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DAN PAL
Light architecture

Creation **SEMIOS** - This document is not contractual - March 05 - Illustrations courtesy of Everlite and the architecture firms and contractors cited / p. 2, Actiar: P. Ruault / p. 6, Ice Rink, Grenoble: M. Morin / p. 7, Rosheim :C. Bourgeois / p.8, Kitchens Millas: Didier Boy De La Tour / p. 11, Renault: Pierre and Gilles / p. 13, François André Stadium: Stéphane Chalmeau / p. 14, Everlite: La Boîte à Pixels / p. 16, Naval base Lorient: Yvan Zedda





Danpalon®

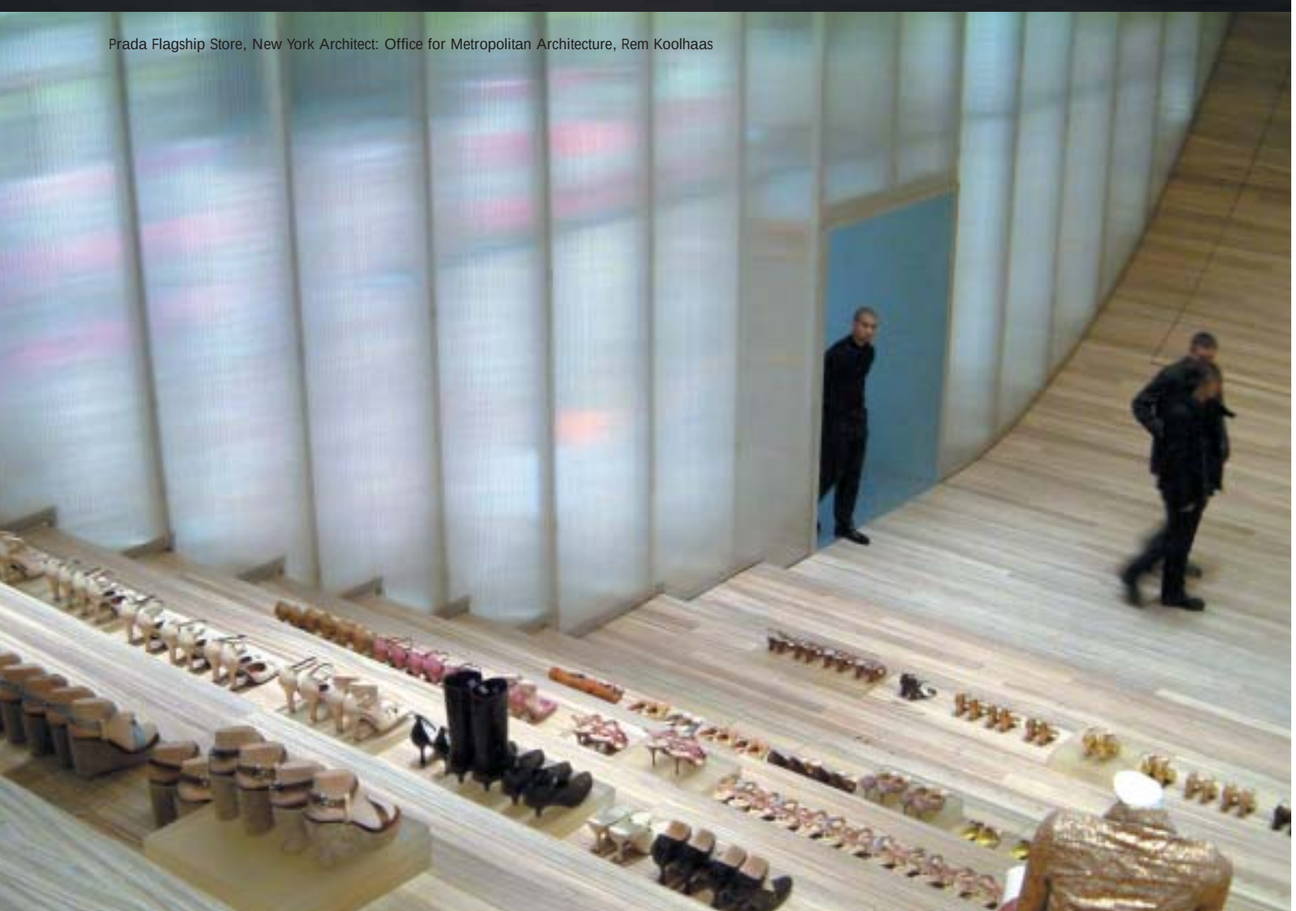
LIVE IN FULL NATURAL LIGHT



DAN PAL
Light architecture



Actair, Nantes Airport - Architects: Manuelle Gautrand & Associates



Prada Flagship Store, New York Architect: Office for Metropolitan Architecture, Rem Koolhaas

Light Architecture

Danpalon is the complete daylighting solution offering exceptional quality of light, thermal insulation and UV protection with a rich non-industrial visual appeal. The Danpalon system offers substantial physiological and psychological benefits in all work and living spaces.

Create with natural light. Use the translucency or transparency of the panels in design to transform buildings in to areas of light and colour, resulting in stunning effects during the day and through the night. Use the Danpalon system for roofing, facades, cladding or partitions, both internally and externally.

Dan Pal (UK) can offer to all professional architects and constructors a complete creative solution. With the superior technical qualities of Danpalon, design in confidence to create spaces of comfort and well being. The Danpalon is 'Light Architecture'.

The Danpalon daylighting system is manufactured from the highest quality polycarbonate. The products performance is certified by rigorous testing from worldwide institutions. This technical superiority is appreciated through a wide range of quality installations performing to the design, throughout the world. The various colours, finishes and visual effects offer a great palette of creative options for all designers to use in realising their own unique designs.

DAN PAL
Light architecture

Danpalon worldwide



Everywhere in the world
Creativity from Day to Night
During the day, the light hugs the building like a second skin and Danpalon provides an optimal quality and comfortable lighting.

