

TRANSLUCENT DIFFU100

100% diffuse light for optimal comfort

Numerous studies have shown that natural light is essential for our physical and psychological health. It increases our efficiency in many areas, including schools, workplaces and sports arenas.

It is also a factor of comfort and productivity in agriculture and animal production in particular. However, direct light means heat.

Our innovative TRANSLUCENT DIFFU100 formulation in bi-stretched PVC combines unique and proven benefits!



**BETTER
THERMAL
COMFORT**



**65%
LIGHT
TRANSMISSION**



**100%
LIGHT
DIFFUSION**

SPECIFICATIONS

Range	RENOLIT ONDEX SOLLUX	
Nominal thickness (mm)	0.9	
Net weight (kg/m ²)	1.5	
Material	Bi-stretched high resistance PVC	
Fire rating (EN 13501-1)	B s1 d0	
Operating range	from -40°C up to +65°C	
Colours	Translucent DIFFU 100	Natural translucent
Light transmission (+/-5 %)	65	65
Milky Diffusion - Haze (%)	100	65

APPLICATIONS

- Sports facilities
- Canopies
- Agricultural buildings
- Industrial buildings
- Residential homes
- Covered walkways
- Fish farming
- Storage

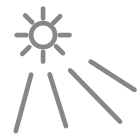
Translucent DIFFU 100 sheets will bring comfort and light to your building whatever its use. Thanks to its perfect light diffusion, sportspeople will be able to move around in an arena without cast shadow on the ground nor glare. It is also a major advantage in the equestrian world. There are additional benefits such as thermal comfort and a fire behaviour allowing smoke to be quickly evacuated for the industrial sector and residences. Finally, as part of our search for an optimal light diffusion, the new MIXT DIFFU 100 shade has been added to our RENOLIT ONDEX BIO ranges specially for greenhouses. It is also suitable for algaculture and the greenhouse growing of vegetables or horticultural products (see our documentation BIO GB20 005).



Reduction of heat stress
Enhanced comfort



A drop of 3 to 8°C inside the building during warm periods, depending on the regions



Homogeneous light distribution
Reduction of shadows on the ground



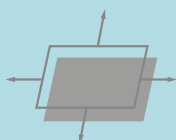
Lower artificial lighting costs
Savings of 1000 to 2000 €/year
(for 1000 m² of building)



Unequalled mechanical resistance
to hail



Resistance to chemical agents,
sea air and
phytosanitary products



Bi-stretching is a unique
manufacturing process providing an
unequalled strength



Very high shock-resistance



B s1 d0
No fire propagation
No droplet

DATA OBTAINED DURING A STUDY IN A CATTLE FARM

Dairy cows are sensitive to the heat. Radiation also has an impact on their welfare and has consequences on their productivity. For these reasons, the natural light provided by the lighting parts on the roof in the stalls must be perfectly controlled.

Data on heat stress

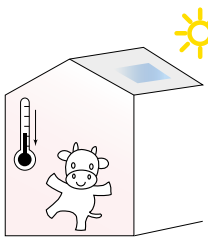
	Temperature / Relative humidity	Loss in milk production (kg/cow/day)
Light stress THI* (68-71)	22°C / 50 %	-0.28 kg -1.1 kg
Moderate stress THI (72-79)	25°C / 50 %	-0.30 kg -2.7 kg
Serious stress THI (80-89)	30°C / 75 %	-0.322 kg -3.9 kg
Severe stress THI (90-99)	34°C / 85 %	< 5 kg

Temperature in °C	Relative humidity (%)									
	0	10	20	30	40	50	60	70	80	90
22	64	65	66	67	67	68	69	70	70	71
23	65	66	66	67	68	69	70	71	71	72
24	66	67	68	68	69	70	71	72	73	74
25	67	68	69	70	71	72	73	74	75	76
26	67	69	70	71	72	73	74	76	77	78
27	68	70	71	72	73	75	76	77	78	80
28	69	70	71	73	74	75	77	78	79	81
29	70	71	73	74	75	77	78	80	81	83
30	71	72	74	75	77	78	80	81	83	84
31	72	73	75	76	78	80	81	83	85	86
32	72	74	76	78	79	81	83	85	86	88
33	73	75	76	78	80	82	84	86	87	89
34	74	76	78	80	81	83	85	87	89	91
35	75	77	79	81	83	85	87	89	91	93
36	76	78	80	82	84	88	88	91	93	95
37	76	79	81	83	85	88	90	92	94	96
38	77	79	82	84	86	88	91	93	95	98
39	78	80	83	85	87	90	92	95	97	100
40	79	81	84	86	89	91	94	96	99	101
41	80	82	85	88	90	93	95	98	101	103

*THI: Thermal Humidity Index

Source: <https://celticseaminerals.com/heat-stress-dairy-cows/>

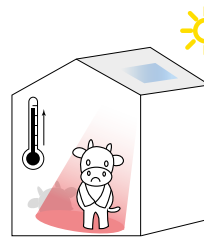
Translucent DIFFU 100



- No shadow cast on the ground
- Thermal comfort
- No light spot
- Homogeneous distribution of light
- Animal welfare
- Increase in milk production

Cast shadows are eliminated, which reduces animal stress. Zones of light disappear, ensuring an optimal surface area available for the animals.

Natural Translucent



- Shadow cast on the ground
- Heat
- Light spot
- Uneven distribution of light
- Animal stress
- Reduction in milk production

Our **PERFOLUX** and **LIGHT RIDGES** ventilation solutions are still available. So do not hesitate to contact us!



Farming group
France
September
2023

4000 lux

16500 lux

2900 lux

WHAT IS PVC?

... POLYVINYL CHLORIDE

It has been produced industrially for over 50 years and is now the most widely used plastic material in the world in the construction industry. It is a thermoplastic resin that easily accepts the shape you want to give it. This is done through heating.

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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