



## 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 vulcanized 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 inserts 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 no deep drawing required.
- ► The composite sheets are thermoformable between 120°C−130°C.
- 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 insert 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 bonded for you nine different combinations of materials with bedding, permanently resilient, or stabilising functions.

And **you** decide which composite sheet is suitable for the individual patient and which materials are to be added to guarantee an optimum management of the patient.

# nora® Lunatec combi 1 EVA expanded sheets

#### The vulcanised combination of:

25 Shore A approx.

52 Shore A

Format: approx. 925 x 580 mm

nora® Lunalastik

permanently resilient cushioning properties

**Hardness:** 

approx. 25 Shore A

Density:

approx. 0.23 g/cm<sup>3</sup>

**Colour:**07 flesh colour

Thickness:
approx. 6 mm

nora® Lunasoft AL

stabilising properties

Hardness:

approx. 52 Shore A

**Density:** 

approx. 0.26 g/cm<sup>3</sup>

Colour: Thickness: 09 white approx. 8 mm

## Areas of application:

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

# nora® Lunatec combi 2 EVA expanded sheets

#### The vulcanised combination of:



Format: approx. 880 x 600 mm

#### nora® Lunairflex

bedding cushioning properties

## **Hardness:**

approx. 22 Shore A

## **Density:**

approx. 0.12 g/cm<sup>3</sup>

**Colour:** Thickness: 07 flesh colour approx. 6 mm

#### nora® Lunasoft SLW

permanently resilient cushioning properties

## **Hardness:**

approx. 30 Shore A

## Density:

approx. 0.20 g/cm<sup>3</sup>

Colour: Thickness: approx. 10 mm

#### Areas of application:

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 EVA expanded sheets

#### The vulcanised combination of:



Format: approx. 870 x 580 mm

#### nora® Lunalastik

permanently resilient cushioning properties

#### Hardness:

approx. 25 Shore A

#### Density:

approx. 0.23 g/cm<sup>3</sup>

11	
Colour:	Thickness:
07 flesh colour	approx 6 mm

#### **Density:**

properties

**Hardness:** 

approx. 0.20 g/cm<sup>3</sup>

approx. 30 Shore A

nora® Lunasoft SLW

permanently resilient cushioning

Colour:	Thickness:
19 stone	approx. 10 mn

#### Areas of application:

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® Lunatec combi 4 EVA expanded sheets

approx.

approx.

#### The vulcanised combination of:



Format: approx. 870 x 540 mm

#### nora® Lunairflex

bedding cushioning properties

#### Hardness:

approx. 22 Shore A

#### **Density:**

approx. 0.12 g/cm<sup>3</sup>

# **Colour:** Thickness: 07 flesh colour approx. 3 mm

#### nora® Lunalastik

permanently resilient cushioning properties

#### **Hardness:**

approx. 25 Shore A

#### Density:

approx. 0.23 g/cm<sup>3</sup>

Colour:	Thickness:
09 white	approx. 6 mm

## Areas of application:

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 A** is recommended.

# nora® Lunatec combi 5 EVA expanded sheets

#### The vulcanised combination of:



Format: approx. 850 x 590 mm

#### nora® Lunairflex

bedding cushioning properties

#### Hardness:

approx. 22 Shore A

## Density:

approx. 0.12 g/cm<sup>3</sup>

Colour: Thickness: 60 bright grey approx. 3 mm

# Areas of application:

# nora® Lunasoft SLW

permanently resilient cushioning properties

## Hardness:

approx. 30 Shore A

# **Density:**

approx. 0.20 g/cm<sup>3</sup>

**Colour:** Thickness: 111 royal blue approx. 3 mm

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

# nora® Lunatec combi 6 EVA expanded sheets

#### The vulcanised combination of:



#### nora® Lunasoft SLW

permanently resilient cushioning properties

# Hardness:

approx. 30 Shore A

#### **Density:**

approx. 0.20 g/cm<sup>3</sup>

# **Colour:** Thickness: 137 terra approx. 4 mm

#### nora® Lunasoft AL

stabilising properties

# Hardness:

approx. 52 Shore A

## **Density:**

approx. 0.26 g/cm<sup>3</sup>

Colour:	Thickness:
81 black	approx. 10 mm

#### Areas of application:

basis for efficiently finished sporty and modern inserts or foot beddings, e.g. long-soled sports inserts.