By night, the internal activity of the building can reveal itself, transforming the building in to a lantern of colour. Danpalon is light architecture – 24 hours a day.





Railway Station, Moscow
Architect: Sasha Lukich



Sports Stadium, Canton, China
Architect: Paul Andreu



Sports Stadium, Macao



Geneva stadium - Architect: Bernard Mocellin



Waste Recovery Plant, Chineham, UK – Architect: S'PACE Architects & Associates - Jean-Robert Mazaud



Principal Railway station, Tel Aviv



The translucency of the building generates a very pleasant light of day; it is also a perfectly adapted lighting for television broadcasting.

Paul Andreu, Architect

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Light architecture

Danpalon decoration



Danpalon, the freedom of expression

Freedom to create – Danpalon allows designers to explore new aesthetic dimensions. Silk-screen printing and painting… by associating the image to light, Danpalon creates evolutionary' spaces, where the decoration of the Danpalon is transformed by light.



Ice Rink, Grenoble, France - Architects: Herault-Arnod - Danpalon 10 SY and fibre optic lighting

The ice pattern effect is realised by a depth, a translucency, a vibration of the printed material.



"Bonhomme de Neige" shopping center - Launaguet
Digital painting on Everlux - GIMBERT SURGELES



Bessou College, France
Architects: MPM Architects,
Morel Pierre and Matthew
Silk-screen printed
Danpalon



INPG, Grenoble, France - Architects: Herault-Arnod - Painted Walls behind Danpalon 10 SY





Children's Centre, Rosheim, France, day and night - Architects: Pierre Albrech, Dominique Weber - Printed films applied on to Danpalon



Bowling alley, Chenove, France - Architects: M. Bastier - Archi Plus
Printed films applied on to Danpalon



"Maison Folie" Exhibition Centre, Villeneuve D'Asque, France
Architect: Quatr'a Architects & Associates
Silk-screen printed Danpalon

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Danpalon colour



Danpalon, shades of light
Danpalon is available as standard in nine colours from clear, ice and opal, orange to blue, green and bronze colours as well as grey and silver. Danpalon can be produced in any colour to echo the environment and incorporate the building in to its surroundings.



