx. 40 Shore A **Density:** Density: approx. 0.13 g/cm³ approx. 0.20 g/cm³ Colour: Thickness: Colour: Thickness: 06 silk approx. 6 mm 27 light blue approx. 10 mm

The upper layer of nora® Lunatec motion is extremely soft, making it ideal especially as a bedding for people with foot pain and as an absorption of shearing forces caused by walking. A large part of the load of the musculoskeletal system is being removed, and therefore the pain. What must be highlighted here as well are its excellent bedding and damping properties in the horizontal load plane. The objective of treatment with nora® Lunatec combi motion 1 may be, for instance, to minimise the shearing forces between the footbed and the sole, and in this manner alleviate the pain. The soft feel enables the patient to consciously place their feet, despite previous periods of pain.

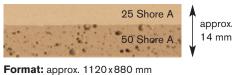
Intended applications:

for insoles and damping inside a shoe; most of all for patients with painful foot or joint diseases like rheumatism or for sensitive diabetic feet. Useful in areas that are very pressure sensitive, to minimise pain through lesser shear forces.

nora® Lunatec cork H

nora[®] Lunatec combi cork 1 expanded EVA sheets, trimmed edges

The vulcanised combination of:



// 44.1"x34.6"

nora® Lunatec combi cork 1 is a vulcanised composite sheet with a stabilising EVA layer containing a high cork fraction. This composite sheet is therefore the ideal basis for the production of durable insoles. In addition, the permanently resilient cushioning layer presents a roughened velvety surface ideal for attaching leather covers.

nora[®] Lunalastik

nora sanaras			
permanently resilient cushioning properties		stabilising properties	
Hardness: approx. 25 Shore A Density: approx. 0.23 g/cm ³		Hardness: approx. 50 Shore A	
		Density: approx. 0.35 g/	cm ³
Colour: 07 beige	Thickness: approx. 6 mm	Colour: 205 cork	Thickness: approx. 8 mm

Intended applications:

permanently resilient and stabilising basis for orthopaedic footbeds and supporting insoles, e.g. for counteracting abnormal strain on the musculoskeletal system from skew, flat, splay, or hollow feet. Depending on the difficulty and type of treatment, **nora**[®] **Lunatec combi cork 1** can be supplemented with additional solid, stabilising material, e.g. **Norit, Lunacell,** or **Lunalight**.

nora® Lunatec combi T1 expanded EVA sheets, trimmed edges

The vulcanised combination of:

The vi

Forma



The 3-layer composite sheet **nora[®] Lunatec combi T1** is a material which is above all specifically suitable for the treatment of rheumatics and clinical pictures with especially sensitive feet. The special feature of **nora[®] Lunatec combi T1** is the softness of its center layer. Embedded in two harder layers, it minimises the occurring shear forces with every foot strike which leads to ease of the musculoskeletal system. Thanks to the special structure of this composite sheet, it offers **excellent cushioning and damping properties in the horizontal load plane.** This effect is the

nora[®] Lunasoft SLW nora[®] Lunasoft Z nora[®] Lunasoft AL Hardness: Hardness: Hardness: approx. 30 Shore A approx. 25 Shore A approx. 52 Shore A Density: Density: Density: approx. 0.20 g/cm³ approx. 0.17 g/cm³ approx. 0.26 g/cm³ Colour: Colour: Colour: 80 anthracite 307 medium grey 09 white Thickness: Thickness: Thickness: approx. 3 mm approx. 4 mm approx. 8 mm

result of the layers being vulcanised. The materials with different hardnesses were fused in a smooth transition and there are no bonded layers which could interfere negatively with this function.

Intended applications:

orthopaedic foot beddings with excellent cushioning and damping properties in the horizontal load plane, specifically for rheumatics and clinical pictures with sensitive feet. Depending on the difficulty and the type of the treatment, **nora**[®] **Lunatec combi T1** can be supplemented by a further solid stabilising material such as e.g. **Norit, Lunacell,** or **Lunalight.**

nora[®] Lunatec combi motion T2 expanded EVA sheets, trimmed edges

NEW

ulcanised combination of:		nora [®] Lunatec motion	nora [®] Lunasoft Z	nora [®] Lunatec CAD 35
12 Shore A	•	Hardness: approx. 12 Shore A	Hardness: approx. 25 Shore A	Hardness: approx. 35 Shore A
25 Shore A	approx. 20 mm	Density: approx. 0.13 g/cm ³	Density: approx. 0.16 g/cm ³	Density: approx. 0.20 g/cm ³
35 Shore A	` ↓	Colour: 56 stone grey	Colour: 345 green	Colour: 60 bright grey
nat: approx. 1000x625 mm // 39.4"x31.5"		Thickness: approx. 7 mm	Thickness: approx. 5 mm	Thickness: approx. 8 mm