#### nora® Lunatec combi 7 EVA expanded sheets

**NEW** 

#### The vulcanised combination of:

30 Shore A approx. 7 mm 40 Shore A

Format: approx. 1180x840 mm

#### nora® Lunasoft SLW

permanently resilient cushioning properties

#### Hardness:

approx. 30 Shore A

#### Density:

approx. 0.20 g/cm<sup>3</sup>

Colour: Thickness: 07 flesh colour approx. 3 mm

#### nora® Lunasoft SL

stabilising properties

#### **Hardness:**

approx. 40 Shore A

#### **Density:**

approx. 0.20 g/cm<sup>3</sup>

Colour: 19 stone grey

Thickness: approx. 4 mm

#### Areas of application:

ideal basis for the efficient manufacture of an insert, 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 EVA expanded sheets

**EVA** expanded sheets

approx.

12 mm

**NEW** 

## The vulcanised combination of:



Format: approx. 880 x 560 mm

#### nora® Lunatec EP

permanently resilient cushioning properties

#### Hardness:

approx. 22 Shore A

#### Density:

approx.  $0.20~g/cm^3$ 

Colour: Thickness: 131 red approx. 4 mm

# nora® Lunatec SE

stabilising properties

#### **Hardness:**

approx. 45 Shore A

#### **Density:**

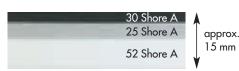
approx. 0.28 g/cm<sup>3</sup>

Colour: Thickness: 81 black approx. 8 mm

#### Areas of application:

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

# nora® Lunatec combi T1 The vulcanised combination of:



Format: approx. 880 x 590 mm

nora® Lunasoft SLW Hardness:

approx. 30 Shore A

Density: approx. 0.20 g/cm<sup>3</sup>

Colour:

80 anthracite

**Thickness:** approx. 3 mm nora® Lunasoft Z Hardness:

approx. 25 Shore A

**Density:** approx.  $0.17 \text{ g/cm}^3$ 

Colour: 307 medium grey

Thickness:

approx. 4 mm

## nora® Lunasoft AL **Hardness:**

**NEW** 

approx. 52 Shore A

**Density:** 

approx. 0.26 g/cm<sup>3</sup>

Colour:

09 white

Thickness:

approx. 8 mm

The first 3-layer composite sheet nora® Lunatec combi T1 is a material which is above all specifically suitable for the management 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 and cushions them in the tread movement such that an improved relief is given during the movement.

Thanks to the special structure of this composite sheet, it offers excellent cushioning and damping properties in the horizontal load direction. This effect is the 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.

#### Areas of application:

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

uct name thickness	Layers	Properties	Thickness	Hardness Shore A
Lunatec combi 1	Lunalastik	permanently resilient	6 mm	25
14 mm	Lunasoft AL	stabilising	8 mm	52
Lunatec combi 2	Lunairflex	bedding	6 mm	22
16 mm	Lunasoft SLW	permanently resilient	10 mm	30
Lunatec combi 3	Lunalastik	permanently resilient	6 mm	25
16 mm	Lunasoft SLW	permanently resilient	10 mm	30
Lunatec combi 4	Lunairflex	bedding	3 mm	22
9 mm	Lunalastik	permanently resilient	6 mm	25
Lunatec combi 5	Lungirflex	bedding	3 mm	22
6 mm	Lunasoft SLW	permanently resilient	3 mm	30
Lunatec combi 6	Lungsoft SLW	permanently resilient	4 mm	30
14 mm	Lunasoft AL	stabilising	10 mm	52
Lunatec combi 7	Lunasoft SLW	permanently resilient	3 mm	30
7 mm	Lunasoft SL	stabilising	4 mm	40
1.0		.1 11		00
Lunatec combi 8 12 mm	Lunatec EP Lunatec SE	permanently resilient stabilising	4 mm 8 mm	22 45
	Lunasoft SLW	permanently resilient	3 mm	30 25
Lunatec combi T1 15 mm	Lunasoft SLW Lunasoft Z Lunasoft AL	permanently resilient permanently resilient stabilising	3 mm 4 mm 8 mm	

# nora® Lunatec combi SK 1 EVA expanded wedge strips

## The vulcanised combination of:

25 Shore A approx.
52 Shore A 14 mm

Format: approx. 850×270 mm (size 1/35-39) approx. 850×300 mm (size 2/40-44) approx. 850×340 mm (size 3/45-49) approx. 850×380 mm (size 4/>49)