Technical Centre for the Environment, Anglet, France - Architects: DL & Associates



Champion Supermarket, Les Sables d'Olonne, France
Architects: Briton & Claude Architecture'

Kitchens Millas, France - SCP Boyer Gibaud Percheron





Bandstand



National Library,
University of Strasbourg, France
Architect: Partick Weber



School Gymnasium, Pau, France - Architect: Nathalie Larradet

The green Danpalon reminds me in a way of the oxidised copper on a nearby building.

Nathalie Larradet, Architect



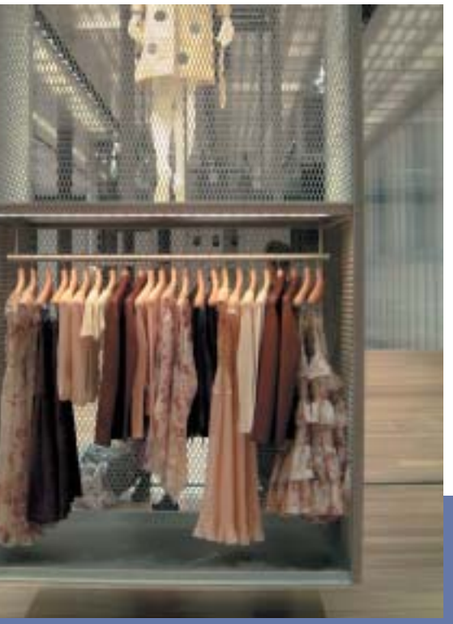
Bowling alley - Thionville, France - Architect: M. Giacommazzi

