

Norafin ®  
*materials for life*

CONSTRUCTION  
EXTERIOR & INTERIOR

High-Performance  
**FOR PEOPLE & ENVIRONMENT**

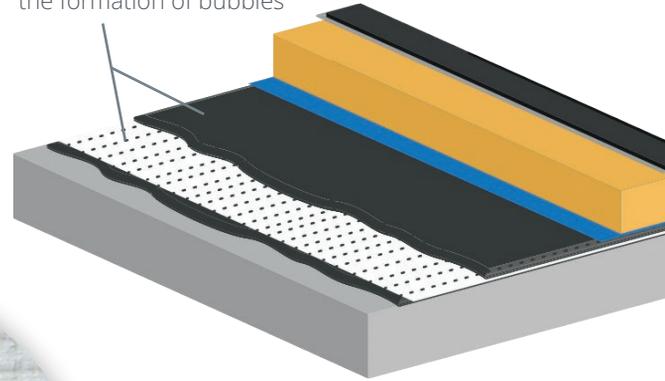




# EFFECTIVE NONWOVENS FOR WATERPROOFING AND RENOVATION

Due to low production costs, a stable, high quality nonwoven helps meet specific requirements for waterproofing and building renovation. Especially our hydroentangled nonwovens with a perforated structure form an excellent reinforcement for the use in flat roof waterproofing with liquid plastic.

Accelerates the absorption of liquid plastic and prevents the formation of bubbles



## ROOF RENOVATION/ROOF WATERPROOFING



We develop our nonwovens in accordance with ETAG005. They meet the minimum shelf life of 60 years and the raw material polyester ensures the necessary alkaline resistance.

## BUILDING WATERPROOFING



## REINFORCING NONWOVENS



- ✓ weatherproof, breathable, durable
- ✓ homogeneous surface structure, very well drapeable
- ✓ chemical and solvent resistant, long-life
- ✓ in various weights between 30 g/m<sup>2</sup> and 1.000 g/m<sup>2</sup>

\* Please note: The indicated product is only one sample of our wide product range.

# WATER ABSORBING AND CONDUCTING NONWOVENS



Our specially developed nonwovens for roof construction and facade greening are beneficial in the green roof construction market because of their filtering and capillary effect. For other plant-related projects or applications beneath the ground, our needle-punch nonwovens are suitable because of the material's added thickness compared to hydroentangled nonwovens.

- ✔ increases retention capacity of water on roofs
- ✔ water transport over 15cm height difference
- ✔ filtering effect for coarse particles
- ✔ residue-free decomposable, completely recyclable



**DRAINAGE NONWOVEN**



**Absorbent  
EVEN IN THE SOIL**



Norafin  
Nonwoven

**Nonwovens for a  
Natural Ecosystem**

\* Please note: The indicated product is only one sample of our wide product range.

# ECOLOGICAL WALLCOVER FOR SUSTAINABLE INTERIOR CONCEPTS



Norafin pioneered the processing of flax-fibers into a tear-resistant, durable nonwoven without binders. Our flax nonwoven can be used as base material for a wide variety of applications in interior design concepts, preferably as wallpaper, which can also be printed.



Development of ecological alternatives to conventional products for a more natural future

## ECOLOGICAL BASE MATERIAL

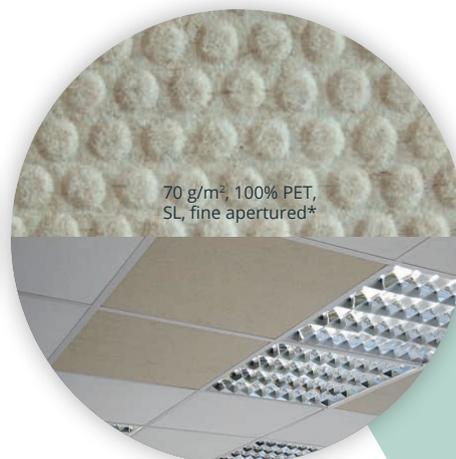


## NATURAL WALLPAPER



The mark of responsible forestry  
FSC® C140662

## BASE MATERIAL FOR ACOUSTIC PANELS, ROOM DIVIDERS, CEILING PANELS, etc.



- ✓ tear-resistant
- ✓ biodegradable, free of chemicals
- ✓ an even surface structure
- ✓ sound absorbing
- ✓ UV resistant
- ✓ humidity regulating

\* Please note: The indicated product is only one sample of our wide product range.

