

BIO2 HP OPTI*Red*

Increase in agronomic yield

Two factors play a key role in plant growth:

- Only part of the solar spectrum (400-700nm) is used by plants for photosynthesis.
- Red light plays a key role in plant growth.

The OPTI*Red* sheet combines these 2 features to improve photosynthetic yield.

It directly includes spectral converters leading to agronomic benefits.

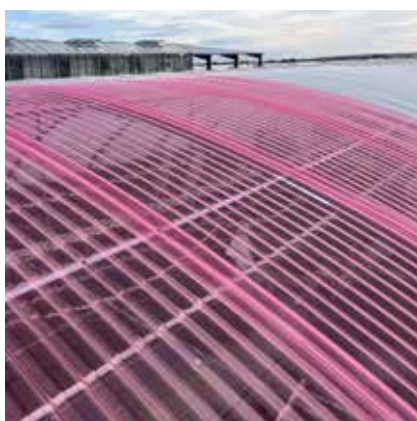
This new advantage is an addition to the mechanical strength of the RENOLIT Ondex BIO2 HP sheet thanks to bi-stretching, a unique manufacturing process consisting in stretching the sheets in both directions.



PROMOTES
BIODIVERSITY



AGRONOMIC
YIELD

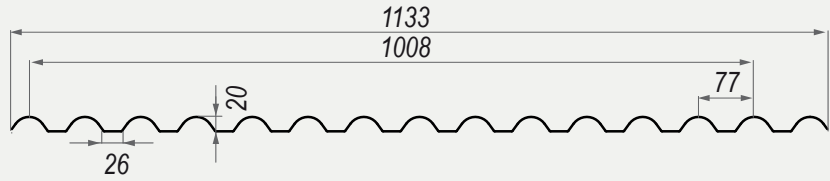


PHOTOSYNTHETIC
EFFICIENCY

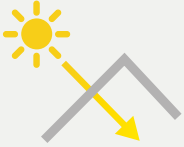
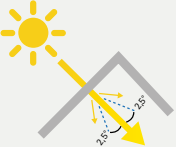
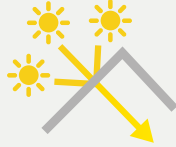
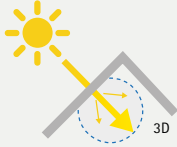
SPECIFICATIONS

PROFILE TOG 77/20

- Useful width: 1008 mm
- Total width: 1133 mm



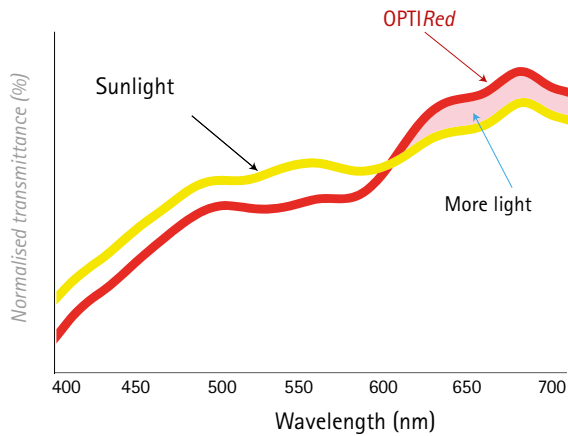
OPTICAL DATA

Light transmission % ①	Haze Diffusion % ①	Hemispherical light transmission % ②	Hortiscatter % ②
75	20 max.	70	4
Percentage of direct solar radiation that passes vertically and is transmitted indoors 	Percentage of light that deviates from the incident beam by more than 2.5 degrees when passing through 	Incoming light beam despite the slope and the glares 	Ability to transform the beam into a wide beam limiting the shadows cast 

Nominal values given for the BIO2 range may vary depending on manufacturing tolerances. Information given in December 2023 in the current state of our knowledge. Technical specifications are subject to change without notice.