#### nora® Lunalastik

permanently resilient cushioning properties

#### Hardness:

approx. 25 Shore A

#### Density:

approx. 0.23 g/cm<sup>3</sup>

	J.
Colour:	Thickness:
07 flesh coloui	approx. 6 mm

#### nora® Lunasoft AL

stabilising properties

#### **Hardness:**

approx. 52 Shore A

#### **Density:**

approx. 0.26 g/cm<sup>3</sup>

	0.	
Colour:		Thickness:
09 white		approx. 2-8 mm

Thanks to its wedge-like shape, **nora**® **Lunatec combi SK 1** is the ideal basis for the efficient manufacture of inserts in only a few steps. In combination with other **nora**® **Luna** products, this wedge is the perfect basis for orthopaedic foot beddings.

## Properties and product benefits:

- strength and edge stability in the hindfoot and metatarsus thanks to the stabilising properties of Lunasoft AL
- high elasticity in the forefoot thanks to the permanently resilient cushioning properties of Lunalastik
- perfect support in the retrocapital area thanks to specific wedge-like shape
- ▶ efficient processing thanks to less material usage and less grinding
- no bonding required and no displacement of the different materials when processing
- ▶ high level of retention of volume because the material is only compressed at the required places and no deep drawing is required.

#### Areas of application:

the composite wedge **nora**® **Lunatec combi SK 1** is the ideal combination for the manufacture of individual long-soled sports inserts and long-soled inserts for flat splay feet. In combination with other Luna products, **Lunatec combi SK 1** is the optimal basis for orthopaedic foot beddings and inserts for geriatric feet and rheumatism.

# **Practical application examples**

# nora® Lunatec combi 1

# Footbed for rheumatic patients

Diagnosis:Rheumatoid arthritisPatient data:Body weight approx. 100 kg

Materials used:

nora® Norit

3 mm (placeholder for covering)

nora® Lunatec combi 1 14 mm (basis)

nora® Lunacell

8 mm (stabilisation)

nora® Lunairmed
3 mm (covering)

Oven setting: 130° C



## **Application** (construction from foot downwards)

1. Placeholder (Fig. 1)

**Recommendation:** Form **nora® Norit** 3 mm on the last (serves as placeholder for covering to be inserted later). **Heating:** approx. 2 minutes

2. Preparation of nora® Lunatec combi 1 (Fig. 2)

**Heating:** approx. 6 minutes

Form **nora**® **Lunatec combi 1** directly on the placeholder (do not bond).

3. Cooling phase

**Rule of thumb:** Heating time x factor of 2 **Cooling time:** approx. 12 minutes

**Tip:** Formed materials may peel off the last again if the cooling period is too short.

# 4. Grinding to shape/stabilising layer

After grind to shape apply polychloroprene-based adhesive to **nora® Lunatec combi 1** and **nora® Lunacell** and leave to air. Heat and form **nora® Lunacell** and allow to cool down. Then grind to shape.

Heating: approx. 4 minutes
Cooling: approx. 8 minutes

#### 5. Covering

Use polychloroprene-based adhesive to bond the **nora® Lunairmed** WITHOUT activation.





# nora® Lunatec combi 2

# **Diabetes-adapted footbed**

**Diagnosis:** Diabetes mellitus, polyneuropathy,

angiopathy

Patient data: Body weight approx. 70 kg

Materials used:

3 mm (placeholder for covering)

nora® Lunatec combi 2
16 mm (basis)

nora® Lunairmed

3 mm (covering)



Oven setting:  $130^{\circ}$  C

## **Application** (construction from foot downwards)

1. Placeholder

See application example nora® Lunatec combi 1.

2. Preparation of nora® Lunatec combi 2 (Fig. 1)

**Heating:** approx. 9 minutes

Form **nora**® **Lunatec combi 2** directly on the placeholder (do not bond).

3. Cooling phase

Cooling time: approx. 18 minutes

4. Grinding to shape

Grind to shape after cooling.

**Recommendation:** The forefoot should have a minimum thickness of approx. 7 mm to retain a total thickness of approx. 10 mm after the covering has been bonded.

5. Covering (Fig. 2)

Cold-bond **nora® Lunairmed** as covering (polychloroprene-based adhesive).

**Tip:** "Cold-bonding" the covering ensures that the shore hardness is preserved. Activation would increase the shore hardness.