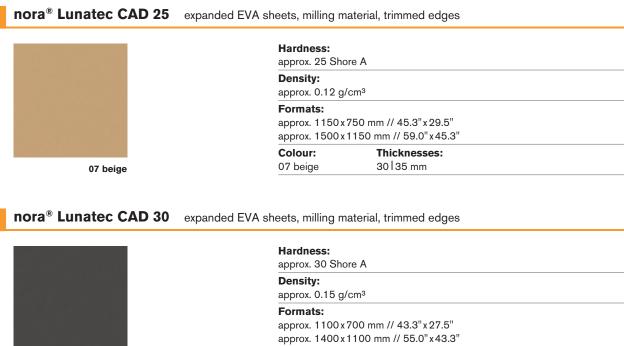
The 3-layer EVA composite sheet **nora®** Lunatec combi motion T2 is a material that is especially suited for the treatment of **painful and pressure sensitive** feet. The material composition combines outstanding functionality, characteristic softness and low weight. The top layer made from Lunatec motion absorbs shear forces caused by walking and has extremely soft bedding properties. The excellent bedding and absorption properties, also in the horizontal load plane, ensure optimum pressure distribution and concentrated pressure relief. In this way, especially feet with painful areas can be treated in the best possible way. With their **permanently elastic** and **stabilising** properties, the two lower layers create the ideal structure for supporting sensitive feet. The layers, which have different hardnesses, are fused with each other in a smooth transition.

Intended applications:

Because of the total thickness of approx. 20 mm, **nora**[®] **Lunatec combi motion T2** is ideal for the manufacture of thicker orthopaedic foot beddings, soft bedding insoles, diabetes-adapted foot beddings or beddings for orthopaedic shoes. The foot beddings can be manufactured in a deep-drawing process, saving time and money, without the use of adhesive.

Milling sheets

80 anthracite



 Colour:
 Thicknesses:

 80 anthracite
 30 | 35 mm

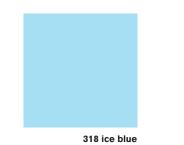
nora® Lunatec CAD 35 expanded EVA sheets, milling material, trimmed edges

	Hardness: approx. 35 Shore	A	
	Density: approx. 0.20 g/cm	3	
		0 mm // 45.6"x30.3" 60 mm // 60.6"x45.6"	
60 bright grey	Colour: 60 bright grey	Thicknesses: 30 35 mm	

nora[®] Lunatec CAD 45 expanded EVA sheets, milling material, trimmed edges



nora[®] Lunatec CAD 55 expanded EVA sheets, milling material, trimmed edges



Hardness:		
approx. 55 Shore	A	
Density:		
approx. 0.30 g/c	m ³	
Formats:		
approx. 1000 x 6	50 mm // 39.3"x 25.6"	
approx. 1300 x 10	000 mm // 51.1"x39.3"	
Colour:	Thicknesses:	
318 ice blue	30 35 mm	

Milling sheets

nora[®] Lunatec combiCAD 1 expanded EVA sheets, milling material, trimmed edges

The vulcanised combination of:



nora[®] Lunatec CAD 45 nora[®] Lunasoft SLW Hardness: Hardness: approx. 45 Shore A approx. 30 Shore A **Density:** Density: Stabilising layer approx. 0.22 g/cm³ approx. 0.20 g/cm³ Colour: Colour: Colour: 56 stone grey 137 terra 80 anthracite **Thickness:** Thickness: Thickness: approx. 24 mm approx. 6 mm approx. 2 mm

Formats: approx. 1120x740 mm // 44.1"x29.1" approx. 1480x1120 mm // 58.2"x44.1"

nora[®] Lunatec combiCAD 2 expanded EVA sheets, milling material, trimmed edges

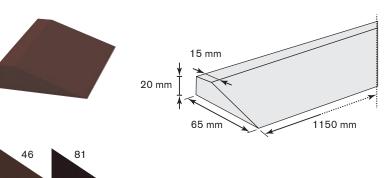
The vulcanised combination of:		nora [®] Lunatec CAD 35	nora [®] Lunasoft Z	
	•	Hardness: approx. 35 Shore A	Hardness: approx. 25 Shore A	
	approx.	Density: approx. 0.17 g/cm ³	Density: approx. 0.16 g/cm ³	Stabilising layer
35 Shore A	35 mm	Colour: 70 yellow	Colour: 131 red	Colour: 81 black
25 Shore A		Thickness: approx. 25 mm	Thickness: approx. 7 mm	Thickness: approx. 3 mm
25 Shore A	¥	approx. 25 mm	approx. 7 mm	approx. 3 mm

Formats: approx. 1120x750 mm // 44.1"x29.5" approx. 1500x1120 mm // 59"x44.1"

nora® Lunatec combiCAD 1 and 2 are an innovative product development in milling sheets. Three different expanded EVA qualities are vulcanised together already during the manufacturing process and guarantee secure strength, without any bonding. The development aimed at combining the optimal milling behaviour and the excellent functional properties of **nora®** Lunatec CAD materials with the enormous advantages of vulcanised composite sheets and thus to obtain an optimised processing. The difference can be seen when processing the **nora**[®] milling materials: the material can be excellently milled and the values for elongation at fracture, tensile strength, and replication are excellent. Also there are no noticeable irregularities as results of irritating adhesive layers.