# MATERIALS FOR LIFE

As a solution-oriented supplier of spunlace and needlepunch nonwovens, as well as composites, it is our daily goal to translate the needs of our customers into available products.

- ✓ optimized hole structure enables controlled curing without the formation of bubbles during the processing with liquid plastic
- ✓ multilayered and double sided
- ✓ dimensional stability in all directions
- ✓ reinforcement through scrim, weaves, etc.
- ✓ antistatic or conductive
- ✓ sustainable production process without binders and with own water treatment cycle

Staple fibers in lengths of 20 – 70 mm

Fiber finenesses between 1 – 15 Dtex

Surface weights with hydroentanglement 15 – 750 g/m<sup>2</sup>

Surface weights with needlepunch 60 – 1,000 g/m<sup>2</sup>

## FINAL CONVERTING OPTIONS

Norafin offers not only the solution-oriented production nonwovens, but also the customer-oriented supply of the goods.

### Short rolls converting

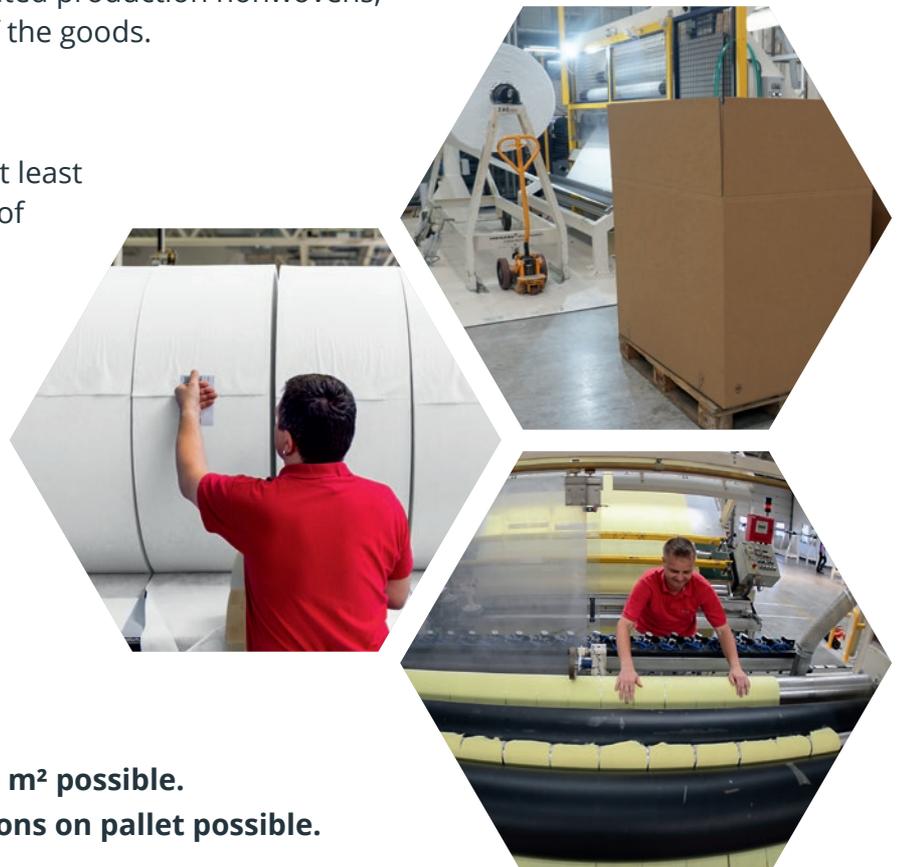
- ✓ individual roll converting, lengths of at least 25 running meters up to a maximum of 1.70 m roll diameter possible
- ✓ individual width assembly from 100 mm to 2,400 mm infinitely possible