- ① determined with a haze-guard ② Data from Wageningen UR light lab (The Netherlands) between 400 and 700 nm

SPECTRAL CURVES



LIGHT QUALITY

RED LIGHT

Responsible for regulating flowering and fruit production
Increases stem diameter and boosts ramification

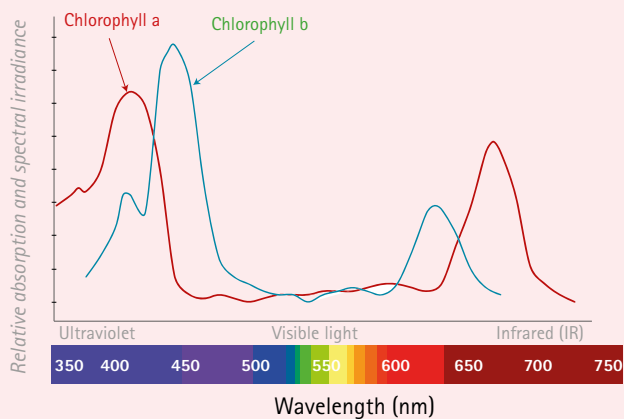
GREEN LIGHT

Leaves absorb little green light

BLUE LIGHT

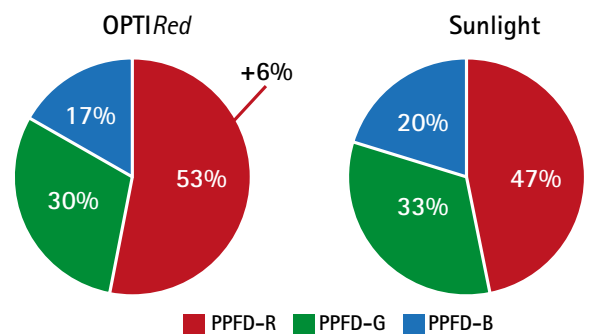
Responsible for vegetative growth and leaf growth
Important for seedlings and young plants as it reduces stretching

ABSORPTION SPECTRUM OF CHLOROPHYLLS



Source: Wageningen University

PPDF-R GAIN OF 6%



PPFD: Photosynthetic Photon Flux Density

Experimental
greenhouse
in Reims (France)
2023

AGRONOMIC BENEFITS

Experiments carried out by CASCADE have shown the benefits of the OPTI*Red* formulation on productions.

The photosynthetic efficiency increases, leading to multiple benefits for plants.

Furthermore, OPTI*Red* sheets allow an alternative to red LED lights during the day, reducing energy costs.

The spectral conversion provided by the OPTI*Red* sheet is lasting over time thanks to the unique formulation of the RENOLIT O*ndex* sheet



YIELD INCREASE
GAIN OF 10%



REDUCTION IN
WATER AND
NUTRIENT
CONSUMPTION



EARLINESS
OF
FLOWERING



IMPROVED HEALTH
AND BETTER
RESISTANCE TO
PARASITES



QUALITY OF
FRUIT AND
VEGETABLES



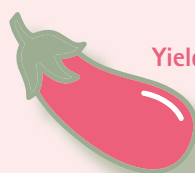
Yield +25%
Earliness



Yield +12%
Earliness



Yield +10%
Less disease
More flowers open



Yield +20%



Yield +10%

WHAT IS PVC?

... POLYVINYL CHLORIDE

PVC has been produced industrially for over 60 years and is now the most widely used plastic material in the world in the construction industry.

RENOLIT Ondex uses the bi-stretching of PVC to manufacture its sheets.



PVC IS MADE FROM
SALT (57%)



PHTALATE AND
BISPHENOL A FREE



100% RECYCLED DURING
MANUFACTURING
PVC is the most recycled (up to
9 times)



SHAREHOLDER IN
an eco-organisation by
and for the players in the
building industry



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vinyl plus



Rely on it.

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