Lifting wedge strips

nora® Lunasoft SLW wedge expanded EVA wedge strips, smooth



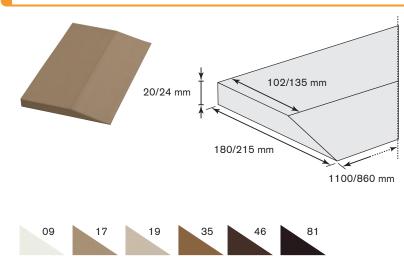
Hardness:

approx. 30 Shore A Density: approx. 0.20 g/cm³ Format: approx. 1150x65x20 mm // 45.3"x2.6"x0.8" Colours: 46 dark brown 81 black

Properties:

excellent shock-absorbing properties. High walking comfort thanks to a combination of very low Shore hardness, low weight and high stability.

nora[®] Lunalight K expanded EVA lifting wedge strips, smooth



Hardness:

approx. 60 Shore A

Density: approx. 0.35 g/cm³

Format:

approx. 1100x180x20 mm // 43.3"x7.1"x0.8"

Colours:

09 white

17 grey beige
 19 stone
 35 medium brown

46 dark brown

81 black

Formats:

approx. 860x215x24 mm // 33.8"x8.5"x0.9" approx. 860x215x20 mm // 33.8"x8.5"x0.8"

Colour: 81 black

Format:

approx. 1100x180x24 mm // 43.3"x7.1"x0.9"

Colours:

46 dark brown

81 black

nora[®] **Lunalight K** are the ideal wedge strips for economic heel built-up.

nora[®] Supersorb Hardness: approx. 28 Shore A Density: approx. 1.09 g/cm³ Format: Profile: approx. 780 x 525 mm // 30.7" x 20.7" 13 Rippled Colour: Thicknesses: 82 brick red 2|4|5 mm 82 brick red Intended applications: very well suited for heel damping and cushioning in particular of sports shoes, function from approx. 300 kg of tread force. Both shock-absorbing and resilient, cushioning properties. Shock absorption at a thickness of 5 mm: approx. 95%. **Processing notes:** sand slightly and bond with polychloroprene adhesive. When roughening or sanding, only press slightly onto the abrasive belt. In order to make full use of the visco-elastic properties of the material in all directions, do not bond on the complete surface, if possible. nora® Orthosorb Hardness: approx. 20 Shore A **Density:** approx. 1.09 g/cm³ Format: Profile: approx. 780 x 525 mm // 30.7" x 20.7" 13 Rippled Colour: Thicknesses: 98 green 2|3|4 mm 98 green Intended applications: very well suited for heel damping and cushioning in particular for orthopaedic shoes. As compared to nora[®] Supersorb, a lesser dampening of nora[®] Orthosorb ensures a better cushioning and higher resilience, up to a tread force of approx. 300 kg. This corresponds to the walking load of a person of approx. 80 kg. Shock absorption at a thickness of 4 mm: approx. 83%.

Puffergummi

nora® Schweizer Puffergummi expanded rubber sheets, smooth



Hardness: approx. 23 Shore A Density: approx. 0.35 g/cm³ Format: approx. 840 x 520 mm // 30.1" x 20.4" Colour: 81 black 12 mm

nora[®] Schweizer Puffergummi is the first choice for applications requiring high resilience and shock-absorbance as well as dimensional stability.

Properties:

excellent shock-absorbing properties. Excellent walking comfort thanks to a combination of very low Shore hardness and a high restoration capability.

Outsole material

nora[®] Lunasoft



46 dark brown



81 black

Hardness:

approx. 50 Shore A **Density:**

approx. 0.38 g/cm³

PROFILE: 78 COARSE WAVE

 Format:

 approx. 1040 x 800 mm // 40.9" x 31.5"

 Colours:
 Thickness:

46 dark brown 81 black

Thickness: n 8 mm

05 light beige	07 beige	09 white
17 grey beige	19 stone	35 medium brown
41 pale brown	19 stone	35 medium brown

PROFILE: 97 PASTILLE Format:

 approx. 800x520 mm // 31.5"x20.4"

 Colours:
 Thicknesses:

 05 light beige
 4 | 6 mm

07 beige 41 pale brown **Colours:** Thicknesses: 4|6|8 mm 17 grey beige 19 stone 35 medium brown 56 stone grey 60 bright grey 78 dark blue Colours: Thicknesses: 09 white 4|6|8|10 mm 46 dark brown

81 black

nora[®] **Lunasoft** is an expanded EVA soling sheet, especially developed for orthopaedic shoe engineering. The **Lunasoft** grade is the ideal combination of low weight and excellent abrasionresistance. This soling sheet is specifically lightweight, flexible, resilient, dimensionally stable and is characterised by a high walking comfort.