# nora® Lunatec combi 3

# **Diabetes-adapted footbed**

**Diagnosis:** Diabetes mellitus, polyneuropathy,

angiopathy

Patient data: Body weight approx. 90 kg

Materials used:

3 mm (placeholder for covering)

nora® Lunatec combi 3 16 mm (basis)

nora® Lunairmed

3 mm (covering)



Oven setting: 130° C

## **Application** (construction from foot downwards)

#### 1. Placeholder

See application examples nora® Lunatec combi 1 and nora® Lunatec combi 2.

**Tip:** The smooth surface of **nora® Norit** conceales any unevenness of the last.

## 2. Preparation of nora® Lunatec combi 3

**Heating:** approx. 9 minutes

Form **nora**<sup>®</sup> **Lunatec combi 3** directly on the placeholder (do not bond).

## 3. Cooling phase

Cooling time: approx. 18 minutes

# 4. Grinding to shape (Fig. 1)

Grind to shape after cooling.

**Recommendation:** The forefoot should have a minimum thickness of approx. 7 mm to retain a total thickness of approx. 10 mm after the covering has been bonded.

## 5. Covering (Fig. 2)

Cold-bond **nora**® **Lunairmed** as covering (polychloroprene-based).

**Tip:** Brief activation of the surface (approx. 20 seconds) causes a thin vulcanized skin on the surface. This is smooth and makes it easier for the patient to get into the shoe.





# nora® Lunatec combi 4

# **Diabetes-adapted footbed**

**Diagnosis:** Diabetes mellitus, polyneuropathy,

angiopathy

Patient data: Body weight approx. 110 kg

Materials used:

nora® Lunatec combi 4

9 mm (basis)

nora® Lunasoft SLW

8 mm (padding layer)

nora® Lunasoft AL

8 mm (stabilisation)



Oven setting: 130° C

## **Application** (construction from foot downwards)

# 1. Preparation of nora® Lunatec combi 4

**Heating:** approx. 5 minutes

Form **nora**® **Lunatec combi 4** directly on the last (without placeholder). The upper layer of **nora**® **Lunatec combi 4** made of **nora**® **Lunairflex** serves as covering.

**Tip:** We recommend placing sample shoe foil on the last to attain a smooth surface.

## 2. Cooling phase

Cooling time: approx. 10 minutes

## 3. Grinding to shape

Grind to shape after cooling.

# 4. Pladding layer (Fig. 1)

After grind to shape apply polychloroprene-based adhesive to **nora**<sup>®</sup> **Lunatec combi 4** and **nora**<sup>®</sup> **Lunasoft SLW** and leave to air. Heat and form **nora**<sup>®</sup> **Lunasoft SLW** and allow it to cool down.

Heating: approx. 4 minutes
Cooling: approx. 8 minutes

## 5. Stabilising layer

Apply polychloroprene-based adhesive to **nora® Lunasoft SLW** and **nora® Lunasoft AL** and leave to air. Heat and form **nora® Lunasoft AL** and allow it to cool down.

Heating: approx. 4 minutes
Cooling: approx. 8 minutes

## 6. Grinding to shape (Fig. 2)

Grind to shape after cooling.

**Recommendation:** 8 mm is necessary to compensate for the longitudinal arch. **nora® Lunasoft AL** is ground down significantly more thinly in the areas of the forefoot and the heel.





# **Practical application examples**

# nora® Lunatec combi 5

# **Long-soled insert**

**Diagnosis:** Flat/splay foot

Patient data: Body weight approx. 90 kg

Materials used: nora® Lunatec combi 5 6 mm (basis)

nora® Lunacell A
3 mm (stabilisation)

nora® Lunasoft SLW
10 mm (padding)



Oven setting: 130° C

## **Application** (construction from foot downwards)

1. Preparation of nora® Lunatec combi 5 (Fig. 1)

Apply polychloroprene-based adhesive to **nora® Lunatec combi 5** (backfoot to padding) and **nora® Lunacell** 3 mm.

**Airing phase:** approx. 2 minutes

**Tip:** Marking the contours facilitates fixation and coating.

Activation of **nora**<sup>®</sup> **Lunatec combi 5** in a closed heat source. After 1 minute, place **nora**<sup>®</sup> **Lunacell** 3 mm back in the oven for a further 2 minutes for activation.

#### **Heating**:

nora® Lunatec combi 5 = 3 minutes nora® Lunacell = 2 minutes

Form both materials in one work step.

