

# Zinc **inspires**



**Delivery program**

# NedZink





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# NedZink

NedZink has already been producing high quality zinc products for applications in the construction sector for more than a hundred years. Titanium zinc is sold under the brand names NedZink NATUREL, NedZink NOVA, NedZink NEO, NedZink NOIR, NedZink NUANCE, NedZink Pro-Tec and NedZink COMPOSITE. NedZink material has an excellent reputation on the international market. The basic material NedZink NATUREL is titanium zinc with a smooth rolled surface for applications in roof and façade cladding, roof gutters and rainwater drainage systems.

NedZink NATUREL is a durable, aesthetic and maintenance-free building material that becomes increasingly attractive over the years under the influence of the weather conditions. A natural zinc patina layer forms on the surface. This property means NedZink NATUREL is mainly used where a natural and lively appearance, high cost-effectiveness and a long life are required.

To have the natural grey shade from the start, NedZink has developed a highly advanced prepatination line. The uniform and attractive medium-grey surface of NedZink NOVA originates after a chemical surface treatment following the rolling process.

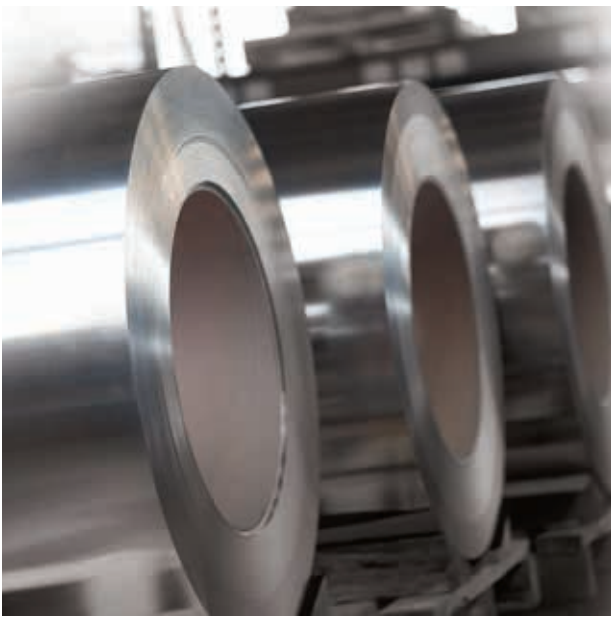
A second colour variant of pre-weathered titanium zinc, also produced on this prepatination line is NedZink NEO, it has a

slightly darker grey surface. The uniform matte, mineral grey alternative gives an extra opportunity in choice.

Fully colourfast, and the most natural of patina shades. NedZink NOIR is a third colour variant of pre-weathered titanium zinc with an anthracite black colour. Roofing, facade cladding and rainwater drainage systems are the colour you wish from the very first day.

In co-operation with the professional wholesale trade, NedZink has given itself the objective of helping and supporting planners and architects as well as future building owners and clients with the use of titanium zinc.

NedZink – Think Zink



# Product description

NedZink produces titanium zinc according to EN 988, an alloy based on electrolytically cleaned zinc with a purity of min. 99.995 % Zn (Z1 according to EN 1179) with small additions of the alloy elements copper, titanium and aluminium. The chemical composition, the mechanical and physical properties and measurement tolerances are determined in the KOMO product certificate and the product certificate from Lloyd's Register, Industrial Quality Scheme for Product Certification by Surveillance of Quality Systems (approval No. QIS 122).

Compliance with the set material properties is checked at regular intervals by an independent and neutral control body, Lloyd's Register.