The pastille profile of **nora**[®] has become a classic among the lightweight and resilient soling materials for repairs and original outfit. The non-directional "nora" in the profile makes this soling sheet a branded product with recognition factor and documents the high quality level of **nora**[®] premium products.

Intended applications:

- for sports and leisure shoes
- for resilient street shoes
- for orthopaedic shoes
- for interim and bathing shoes

Processing notes:

81 black

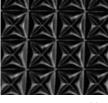
- usual EVA bonding
- adapt contact pressure to the flexibility of the material
- thermoformable at 120°-170° C // 248°-338° F
- bonding with polychloroprene adhesives
- PVC adhesives are not recommended

78 dark blue

 $\mathbf{nora}^{\texttt{B}}$ Astro Soft are anti-slip soling sheets made of expanded rubber. Its low weight is a paramount requirement for modern outsole sheets, alongside premium quality and minimum abrasion.

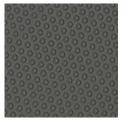
nora[®] Astro Soft





46 dark brown

81 black



56 stone grey



81 black



17 grey beige



81 black



80 anthracite

46 dark brown

The colours available with the nora® Astro Soft assortment and those used for the nora® EVA materials are perfectly harmonised and combinable.

Hardness:

approx. 45 Shore A Density: approx. 0.40 g/cm³

PROFILE: 09 COARSE CROSS PATTERN

Format: approx. 820x510 mm // 32.2"x20.1"			
Colours:	Thicknesses:		
46 dark brown	618 mm		
81 black			

PROFILE: 87 MINI NON-SLIP

Thicknesses:

618 mm

Format: approx. 820 x 510 mm // 32.2" x 20.1" Colours:

56 stone grey 80 anthracite 81 black

Format:

approx. 800 x 485 mm // 31.5" x 19.1"

Colour: Thickness: 81 black 4 mm

PROFILE:	96 BLOCK FINE
Format:	
approx. 840 x 510	mm // 33.1"x 20.1"
Colours:	Thicknesses:
17 grey beige	4 6 8 mm
46 dark brown	
81 black	

nora® Astro Soft profile 96 block fine is the ideal outsole for elegant and sporty footwear. The nondirectional "nora" in the profile makes this soling sheet a branded product with recognition factor.

Soling sheets

nora® Astrolight are anti-slip soling sheets made of expanded rubber. When developing the Astrolight grade, particular attention was directed to maintain the known good properties of Astro and at the same time to reduce the weight of the material.

The result: nora® Astrolight has a weight which was reduced by approx. 20%. Low weight, excellent abrasion and extraordinary resilience make Astrolight the soling sheet for sophisticated demands in repair, shoe finishing, and production of flexible footwear.

nora[®] Astrolight Star







46 dark brown

Hardness:

approx. 50 Shore A

Density: approx. 0.50 g/cm³

PROFILE: 64 STAR

Format: approx. 940x535 mm// 37.0"x21.1" Thicknesses: Colours: 416 mm 09 white 19 stone 46 dark brown 81 black



81 black

81 black

nora[®] Astrolight Delta



89 red

352 jeans blue

Hardness:

approx. 50 Shore A

approx. 0.50 g/cm³

PROFILE: 95 DELTA

approx. 950x535 mm // 37.4"x21.1"

olours:	Thicknesses:
09 white	416 mm
17 grey beige	
19 stone	
41 pale brown	
46 dark brown	
56 stone grey	
81 black	
89 red	
52 jeans blue	

The profile 95 delta means an extraordinary look and safe tread. The small triangles of the profile are arranged to form a hexagon. The brand nora® harmoniously and non-directionally fits into the product range.

 $\mathbf{nora}^{\texttt{®}}$ \mathbf{Astro} are anti-slip soling sheets made of expanded rubber. With its low specific weight and its high slip- and abrasionresistance, this soling grade is thus in particular suitable for use in orthopaedic shoes, shoe finishings, and demanding shoe repairs.

The colours of the nora® Astro range are matched to the colours of the nora® EVA materials and can be ideally combined.

nora[®] Astro



57 smoke



81 black



Hardness:	Density:
approx. 50 Shore A	0.65 g/cm ³

PROFILE: 58 COARSE WAVE

Format: approx. 1020x880 mm // 40.2"x34.6"

Colours:	Thickness:
57 smoke	6 mm
81 black	

PROFILE: 62 MEDIUM CREPE

Thickness:

6 mm

approx. 880 x 510 mm // 34.6" x 20.1"



57 smoke



81 black

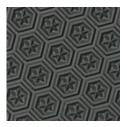


101 leather brown

09 white



35 medium brown



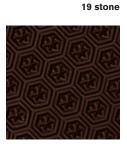
56 stone grey



17 grey beige

41 pale brown

78 dark blue



46 dark brown



81 black

PROFILE: 64 STAR

Formats:

Format:

Colours:

57 smoke

81 black 101 leather brown

approx. 860 x 500 mm // 33.9" x 19.7" approx. 880 x 510 mm // 34.6" x 20.1"

Colours:	Thicknesses:	
09 white	416 mm	
17 grey beige		
19 stone		
35 medium brown		
41 pale brown		
46 dark brown		
56 stone grey		
78 dark blue		
81 black		
Format:		
approx. 880 x 510 m	m // 34.6"x 20.1"	
Colour:	Thickness:	
81 black	8 mm	

Soling sheets

nora[®] Astro



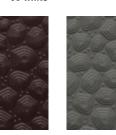


57 smoke





09 white



46 dark brown



17 grey beige

56 stone grey





80 anthracite

V PROFILE: 65 SUCTION CUP

Format: approx. 1020x880 mm // 40.2"x34.6 Thicknesses: **Colours:** 57 smoke 516 mm 81 black

PROFILE: 110 GEO

Format: approx. 880x510 mm // 34.6"x20.1"

Colours:	
09 white	
17 grey beige	
19 stone	
46 dark brown	
56 stone grey	
80 anthracite	
81 black	

The profile 110 GEO is non-directional, has good grip, is multilayered and is spread over four to five different profile levels. Due to the making of the profile stones and dirt do not stick to the sole.

Thicknesses: 416 mm



81 black



60 bright grey





70 yellow



81 black

▼ PROFILE: 111 SUNFLOWER

Format:

approx. 910x520 mm // 35.8"x20.5"

Colours:	Thickness:	
60 bright grey	5 mm	
70 yellow		
81 black		
368 grass green		
376 deep blue		

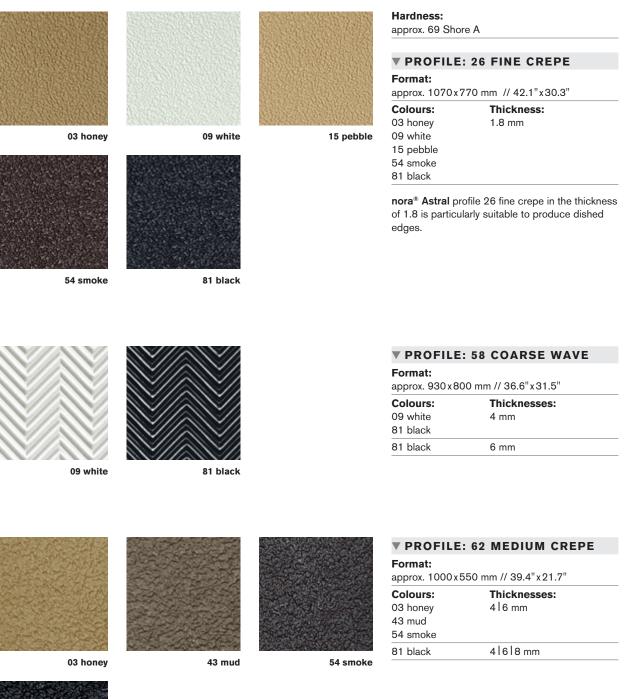
The nora® Astro Sunflower profile 111 is modern, has good grip, is multilayered and offers safe tread. The non-directional design of the individual elements means that this soling sheet is very versatile in its usage. The type of profile prevents stones and dirt from getting stuck.

368 grass green

376 deep blue

nora® Astral are soling sheets made of transparent compact rubber for both sole and heel areas. The Astral grade is extremely wear- and slip-resistent and is characterised by a high level of extensibility. Thanks to the resilient special mixture with a hardness of approx. 69 Shore A, an excellent walking comfort is obtained. **nora**[®] **Astral** is suitable both for high-quality repairs and for use as outsoles for orthopaedic shoe finishing and orthopaedic shoes. The variety of profiles and colours facilitates optimum adaptation to any shoe type and any season.

nora[®] Astral





81 black

Soling sheets

nora[®] Astral



54 smoke



81 black



81 black



81 black

PROFILE: 74 DOUBLE SAW TOOTH

 Format:

 approx. 1070 x 770 mm // 42.1" x 30.3"

 Colour:
 Thickness:

 54 smoke
 5 mm

PROFILE: 87 MINI-NON-SLIP

Format:		
approx. 1070 x	770 mm // 42.1"x30.3"	
Colour:	Thickness:	
81 black	3 mm	

PROFILE: 95 DELTA

Format: approx. 790x465 mm // 31.1"x18.3"

Colour:	Thicknesses:	
81 black	2.5 4 6 mm	

nora[®] Astral profile 95 delta means an extra-ordinary look and safe tread. The small triangles of the profile are arranged to form a hexagon. The brand **nora[®]** harmoniously and nondirectionally fits into the product range.

