



TRANSLUCENT DIFFU100

100% diffuse light
for optimal comfort

BETTER THERMAL 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!



APPLICATIONS

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



**65%
LIGHT
TRANSMISSION**



**100%
LIGHT
DIFFUSION**

SPECIFICATIONS

Ranges	ONDEX HR (High Resistance)	ONDEX SOLLUX
Nominal thickness (mm) +/-	1.1 - 1.2	0.9 - 1.0
Net weight (kg/m ²) +/-	1.9	1.5
Material	High Resistance bi-stretched PVC	
Fire rating (EN 13501-1)	B s1 d0	
Operating range	-40°C to + 65°C	
	ONDEX HR and SOLLUX	
Colours	Translucent DIFFU100	Natural translucent
Light transmission (+/-5 %)	65	65
Milky Diffusion - Haze (%)	100	65

Translucent DIFFU100 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 DIFFU100** shade has been added to our **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 GB26 005).

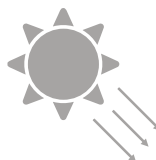
8 GOOD REASONS TO CHOOSE TRANSLUCENT DIFFU100



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)



Unequaled
mechanical
resistance to hail



Resistance to
chemical agents,
sea air and
phytosanitary
products



Very high
shock-resistance



B s1 d0
No fire propagation
No droplet

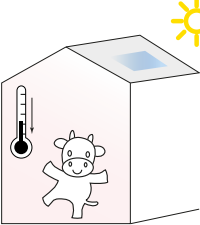
DATA OBTAINED DURING A STUDY IN A CATTLE FARM

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.

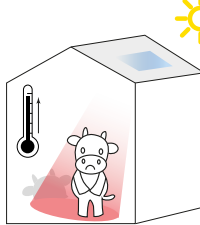
Data on heat stress			
		Temperature / Relative humidity	Loss in milk production (kg/cow/day)
	Light stress THI* (68-71)	22°C / 50 %	-0.28 kg -1.1 kg
	Moderate stress THI (72-79)	25°C / 50 %	-0.30 kg -2.7 kg
	Serious stress THI (80-89)	30°C / 75 %	-0.322 kg -3.9 kg
	Severe stress THI (90-99)	34°C / 85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

*THI: Thermal Humidity Index
Source: <https://celticseaminerals.com/heat-stress-dairy-cows/>

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



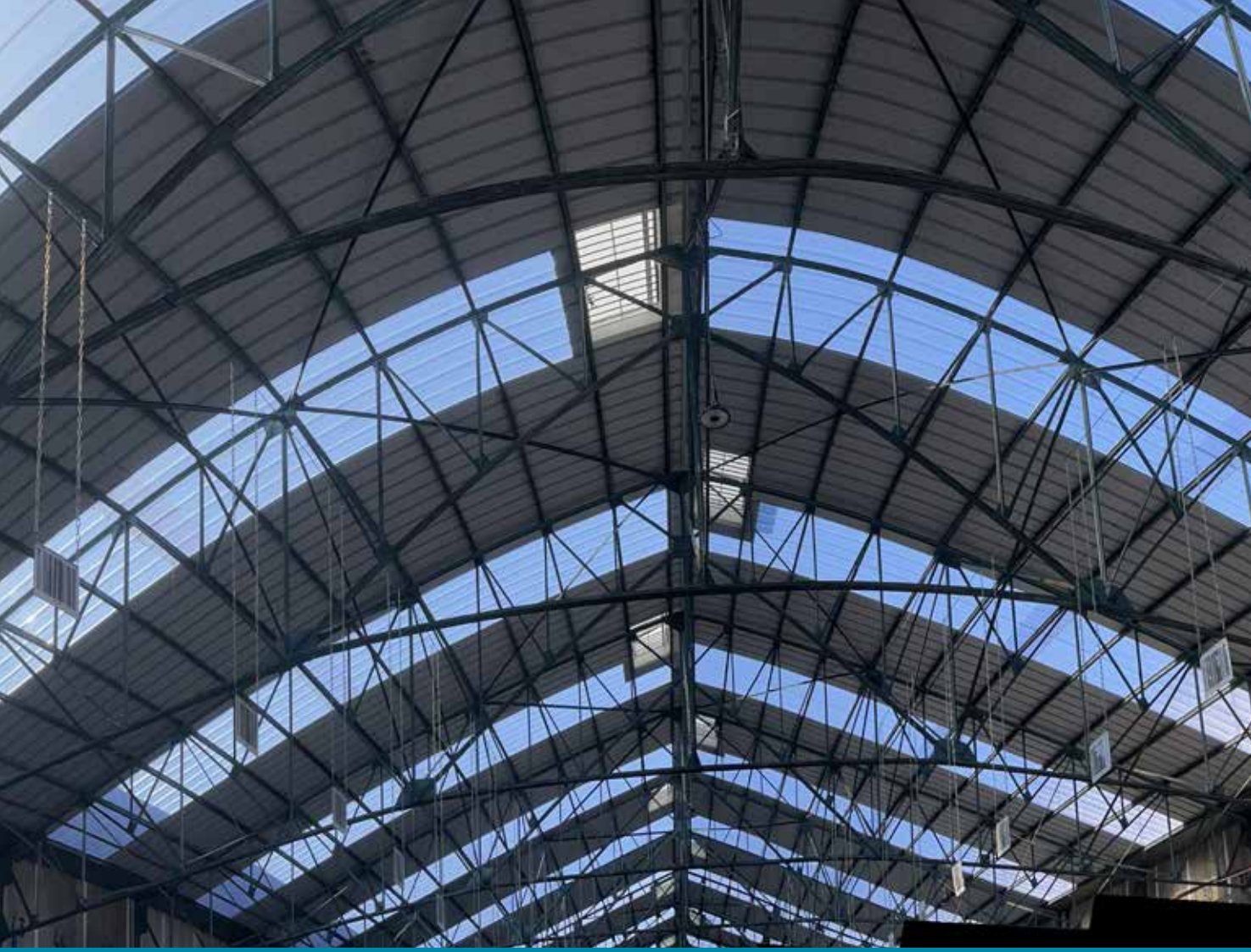
- No shadow cast on the ground
- Thermal comfort
- No light spot
- Homogeneous distribution of light
- Animal welfare
- Increase in milk production



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

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

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



WHAT IS THE BI-STRETCHING?

An exceptional resistance «Made in France»

Invented and patented in 1964, this process is unique in the world for the production of cladding and roofing sheets.

Bi-stretching involves stretching the sheet in both width and length before giving it its final shape.

This entirely mechanical process is perfectly stable over time and gives the **ONDEX** sheets their incomparable resistance.

More than four times higher than non bi-stretched PVC sheets!

WHAT IS PVC?

POLYVINYL CHLORIDE

It has been produced industrially since the 1960s 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.

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



**PVC IS MADE
FROM SALT
(57%).**



**PHTALATE AND
BISPHEOLA
FREE**



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