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Danpalon interiors



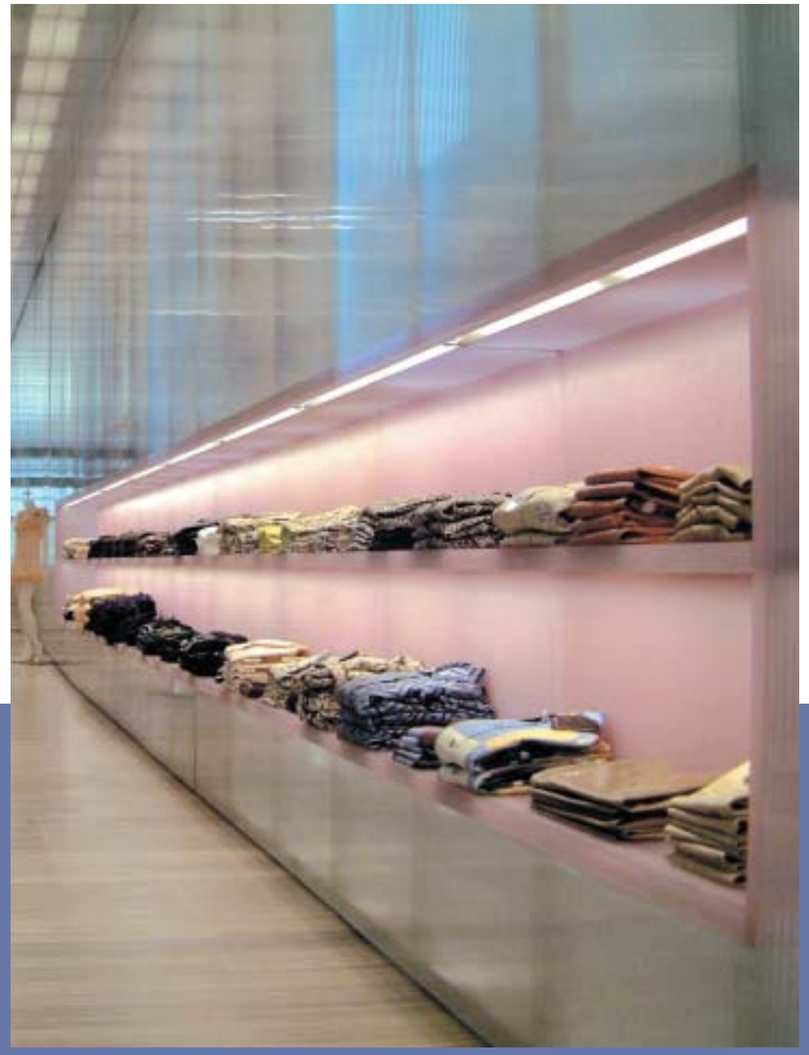




Prada Flagship Store, New York
Architect: Office for Metropolitan Architecture, Rem Koolhaas

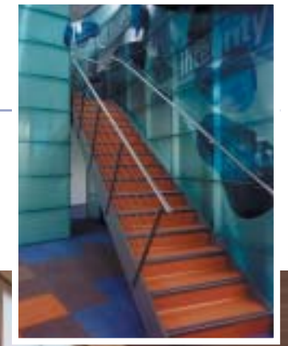
Danpalon creates the scene

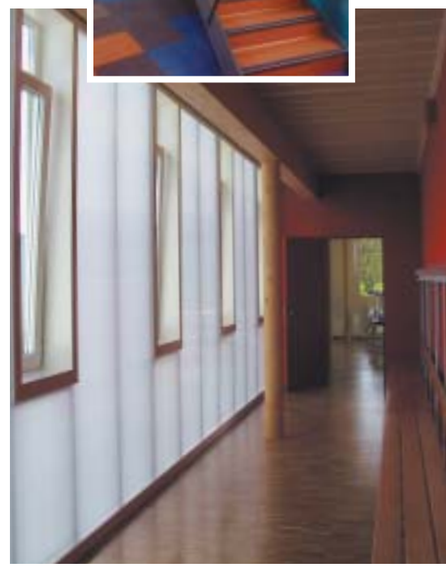
Internal spaces can be brought to life with Danpalon and light effects, creating an appealing environment. The clean lines of the Danpalon, coupled with coloured panels and sympathetic lighting can create a space, giving the feeling of openness and light. Create new atmospheres – live in light with Danpalon.





Hospital Centre Elbeuf, France - Architect: Frédéric Closset





Esplanade secondary school Begnins (Switzerland)
Pascal De Benoit, Martin Wagner Architects