PROFILE: 110 GEO

Format:

approx. 790x460 mm // 31.1"x18.2"

<u></u>		
Colour:	Thicknesses:	
81 black	416 mm	

The 110 GEO profile is non-directional, multilayered, has good grip and is spread over four to five different profile levels. The type of profile prevents stones and dirt from getting stuck.

nora® Durotrans are soling sheets made of transparent compact rubber with prominent profiles for both sole and heel areas. The Durotrans grade is extremely wear- and slip-resistent and possesses excellent abrasion values and a high level of flexibility. Thanks to the resilient special mixture with a hardness of approx.

69 Shore A, an excellent walking comfort is obtained. nora® Durotrans is suitable both for high-quality repairs and for use as outsoles for orthopaedic shoe finishing and orthopaedic shoes. The variety of profiles facilitates optimum adaptation to any shoe type and any season.

nora® Durotrans





03 honey

	Format: approx. 800 x 500 m	m // 31.5"x19.7"
	PROFILE: 34	GRID
	Colours:	Thicknesses:
	03 honey	4 6 mm
54 smoke	54 smoke	
	81 black	

Hardness: approx. 69 Shore A



81 black

and and and and and and and	non i mar i
	515
<u>nggggg</u>	515
	111
	1
	51 151
	-
	51151

81 black



101 leather brown

PROFILE:	36	SQUARE
Colours:		Thicknesses:
81 black		416 mm

101 leather brown

81 black

PROFILE: 37 PRISM

Colour:	Thicknesses:
81 black	4 6 mm

Soling sheets

nora[®] Contol A



81 black

Hardness:

approx. 70 Shore A

Format:

approx. 1000 x 800 mm // 39.4" x 31.5"

PROFILE: 42 CLIMBER SMALL

Colour:Thickness:81 black5 mm

nora[®] **Contol A** is an abrasion-resistant soling sheet made of oil- and petrolresistant special rubber mixture with antistatic properties for the repair of working shoes with corresponding requirements.

nora[®] Contol FB



81 black

Hardness:

approx. 64 Shore A

Format: approx. 800x500 mm // 31.5"x19.7"

PROFILE:	48 BLOCK

Colour:	Thicknesses:
81 black	5 6.5 mm

nora[®] **Contol FB** is an extremely slip-resistant special grade. This soling sheet is oil-, petrol-, and grease-resistant. The enormous slip-resistance is achieved by the open, bevelled profile with drainage to remove liquids.

nora® Contol FB is especially suited for working shoes in wet areas, i.e. for walking on tile floors in connection with liquids, in particular in grease-contaminated rooms such as e.g. kitchens or dairies.

nora® Constant is a classic solid soling sheet with a timeless wave pattern and

nora[®] Constant



51 black brown

nora[®] Por





48 antique

Hardness:Density:approx. 93 Shore Aapprox. 1.00 g/cm³

excellent bonding properties.

approx. 810x640 mm // 31.9"x25.2"

PROFILE: 82 FINE WAVE

Thicknesses:

213 mm

Format:

Hardness: approx. 88 Shore A

Format:

Colour:

51 black brown

approx. 1040 x 520 mm // 40.9" x 20.4"

SURFACE: 67 STRADA
 Colours: 2.7 3.5 4.3 m

26 leather brown 2.7 3.5 4.3 mm 48 antique

nora[®] **Por** is a semi-expanded soling sheet for special use as "artificial" bottom leather for ladies' and men's shoes. This soling sheet has a long life, good bonding properties, and offers weight benefits as compared to solid soling sheets.

26 leather brown

nora[®] Contilit



101 leather brown



Hardness:

approx. 87 Shore A

101 leather brown

PROFILE: 32 BRILLANT

Format: approx. 1000x800 mm // 39.4"x31.5"		
Colours:	Thicknesses:	
51 black brown	1.8 2.7 3.5 4.3 mm	
81 black		

1,8|2,7|3,5 mm

nora[®] **Contilit** is a fine-profiled soling sheet for stylish repairs and can be ideally combined with the heel piece or heel sheet **nora**[®] **Elite**.

Heeling strips

nora[®] Contilit K

				/
51	81	101	110	
black	black	leather	beige	
brown		brown		



Hardness:

approx. 93 Shore A

SURFACE: SMOOTH

Length: approx. 1090 mm //	42.9"	
Colours: 51 black brown 81 black	Dimensions: 3x35 mm // 0.12"x1.4"	
51 black brown 81 black 101 leather brown 110 beige	4x40 mm // 0.15"x1.6"	

PROFILE: 32 BRILLANT

Length: approx. 1000 mm /	/ 39.4"	
Colours:	Dimension:	
51 black brown	black brown 4x40 mm // 0.15"x1.6"	
81 black		

nora[®] **Contilit K** is the tried-and-tested heeling strip for the repair of smooth and slightly profiled shoe bottoms. Good bonding properties guarantee reliable heel repairs.