2. Cooling phase

Cooling time: approx. 11 minutes

3. Preparation of the padding layer

Apply polychloroprene-based adhesive to **nora® Lunasoft SLW** 10 mm.

Airing phase: approx. 2 minutes
Activation of nora® Lunasoft SLW.
Heating: approx. 5 ½ minutes
Forming and cooling in a vacuum press.

Cooling: approx. 11 minutes

**4. Grinding to shape** (Fig. 2) Grind to shape after cooling.





# nora® Lunatec combi 6

# Long-soled sport insert with shock absorber

Diagnosis: Flat/splay foot

Patient data: Body weight approx. 80 kg

Materials used: nora® Lunatec combi 6 14 mm (basis) nora® Supersorb

2 mm (shock absorber)



Oven setting: 130° C

## **Application** (construction from foot downwards)

1. Preparation of nora® Lunatec combi 6

Activation of **nora® Lunatec combi 6** in a closed heat source

**Heating:** approx. 6 minutes Form on the last.

2. Cooling phase

Cooling time: approx. 12 minutes

3. Grinding to shape (Fig. 1)

Grind the underside and sides of the insert to shape. Mark a "working line" for the area where **nora® Supersorb** is to be inserted later. Grind **nora® Lunatec combi 6** on the underside to integrate **nora® Supersorb.** 

4. Preparation of the shock absorber (Fig. 2)

Mark, cut out and fit nora® Supersorb.

**Tip:** When cutting, leave a tolerance of approx. 2 mm at the sides. **nora® Supersorb** should be smaller than the insert and not lie flush with the sides. This is the only way to achieve a 100 % viscoelastic effect.

Apply polychloroprene-based adhesive to the contact areas of **nora® Lunatec combi 6** and **nora® Supersorb. Tip:** Bonding the contact area is sufficient. Do not glue the entire surface of **nora® Supersorb** as this will impair the viscoelastic properties.





# nora® Lunatec combi 7

# Thin orthopaedic footbed with extra edge stability

**Diagnosis:** Low arch/flatfoot

Patient data: Body weight approx. 80 kg

Materials used: nora® Lunatec combi 7 7 mm (basis) nora® Lunacell

4 mm (stabilisation)



Oven setting: 130° C

## **Application** (construction from foot downwards)

1. Preparation of nora® Lunatec combi 7

Activation of **nora**® **Lunatec combi 7** in a closed heat source.

**Heating:** approx. 5 minutes

Form nora® Lunatec combi 7 to shape directly on the last.

2. Cooling phase

Cooling time: approx. 10 minutes

3. Grinding to shape (Fig. 1)

Grind down edges of nora® Lunatec combi 7.

**Tip:** The edges should be ground down to later improve edge stability with **nora® Lunacell.** This allows **nora® Lunacell** to remain upright up to the edge and gives stability to the footbed.

4. Preparation of the stabilisation (Fig. 2)

Apply adhesive to **nora® Lunatec combi 7** (backfoot to padding)
Apply adhesive to **nora® Lunacell** 

(cut out for backfoot to padding) **Airing phase:** approx. 2 minutes

Activation of **nora**® **Lunacell** in a closed heat source.

**Heating:** approx. 4 minutes

Form **nora**® **Lunacell** to shape and allow it to cool down.

Cooling: approx. 8 minutes

5. Grinding to shape

Grind to shape after cooling.





# nora® Lunatec combi 8

# Thin footbed with excellent shape restoration

Diagnosis: Flat/splay foot

Patient data: Body weight approx. 100 kg

Material used: nora® Lunatec combi 8 12 mm (basis)



Oven setting: 130° C

## **Application** (construction from foot downwards)

Preparation of nora® Lunatec combi 8 (Fig. 1)
 Activation of nora® Lunatec combi 8 in a closed heat source.

**Heating:** approx. 6 minutes

Form **nora**® **Lunatec combi 8** to shape directly on the last.

2. Cooling phase

Cooling time: approx. 12 minutes

3. Grinding to shape (Fig. 2)

Grind the underside and sides of the insert to shape. This combination of materials offers sufficient volume to grind a good roll. The material is also ideal for grinding very thin inserts, e.g. for sport footwear.





