



ONDEX BIO

The control of light !

ONDEX[®]
by RENOLIT WATERPROOFING

www.ondex.com



Welcome to RENOLIT ONDEX

THE PARTNER FOR ALL YOUR PROJECTS

RENOLIT Ondex has been a French subsidiary of the RENOLIT AG Group since 2006.

RENOLIT AG is one of the world's leading manufacturers of high-quality films and thermoplastic products. This independent family company has been making its mark in terms of quality and innovation for 60 years. It currently employs 4300 people on more than 30 production and distribution sites. The name RENOLIT is synonymous throughout the world with technical expertise, modern product design and customer-oriented services.

A world player in the field of plastic sheeting, RENOLIT Ondex has been producing flat and corrugated sheets for more than 40 years.

The manufacturing method - bi-stretching - gives ONDEX products their originality, with incomparable mechanical strength.

RENOLIT Ondex exports more than 80 % of its production. ONDEX sheets are used throughout the world in forty countries.

ONDEX products are used in fields as varied as:

- industrial construction
- building industry
- horticulture and agriculture
- wall protection
- decoration

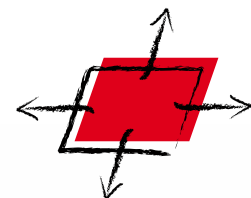
BI-STRETCHING

AN ONDEX PROCESS WHICH GENERATES OUTSTANDING STRENGTH

The manufacturing process used to produce ONDEX sheets is original and unique in the PVC sheet sector.

ONDEX sheets are produced by a classic extrusion process. But the originality and exclusivity of this manufacturing process lies in its bi-stretching, which consists of **stretching the sheets in both directions** – in length and width. This creates a mesh in the molecular structure as the threads and weft in fabric. This completely mechanical process is perfectly stable over time and does not require the use of chemical additives which would be likely to speed up ageing of the sheets.

This molecular reorganization gives ONDEX sheets their incomparable strength.



ONDEX Bi-stretched



ONDEX BIO

THE CONTROL OF LIGHT !

The range of **ONDEX BIO** sheets was designed for **claddings and roof coverings** of greenhouses and garden centres.

ONDEX BIO sheets, available in 4 colour shades from crystal to opaque, are suitable for **all types of cultures** and are also used for **storage buildings or technical premises**.

The light transmission is adapted

- up to 90 % compared with air
- transparency to short infrared of 90 %
- transparency to ultraviolet of 8 %
- opacity to long infrared of 99 %

Increased mechanical resistance to:

- hail
- wind
- snow falls



Colours

4 standard colours available*



White opaque



Neutral crystal



80 % diffusing crystal



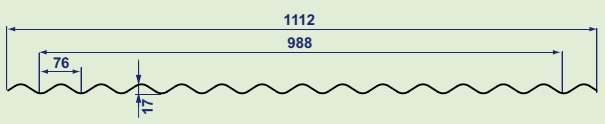
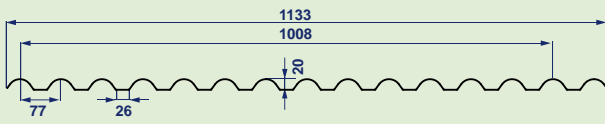
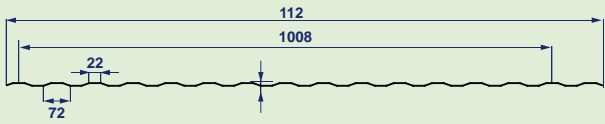
50 % diffusing crystal

**Colours available for some profiles, other colours possible upon request
Representation not contractually binding*



Profiles*

Specially adapted shapes for greenhouses

	Minimum slope	Longitudinal overlap	Useful width	Area of sheets for 1m ² of roofing/cladding	Range	Maximum gap between purlins
TO 76 x 18 - 15 Bio 	10 %	2 waves	0.988 m	1.12 m ²	Bio 1 Bio 2 Bio 3	1.1 m
		1 wave	1.064 m	1.04 m ²		1.25 m
						1.35 m
TOG 77x20 	10 %	2 waves	1.001m	1.12 m ²	Bio 1 Bio 2 Bio 3	1.15 m
		1 wave	1.078 m	1.04 m ²		1.4 m
						1.5 m
G 72x 	10 %	2 waves	0.98 m	1.12 m ²	Bio 2	0.6 m

*Contact us for other profiles. See installation instructions given in our technical documents and installation leaflets

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Renovation or new construction

3 RANGES FOR ALL PROJECTS

ONDEX Bio 3

THE TOP-OF-THE-RANGE FOR GREENHOUSES

ONDEX BIO 3 sheets are the thickest of the range and benefit from a reinforced UV protection.

They are mainly designed for cyclone regions

- maximum gap between purlins
- Increased light in the greenhouse because of a reduced number of supports
- reinforced mechanical resistance
- reinforced UV protection



ONDEX Bio 2

FOR ALL TYPES OF GREENHOUSES

ONDEX BIO 2 sheets have been used for more than 30 years throughout the world ; they adapt to all types of applications :

- roofings
- claddings
- gables
- openings
- partitions

ONDEX Bio 1

BASIC CHARACTERISTICS

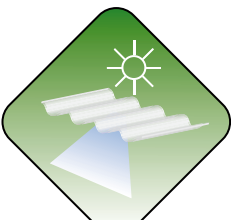
Even in smaller thicknesses, ONDEX BIO 1 sheets have excellent optical and mechanical qualities.

This range was developed for projects where the specifications are less demanding and where the characteristics of polycarbonate sheets are considered to be sufficient.

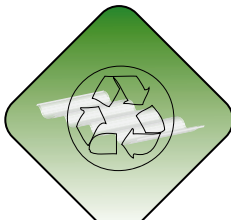
7 good reasons for choosing ONDEX BIO



Shock-resistance



Light transmission



100 % recyclable



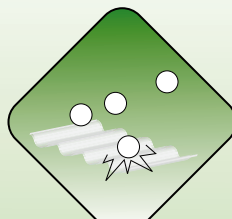
Fire classification B1



Chemical resistance*



Low temperature resistance



Hail resistance

* List on request



INNOVATION

A PRIORITY FOR RENOLIT ONDEX

The innovative strategy of RENOLIT Ondex is based on 2 main themes: a permanent policy to improve existing products and the development of new applications.

To meet our customers' growing demands, our Marketing and Research & Development departments are constantly developing new profiles or colours.

Diversification is one of the driving forces of innovation at RENOLIT Ondex, but it is our customers, above all, who stimulate our creativity.

More than 100 new products are launched every year!

SUSTAINABLE DEVELOPMENT

PVC IS A 100% RECYCLABLE AND RECYCLED MATERIAL...

Eager to protect the environment and conserve resources, RENOLIT Ondex recycles all its manufacturing waste internally.

Sheets can be collected at the end of their life and easily recycled in specialist sectors, thereby gaining a new lease of life!



ONDEX BIO sheets application*

QUICK ADVICE FOR A SUCCESSFUL PROJECT!



The temperature of the sheet must not exceed recommended temperatures



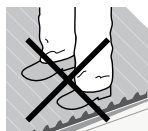
Use the accessories recommended in our installation instructions



Check the altitude of the implementation



Protect the sheets from sun, wind and rain during storage and throughout implementation



Comply with safety regulations. Do not step directly on the sheets



Check centre distances according to snow & wind loading



Check weather conditions (wind, rain, snow)



Make sure the installation «sky side» is identified

*See installation instructions given in our technical documents and installation leaflets

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