Heeling material

nora® Elite







101 leather brown



51 black brown

nora[®] Glorit



51 black brown



51 black brown

PROFILE: 33 BRILLANT

Hardness: approx. 93 Shore A

81 black

Hardness:	
with stabilising pad:	
101 leather brown	5 mm
81 black	
51 black brown	5 6 mm
Colours:	Thicknesses:
approx. 800 x 500 m	m // 31.5"x19.7"
Format:	

 Format:

 approx. 800x500 mm // 31.5"x19.7"

 Colours:
 Thickness:

 51 black brown
 6 mm

101 leather brown

nora[®] **Elite** profile 33 is a fine-profiled heel sheet for stylish repairs. The nondirectional profile makes this heel sheet a branded product with recognition factor.

Properties:

partially with stabilising pad, sanded back.

PROFILE: 3	7 PRISM	
Hardness: approx. 90 Shore J	A (tread surface)	
Format: approx. 800 x 500	mm // 31.5"x19.7"	
Colour:	Thicknesses:	

 \mathbf{nora}^{\otimes} Elite profile 37 is a coarse-profiled heel sheet with winter profile for a safe foothold.

Properties:

6 mm version with stabilising pad, sanded back.

PROFILE: 39 FRESKO

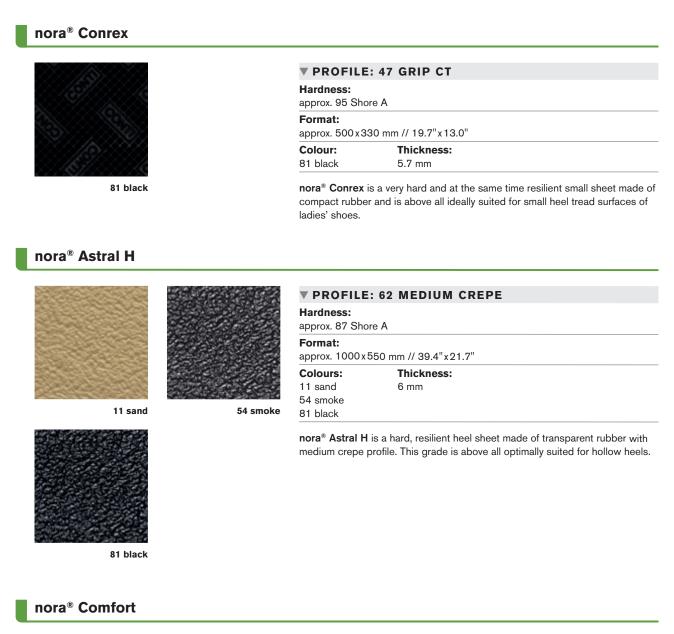
Hardness: approx. 93 Shore	Ą		
Format: approx. 800 x 500	mm // 31.5"x19.7"		
Colour: 51 black brown	Thickness: 5.5 mm		

nora® Glorit profile 39 is an elegant heel sheet with a particularly fine profile.

V PROFILE: 05 PYRAMID MEDIUM

Hardness:		
approx. 93 Shore A	4	
Format:		
approx. 770x535 i	nm // 30.3"x21.1"	
Colour:	Thickness:	
51 black brown	6 mm	

 $\mathbf{nora}^{\circledast}$ Glorit profile 05 is a classical heel sheet with a medium pyramid profile for a safe tread.







51 black brown

С 5

81 black

PROFILE: 06 CRISTAL

Hardness: approx. 67 Shore A

Format:

approx. 770x535 mm // 30.3"x21.1"

7 mm		
	7 mm	7 mm

nora[®] Comfort is a highly resilient heel sheet, excellently suited for special sizes and special shapes.

Properties:

highly resilient, wear-resistant, non-slip and shock-absorbing, high walking comfort thanks to a soft compound harmonisation, stable bottom required, sanded back.

Heel piece strips

nora[®] Astral H



PROFILE: 62 MEDIUM CREPE

Hardness: approx. 87 Shore A Length: approx. 1000 mm // 39.4"

Colours:

11 sand

54 smoke 81 black

Widths:

55|72|85 mm // 2.2"|2.8"|3.3" Thickness:

6 mm

nora® Astral H heel piece strips made of hard, resilient transparent rubber with medium crepe profile are excellently suited for any economic heel repair. The heel piece strips are made of the heel sheet nora® Astral H.

Die-cut pieces

nora® Elite

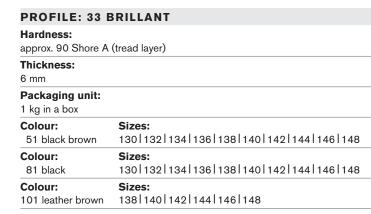


51 black brown

81 black



101 leather brown



 $\mathbf{nora}^{\circledast}$ \mathbf{Elite} is a stylish die-cut piece with stabilising pad for economic and durable repairs. This die-cut piece is the ideal complement of the nora® Contilit soling sheets.

Properties: with stabilising pad, sanded back.



PROFILE: 13 RIPPLED

Hardness: approx. 87 Shore A	Length: approx. 1070 mm // 42.1"
Colours: 51 black brown 81 black	Dimensions: 8x40 mm // 0.3"x1.6"
51 black brown 81 black	10x50 mm // 0.4"x2.0"

nora® Compakt K are universally usable wedge strips. **Properties:** wear-resistant, shock-resistant, excellent bonding properties.