# **Practical application examples**

# nora® Lunatec combi T1

# Orthopaedic footbed

Orthopaedic footbed with very good padding and cushioning properties in the horizontal direction of load

Diagnosis: Rheumatism, diabetes, geriatric foot
Patient data: Body weight approx. 100 kg

Material used: nora® Lunatec combi T1 15 mm (basis)



Oven setting: 130° C

## **Application** (construction from foot downwards)

Preparation of nora® Lunatec combi T1 (Fig. 1)
 Activation of nora® Lunatec combi T1 in a closed heat source.

**Heating:** approx. 8 minutes

Form **nora**® **Lunatec combi T1** to shape directly on the last.

2. Cooling phase

Cooling time: approx. 16 minutes

3. Grinding to shape (Fig. 2)

Grind the underside and sides of the insert to shape.

Tip: Depending on the difficulty and type of care, nora® Lunatec combi T1 can be supplemented by an additional stabilising material such as Norit, Lunacell or Lunalight.

The special feature of **nora® Lunatec combi T1** is the softness of its centre layer. Embedded between two harder layers, it minimises the occurring shearing force and absorbs it in the tread movement, providing enhanced relief when walking.

# nora® Lunatec combi SK1

# Long-soled insert

Diagnosis: Flat/splay foot

Patient data: Body weight approx. 90 kg

Materials used:

nora® Lunatec combi SK 1 8/14 mm (basis)

nora® Lunasoft SL trendline 2 mm (covering)



Oven setting: 130° C

## **Application** (construction from foot downwards)

Preparation of nora® Lunatec combi SK 1 (Fig. 1)
 Activation of nora® Lunatec combi SK 1 in a closed heat source.

**Heating:** approx. 5 minutes

Form **nora**® **Lunatec combi SK 1** directly on the last. **Tip:** Forming in the retrocapital area is facilitated by laying a pad on the last.

2. Cooling phase

Cooling time: approx. 10 minutes

3. Grinding to shape (Fig. 2)

Grind the underside and sides of the insert to shape. Grinding is minimised due to the tapered forefoot.

**Benefits:** 

Less material is used = saves costs Less grinding is necessary = saves time + causes less waste

4. Covering

Apply adhesive to the formed insert made of **nora® Lunatec combi SK 1** and the covering made of **nora® Lunasoft SL trendline** and leave them to air.

Attach the covering in the toe area. Briefly activate **nora**® **Lunasoft SL trendline** and apply adhesive to the entire surface. Cut the covering to size and grind to shape.









# An excellent composition:

Composite sheet nora® Lunatec combi

- Heating and cooling time
- Hints and tricks

At a glance



Setting of oven: 130° C

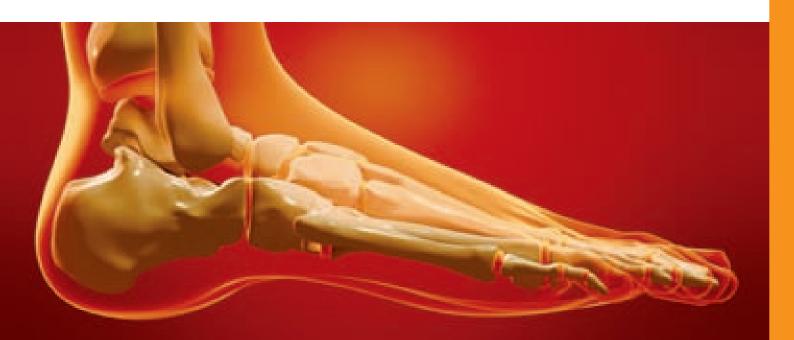
Rule of thumb: Activation time x factor 2

= optimum cooling time.

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

#### **Questions? Please contact us!**

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# nora® Lunatec combi sheets are vulcanised compositions of proven nora® qualities, made in Germany.

**nora**® **Lunatec combi** is an innovative product development in composite sheets: two or three different materials are vulcanized 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 inserts in orthopaedic shoe engineering.

# These are your benefits:

- · No gluing required.
- No displacement of the different materials when processing.
- A higher retention of volume because no deep drawing required.
- The composite sheets are thermoformable between 120°C-130°C.

#### Further advantages as compared to glued products:

 No bubble formation at the joints and no hardening because of the adhesive film.

In orthopaedics shoe engineering, different material combinations are used depending on diagnosis, symptoms, and weight of the patients. We already bonded for you nine different combinations of materials with bedding, permanently resilient, or stabilising functions.

And **you** decide which composite sheet is suitable for the individual patient and which materials are to be added to guarantee an optimum management of the patient.

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

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