Product property



<b>Chemical composition</b>		
<b>Product requirements</b>	<b>NedZink titanium zinc</b>	<b>Product requirements according to DIN EN 988</b>
Zinc	Zn 99,995 %	Zn 99,995 %
Copper	Cu 0,08 - 0,17 %	Cu 0,08 - 1,0 %
Titanium	Ti 0,07 - 0,12 %	Ti 0,06 - 0,2 %
Aluminium	Al ≤ 0,015 %	Al ≤ 0,015 %
<b>Size tolerances for standard products</b>		
<b>Product requirements</b>	<b>NedZink titanium zinc</b>	<b>Product requirements according to DIN EN 988</b>
Sheet and coil thickness	± 0,025 mm	± 0,03 mm
Sheet and coil width	+ 2/-0 mm	+2/-0 mm
Sheet length	+ 2/-0 mm	+10/-0 mm
<b>Mechanical &amp; technological properties</b>		
<b>Product requirements</b>	<b>NedZink titanium zinc</b>	<b>Product requirements according to DIN EN 988</b>
Yield strength elasticity (Rp 0,2)	min. 110 N/mm <sup>2</sup>	min. 100 N/mm <sup>2</sup>
Tensile strength (Rm)	min. 150 N/mm <sup>2</sup>	min. 150 N/mm <sup>2</sup>
Elongation (A50)	min. 40 %	min. 35 %
Vickers hardness (HV 3)	min. 40	-
Folding test	1. no fractures on the fold 2. no cracks 3. relative tensile strength D ≥ 0,7 * original tensile strength	no fractures on the fold
Permanent stretch in creep test	max. 0,1 %	max. 0,1 %
Shrinkage cupping	max. 1,5 mm/m	max. 1,5 mm/m
Flatness-corrugation	max. 2 mm	max. 2 mm
Independent product control	certain times a year	-
Guarantee	10 years	-
Quality management system: NEN-EN-ISO 9001		
<b>Physical properties</b>		
Density	7,2 g/cm <sup>3</sup>	
Melting point	420 °C	
Recrystallisation temperature	> 300 °C	
Linear expansion coefficient	0,022 mm/(mK)	

The materials are provided with a continuous stamp with a mark according to the provisions of NEN-EN 988, mentioning the producer, the product description in German, Dutch, English and French, the EN 988 standard, the nominal thickness, the batch number, the year of production and the logos of the control bodies Lloyd's Register and KOMO (K7054).

This product certificate and the ISO 9001 certificate for the quality management system at NedZink assure a constant and uniform high quality, meeting our own standards and far exceeding NEN-EN 988.

NedZink titanium zinc is characterised by high durability and excellent deformation properties, and is extremely weather-resistant and maintenance-free.



# Product range

NedZink is one of Europe's leading producers of titanium zinc for the construction sector. At the Budel-Dorplein plant in Dutch North Brabant, titanium zinc semi-finished products are rolled for use in roof and façade cladding and rainwater drainage systems in traditional and modern architecture.

## PRODUCT RANGE:

### Natural titanium zinc in sheets, coils and strips

#### **NedZink NATUREL**

NedZink NATUREL is a durable and aesthetic material that in the course of time develops a unique charm by the progressive patination of roof and facade cladding. The patina layer originates by the formation of a zinc carbonate base, which forms an oxide skin that is also a natural protective coating. This process starts under the influence of the weather conditions. It has a natural course, so the full grey shade is obtained after one to four years.

### Pre-weathered titanium zinc in sheets, coils and strips

#### **NedZink NOVA**

NedZink NOVA is pre-weathered titanium zinc with a matte subtle brushed surface in a natural medium-grey colour. The uniform medium-grey surface of NedZink NOVA originates after a chemical surface treatment following the rolling process. No coating or lacquer layer is applied. The structure and composition of the patina layer that is normally naturally formed by weather influences is simulated, and the natural properties of the titanium zinc are fully retained. Because NedZink NOVA is mainly used for aesthetically high quality applications, e.g. for facades, the products are provided with temporary surface protection.

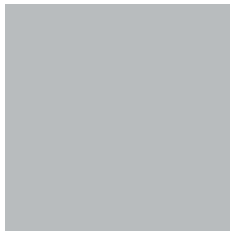
This protection prevents minor damage and soiling during processing and assembly and ensures an optimal appearance after application. On request NedZink NOVA can also be supplied with a self-adhesive protective foil. This foil should be removed immediately and in one smooth motion after assembly on the construction site.