Length:

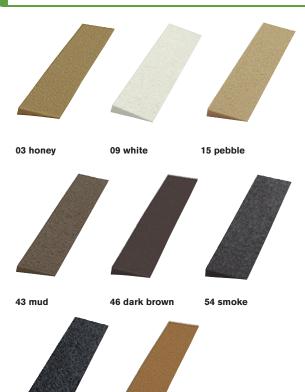
approx. 930 mm // 36.6"

PROFILE: 62 MEDIUM CREPE

Hardness:

approx. 69 Shore A

nora[®] Astral K



101 leather brown

Colours:	Dimensions:	
03 honey	8x40 mm // 0.3"x1.6"	
54 smoke		
81 black		
03 honey	10x50 mm // 0.4"x2.0"	
15 pebble		
43 mud		
46 dark brown		
54 smoke		
81 black		
101 leather brown		
03 honey	10x60 mm // 0.4"x2.4"	
09 white		
43 mud		
46 dark brown		
54 smoke		
81 black		
101 leather brown		
81 black	10x80 mm // 0.4"x3.1"	
81 black	14x65 mm // 0.5"x2.6"	

nora[®] **Astral K** are multi-purpose wedge strips with crepe profile, made of transparent rubber. **nora**[®] **Astral K** develops excellent stretch properties when bonded to soft bottoms (PU, EVA, and TR).

Properties: wear-resistant, shock-resistant, excellent bonding properties, high stretch properties.

nora[®] Astro K

81 black



46 dark brown

81 black

PROFILE: 62 MEDIUM CREPE

Hardness: approx. 50 Shore A	
Density: approx. 0.65 g/cm ³	Length: approx. 1020 mm // 40.2"
Colours:	Dimensions:
46 dark brown	10x60 mm // 0.4"x2.4"
81 black	
81 black	10x80 mm // 0.4"x3.1"

nora® Astro K are specifically lightweight wedge strips made of expanded rubber with crepe profile, in matching colours to **nora®** Astro soling sheets.

Properties: wear-resistant, shock-resistant, excellent bonding properties.

45

Expanded sheet product range

This overview lists the standard colours which can be ideally combined.

For further coloured and patterned versions, e.g. of **nora® Lunasoft SL color**, please see the corresponding product pages.

Material	Version/profile	Colour	05	07	09	17
Lunairmed						
Lunairflex				:::		
Lunalastik				:::		
Lunasoft SLW						
Lunasoft SL						
Lunasoft AL						
Lunatec SE						
Lunalight A						
Lunacell				:::		
Lunalight K	wedge strips					
Lunasoft SLW	wedge strips					
Lunasoft	78 Coarse wave					
Lunasoft	97 Pastille					
Astro Soft	09 Coarse cross patter	n				
Astro Soft	87 Mini Non-Slip					
Astro Soft	96 Block fine					20
Astrolight	64 Star					
Astrolight	95 Delta					A A A
Astro	58 Coarse wave					
Astro	62 Medium crepe					
Astro	64 Star					No.
Astro	110 Geo					
Astro	111 Sunflower					
Astro	65 Suction cup					
Astro K	62 Medium crepe wedg	ge strips				

19	35	41	46	54/57	56	60	78	80	81	Details/Page
										11
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Transparent sheet product range

	Colour	03	09	11	15	43	46	54	81	101	Details/ Page
Material	Version/profile										
Astral	26 Fine crepe										37
Astral	58 Coarse wave		V						V		37
Astral	62 Medium crepe										37
Astral	74 Double saw tooth										38
Astral	87 Mini Non-Slip										38
Astral	95 Delta										38
Astral	110 Geo										38
Durotrans	34 Grid										39
Durotrans	36 Square										39
Durotrans	37 Prism										39
Astral H	62 Medium crepe										43
Astral H	62 Medium crepe heel piece strips										44
Astral K	62 Medium crepe wedge strips										45

Warming and cooling times of composite sheets

	Warming time min.	Cooling time min.
Lunatec combi 1	6	12
Lunatec combi 2	9	18
Lunatec combi 3	9	18
Lunatec combi 4	5	10
Lunatec combi 5	3	6
Lunatec combi 6	6	12
Lunatec combi 7	5	10
Lunatec combi 8	6	12

	Warming time min.	Cooling time min.
Lunatec combi cork 1	5	10
Lunatec combi CW	5	10
Lunatec combi motion 1	5	10
Lunatec combi T1	8	16
Lunatec combi motion T2	9	18

The times given here are proven reference values based on a constant temperature of 130° C // 266° F. These times can deviate dependent upon the oven, temperature precision, how often the door is opened and personal experiences.

Setting of the oven 130° C // 266° F

Rule of thumb: Warming time x factor 2 = optimum cooling time

Questions? Please contact us!

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