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Danpatherm

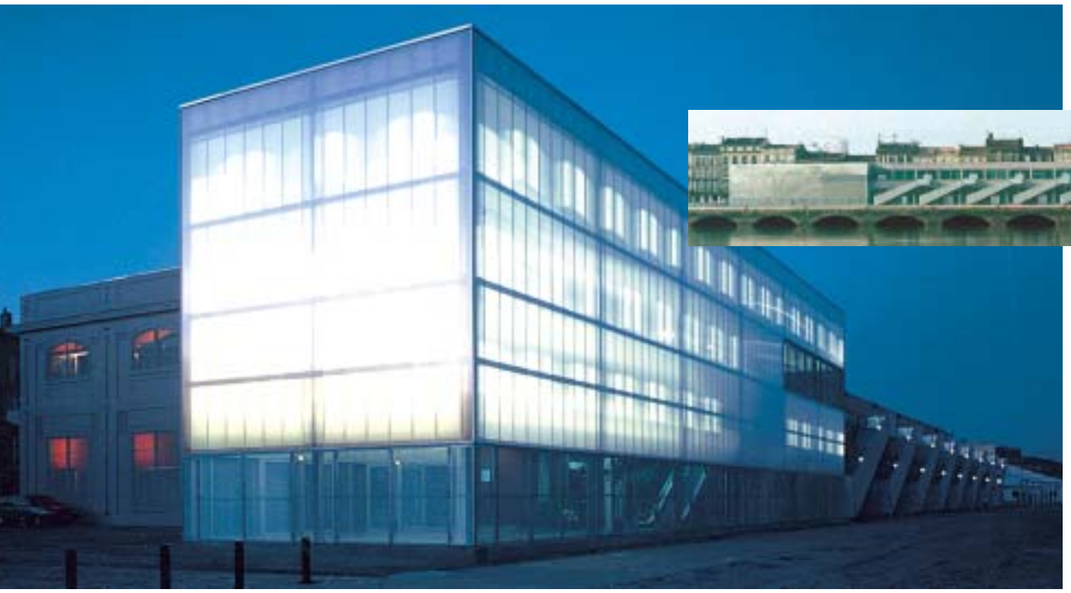
Danpatherm +



Danpalon – Insulation with light
Thermal insulation without opacity is achieved using two Danpalon panels enclosing an insulating air strip. Danpatherm is the first thermal insulating system which is also translucent. The Danpatherm + version also incorporates an additional translucent insulating material in between the Danpalon panels.

The immateriality of light and the thermal performance of the Danpalon are very appealing.

Christophe Gautié, Achitect & associates



Hangar 14
Exhibition Hall,
Bordeaux, France
Architects:
C. Gautié,
V. Tastet,
S. Courrian,
J.P.Lanoire



Esplanade secondary school,
Begnins, Switzerland
Architect:
Pascal De Benoit,
Martin Wagner



Danpatherm on the François André Stadium - Architects: Estève & Boucheton



SCI Juves - offices, Bordeaux, France - Architect: Pierre Ferret



Medical Centre, La Rochelle, France
Architect: Jean-Luc Cortella



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Danpavoute





Army Selection Centre,
Duhesme de Mâcon, France
Architect: Dominique Péloni





Everlite Concept Workshop,
Grigny, France



Sports & leisure
complex, coquilles
Architect: EURL
Marc Larivière

Danpalon lighting from the top
The quality of light transmission combined with high thermal performance.
Throughout the seasons, the very low solar factor of Danpavoute reduces the 'greenhouse effect' whilst optimising the efficiency and costs of air-conditioning.
Self supporting and curved, Danpavoute offers installation flexibility with technical attributes such as a 10 year guarantee against hale and impact resistance up to 1200 Joules.

Danpalon hugs perfectly the curves of the roof.

Dominique Péloni, Achitect



Forest Hill Shopping Centre, Villejuif, France

Danpalite



Danpalon, pure transparency
Danpalite has no equivalent on the market when it comes to light transmission.
A flexible system for installation, several hundred square metres can be realized in one installation block.



Cable Car Station, Lognan
Architects: Legrand-Crouan





Tram Station at Hérouville-Saint-Clair, France - Architects: Tetrarc

Danpalite allowed us to retrieve the lightness of foliage in which the light plays.

Tetrarc, Architecture and design firm

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Light architecture

Natural light
stability and productivity

The economical character of natural light is not only measured with the reduction of energy use, but also beneficial effects on ones well being, the diurnal lighting can generate a real productivity stimulator in the firm. Marc Fontoynont, professor and Director of research at the ENTPE (National Civil Engineering School in France), gives a report on the matter.

A natural source of well being
Joining the light spectrum wavelengths, “coloured” by the shades of our environment, natural light is not only more beautiful than artificial light: it is essential to our physiological and psychological balance. Medical studies highlight the importance of a true daily luminous cycle (real days and true nights) for a good night’s sleep.

Artificial lighting: fatigue and headaches
Unfortunately, not all buildings are designed in order for their occupants to benefit from the advantages of natural lights. In most firms and industrials spaces, neon and halogen compensate for the lack of natural light with often, annoying consequences for man… and business: In this way, people permanently exposed to artificial lighting have more breaks and are subject to heavy fatigue, headaches and a drop in concentration at the end of the day.