THINK  
ZINK



NedZink NATUREL



NedZink NOVA



NedZink NEO



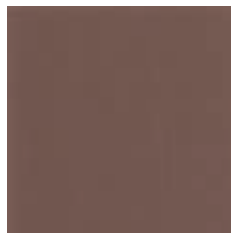
NedZink NOIR



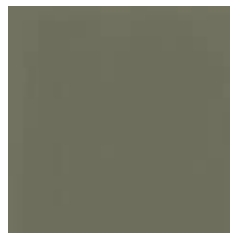
NedZink NUANCE BLUE



NedZink NUANCE RED



NedZink NUANCE GREEN



### Pre-weathered titanium zinc in sheets, coils and strips

#### NedZink NEO

NedZink NEO is pre-weathered titanium zinc with a matte subtle brushed surface in a mineral grey colour. This slightly darker grey surface originates after a chemical surface treatment following the rolling process. No coating or lacquer layer is applied. The properties of zinc as a building material do not change. NedZink NEO has also a temporary organic layer that protects the surface against fingerprints (AFP). In addition NedZink NEO is supplied with a protective foil on the surface to protect the surface during transport and assembly. This foil should be removed immediately and in one smooth motion after assembly at the construction site.

### Pre-weathered titanium zinc in sheets, coils and strips

#### NedZink NOIR

NedZink NOIR is titanium zinc that undergoes a patination process and has an anthracite black colour. The uniform dark surface of NedZink NOIR originates after a chemical surface treatment following the rolling process. No coating or lacquer layer is applied. The properties of zinc as a building material do not change. A temporary organic layer is also applied to protect the surface against fingerprints (AFP). In addition NedZink NOIR is supplied with a protective foil on the surface to protect the surface during transport and installation. This foil should be removed immediately and in one smooth motion after assembly at the construction site.

### Pre-weathered titanium zinc with colour nuance

#### NedZink NUANCE

NedZink NUANCE is pre-weathered titanium zinc provided with pigments. This results depending on the selected pigment in a pre-weathered zinc variant with a blue, red or green colour nuance. These pigments also provide additional protection to the pre-weathered zinc.

NedZink NUANCE is available in the following versions:

- NedZink NUANCE Blue
- NedZink NUANCE Red
- NedZink NUANCE Green

*Other colour nuances are on request.*

### Natural titanium zinc and pre-weathered titanium zinc with a protective coating on the back side

#### NedZink Pro-Tec

NedZink Pro-Tec is titanium zinc produced by NedZink with a protective coating on the back side for application on either cold or hot roof constructions. This protective coating protects the zinc against the effects of water vapour and other substances. The good processing properties of zinc are retained.

NedZink Pro-Tec is available in the following versions:

- NedZink NATUREL Pro-Tec
- NedZink NOVA Pro-Tec
- NedZink NEO Pro-Tec
- NedZink NOIR Pro-Tec
- NedZink NUANCE Pro-Tec

### Pre-weathered titanium zinc with a LDPE core

#### NedZink COMPOSITE

NedZink COMPOSITE is a panel consisting of two layers of pre-weathered zinc and a LDPE core. This combination creates a stiff and flat panel which is perfect for cladding applications. Gluing, cassettes, clamping or screwing, for any application a solution is available.

Detailed information about available dimensions, weights and packaging can be found on the product data sheets.

# Transport and storage



## Packaging, transport storage and processing

Titanium zinc from NedZink must always be transported and stored in a dry and ventilated environment.

Mechanical damage must be avoided at all times. The product must always be protected against damage by knocks (dents) and scraping. The metal surfaces must be adequately protected, also when a protective foil is applied.

The product must also be stored in a dry and ventilated environment on the site. Stored material must be covered to protect against moisture. Protection against rising damp must also be ensured provided. Open storage and storage outside with a cover and packaging that can cause the formation of condensation must be avoided. Mechanical deformation of zinc below 7°C material temperature (and removal of the protective foil) is not allowed.

*For additional information about the product range and the processing of NedZink products see our website [www.nedzink.com](http://www.nedzink.com).*

# Guarantee and Service

## Guarantee

The technical know-how and cleverly conceived quality management at NedZink B.V., together with regular quality tests by independent control bodies, give the guarantee of a uniform high quality of semi-finished products and finished products. It is, however, possible that you have observations concerning a product. In this case NedZink offers its clients from the trade, processors and construction planning the certainty of an immediate guarantee for the fast and professional rectification of any damage for a duration of 10 years.

## Technical construction advice

NedZink provides technical advice from architect up to the building site. Besides an excellent product quality and the extended guarantee, NedZink offers its clients assistance with daily application. NedZink will assist you in word and deed with your planning, execution and processing.