### Aftertreatment options:

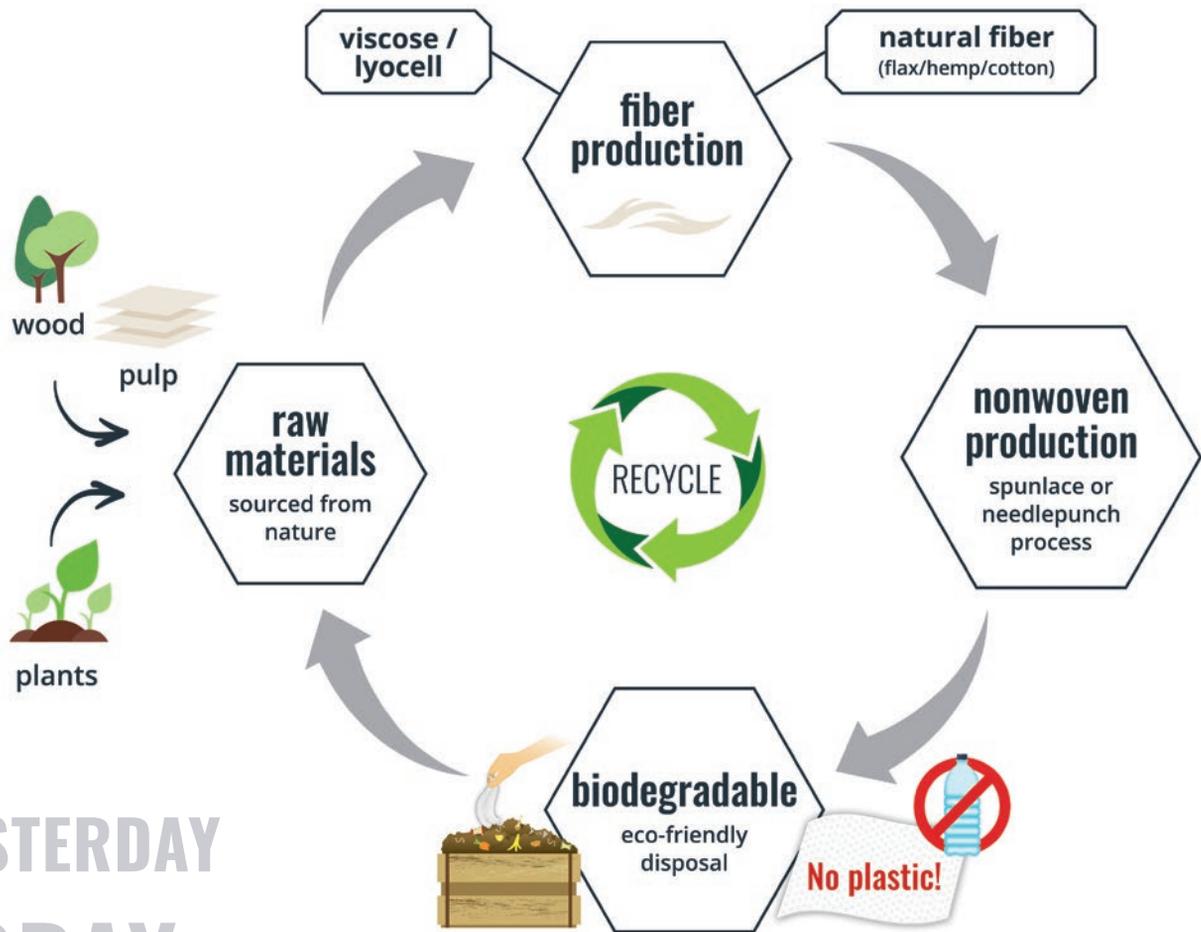
- ✓ flame-retardant
- ✓ water and oil repellent
- ✓ printing and coating
- ✓ laminating and calendering

**Minimum order quantity under 20,000 m<sup>2</sup> possible.**

**Packaging in foil bags and folding cartons on pallet possible.**



Our brand **Norafin ECOLINE<sup>®</sup>** stands for nonwovens which consist of renewable and recyclable raw materials. To support the production of biodegradable nonwovens, we prefer the use of regenerated and natural fibers. Thus, Norafin clearly avows to the climate protection of our planet!



YESTERDAY  
 TODAY  
 TOMORROW  
 For a sustainable life

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