Open the spaces to natural light
On the contrary, specific qualities of natural light favour devotion to work and productivity. In the industrial field, this sort of lighting shows the advantage of easing the work conditions, contributing to the optimisation of ones wellbeing… and productivity.

An invitation to impose the natural lighting in all specifications
With Danpalon, Dan Pal (UK) can provide light architecture systems with no equivalent on the market. Dan Pal (UK) can provide the systems to put light into the heart of tomorrows projects.



Naval base,
Lorient, France
Architect:
M. Revert

Durability
certifications, technical advices



NANTES ATLANTIQUE

AREF International
À l'attention de Monsieur TRICOT
163 bis Avenue de Clichy
Trapèze Malakre
75017 PARIS

Bouguenais, le 6 avril 2004

RE: Nantes Atlantique Airport

Sir,

We opted for the solution of using Danpalon polycarbonate systems for the construction of the B.E.M.A. building on the basis of the descriptive list of choices provided by our architect Manuelle Gautrand for this project, which was carried out in 1996.

We hereby confirm that since that date, we have been entirely satisfied with the choice of Danpalon, with respect not only to its resistance to ageing, in which we have observed no deterioration whatsoever, and with respect to both its light-transmitting properties and the mechanical resistance of the system as implemented using the proper construction practices.

ilding, we have
he site, namely
/ 1,000 sq.m. of



DELEGATION INFRASTRUCTURE
INGENIERIE
GROUPE BATIMENT

SNCF

EVERLITE CONCEPT
9, place de la Vaucaise - CS 1463
ZI La Petite Montagne Nord
91020 EVRY CEDEX

Ref :

Objet : ATTESTATION

Date : 8 novembre 2001

I chose the Danpalon products, distributed by the firm EVERLITE CONCEPT, for the achievement of the walls and the roofing relative to some buildings I designed.

These materials permitted, in the economy of the projects, to create some surfaces totally translucent, capable of lightening naturally the heart of the buildings.

Particularly adapted to the industrial projects, the Danpalon products marketed by EVERLITE CONCEPT are proposed as complete systems ready to fit as walls or roofings, possessing the necessary agreements for resistance, watertightness or life time.

These agreements were completed by some accelerated ageing tests made in the SNCF laboratory, which emphasized their good behaviour in the time, included in an industrial environment.

I appreciated the solutions proposed by the supplier in order to solve the solar control problem.

I also appreciated the searching efforts and the answers found by EVERLITE CONCEPT to limit or reduce the possible friction marks or accidental scratches.

Daniel SIMON
Architecte DPLG



SOCOTEC

Saint Quentin en Yvelines
le 07 Avril 2004

DIRECTION OPERATIONNELLE CENTRALE
Service National Construction
« les Quadrants » - 3, avenue du Centre - Guyancourt
78182 Saint Quentin en Yvelines Cedex
Tél. 01 30 12 80 00
Fax 01 30 12 82 83

AFFAIRE SUIVIE PAR : P. MAITRE
TEL. DIRECT : 01 30 12 83 01

ANC 04 1218 P00TF

AFFAIRE : Enquêtes Techniques SOCOTEC sur les Procédés de la gamme DANPALON

EVERLITE CONCEPT
3, rue du Rêverolais
BAJC 1721
Z.I. La Petite Montagne Sud

91017 EVRY LISSES CEDEX

A l'attention de Monsieur Bernard SAINT

Fax n° 01 64 97 07 33

Sir,

We are responding to your request concerning the successive Socotec Technical Audits carried out since 1989 on the systems or processes in the various applications of the Danpalon range.

These Audits all resulted in a FAVOURABLE OPINION from Socotec on the basis of the relevant Technical Specifications Documents for the various applications of the Danpalon processes in mainland France: these Technical Specifications Documents define the conditions of use and implementation for the various applications.

In the context of these renewed Technical Audit missions, no anomalies have been brought to the attention of Socotec (from 1989 to the current date in April 2004) of a nature to call into question or raise doubts as to the quality or durability with respect to premature weathering of Danpalon components in their various applications, with respect to both their light-transmitting properties and their mechanical resistance and watertightness.