### Technical documentation

In the event of any questions about technical use we dispose of comprehensive technical information in printed or digital form. For this please see our website [www.nedzink.com](http://www.nedzink.com). For immediate assistance or advice when designing, detailing, planning and processing you can contact the technical department at NedZink.

### Service on-site

We offer you on-site advice and assistance. For this you can make an appointment with one of our project advisers.

# Zinc and environment

### Zinc and the environment

Zinc is an essential trace element present in the natural environment. It is indispensable for the healthy development of people, animals and plants. The often strongly differing concentrations of natural elements such as zinc and iron contribute to the biodiversity of the areas concerned.

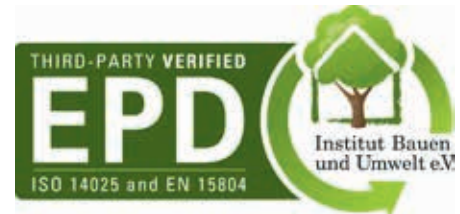
All organisms are able to adapt to these varying concentrations.

NedZink titanium zinc has an exceptionally low corrosion value, and as a result also a very low emission value. The working life of professionally assembled roof gutters in titanium zinc is more than 60 years. Roofing or facade cladding in NedZink titanium zinc protects a building for up to 70 or even 150 years.

Old titanium zinc building material can be 100 % recycled, so valuable resources are saved and an actual contribution is made to the preservation of our environment. Choosing titanium zinc means choosing a natural and extremely durable building material.







## EPD – Environmental Product Declaration

NedZink has an EPD (Environmental Product Declaration) for NedZink NATUREL, NedZink NOVA and NedZink NOIR. These EPDs, which also received the ECO platform label, provide information about the product's environmental data based on the lifecycle analysis or its ecological footprint. By comparing the various EPDs with one another customers can now choose an environmentally conscious product more easily.


The EPDs provide vital data for the environmental assessment of buildings as set out in the new European project for the "Sustainability of buildings". In order for the independent IBU to

objectively compare the environmental impact of NedZink NATUREL, NedZink NOVA and NedZink NOIR, it is tested and validated according to the ISO 14025, 14040 and 15804 standards. They examined the lifecycle analysis (LCA) of each of the three zinc products. The LCA is a tried and tested method, which makes it possible to assess and quantify the environmental impact of the product in every phase of its lifecycle. This includes, among others, CO2 emissions, energy and water consumption and air pollution. The EPDs can be compared based on these indicators, facilitating an environmentally conscious product choice.

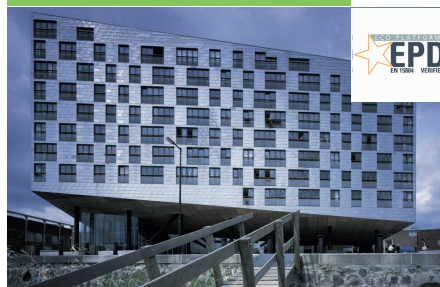
**ENVIRONMENTAL PRODUCT DECLARATION**  
as per ISO 14025 and EN 15804

Owner of the declaration	NedZink B.V.
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-NED-20140082-IBA2-EN
ECO EPD Ref. No.	ECO-00000089
Issue date	23.10.2015
Valid to	22.10.2020

**NedZink NATUREL**  
**NedZink B.V.**




[www.bau-umwelt.com](http://www.bau-umwelt.com) / <https://epd-online.com>



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**NedZink NOVA, NedZink NOIR**  
**NedZink B.V.**



[www.bau-umwelt.com](http://www.bau-umwelt.com) / <https://epd-online.com>





[www.nedzink.com](http://www.nedzink.com)

## Build on NedZink

As a passionate player in the market for rolled Titanium Zinc, NedZink is inspired each day by the demand from architects, designers and users for existing and new possibilities.

NedZink stimulates the achievement of durable and high quality construction projects with bright rolled and pre-weathered zinc. As a trading partner NedZink ensures reliable deliveries, knowledge, quality and service. NedZink is an active promoter of creative zinc applications.

NedZink is also aware of its responsibility with regard to people and the environment. Future-oriented business management and investments in up-to-date production techniques reinforce its market position, and create room for new developments.

NedZink is part of 'Koramic' and 'ElvalHalcor'. Production takes place in the Netherlands. There are sales offices in the Netherlands, Belgium, Germany and France.



NedZink – Think Zink

### Netherlands

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