Ever since the first Socotec Opinion, issued in October 1989, all of the successive Socotec Opinions have been FAVORABLE, on the basis of the Technical Specifications Documents validated thereby.

The most recent Socotec Opinion, formulated on the basis of Danpalon Technical Specifications Document no. 2B (with various addenda), is valid until 31 December 2005.

Under the circumstances, Socotec has no observations to make concerning the Everlite Concept note dated 6 April 2004, which reprints excerpts from the successive Socotec Opinions on the Technical Specifications Documents for the processes in the Danpalon range.

Sincerely yours,

Le Directeur d'Agence

P. MAITRE

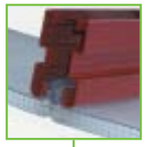
Danpalon, reliable material
The best of natural light, and for a long time: a high quality synthetic material, Danpalon ensures technical and aesthetic durability with no equivalent in its field.

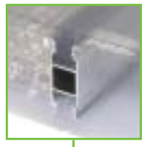
These ageing performances, acknowledged and approved by well known institutes (SOCOTEC certifications, technical advice from the CSTB, Warrington fire research certifications), explain why more and more constructions professionals prefer Danpalon. Vote of confidence…

Originals letters are in french
copies available on request

Danpalon systems






Description	DANPALON 8													DANPALON 10							DANPALON 10							DANPALON 16									DANPATHERM		DANPALITE						
	clear	ice	smoke	blue	green	opal	danpalu	clear	ice	smoke	blue	green	opal	danpalu	clear	ice	smoke	blue	green	opal	danpalu	clear	ice	smoke	blue	green	opal	danpalu	clear	ice	smoke	blue	green	opal	danpalu	clear Matt Finish	ice Matt Finish	16 + 16	10 + 8	clear	ice	smoke	blue	green	opal	danpalu
Amount walls	2							4							3							4							6									6 + 6 + air strip	4 + 4 + air strip	1						
Structure	rectangular structure (SR)							multi-cell structure (MC)							Y structure (SY)							multi-cell structure (MC)							multi-cell (MC)									double wall		Compact 4 mm						
Light transmission %**	84	75	44	63	71	45	24	71	60	25	50	60	35	20	80	62	25	48	58	33	20	71	60	25	50	60	35	20	63	51	35	49	44	22	20	53	40	consult us		63		35	49			20
Solar transmission %**	74	70	44	69	64	48	21	60	54	26	57	52	38	18	66	59	28	57	54	37	18	60	54	26	57	52	38	18	51	50	35	51	42	28	17	50	41	consult us		51		35	51			18
Solar reflection %**	25	25	18	24	21	36	30	36	32	18	27	32	40	33	28	30	11	22	22	45	30	36	32	18	27	32	40	33	40	38	30	38	33	51	29	35	38			40		30	38			33
SHGC Coefficient**	0.74	0.71	0.52	0.70	0.67	0.51	0.31	0.61	0.57	0.37	0.60	0.55	0.42	0.28	0.67	0.61	0.40	0.61	0.59	0.41	0.28	0.61	0.57	0.37	0.60	0.55	0.42	0.28	0.53	0.52	0.42	0.53	0.47	0.32	0.28	0.52	0.45			0.61		0.42	0.53			0.28
U = Wm² C° (K)	2.46 in MC***							3.30 in SR***							2.11 in MC***							2.86 in SY***							1.53***									consult us		5.20***						
Fire performances	M1*														M1* / class 1Y							M1* / class 1Y							M1* / class 1Y									M1*	M1*	M2*						
Sound proofing	17 dBA														21 dBA							21 dBA							21 dBA									27 dBA	22 dBA	26 dBA						
Span on flat roof	1.75 m														up to 2 m							up to 2 m							up to 2.20 m											according to supporting structure						
Minimum pitch	5°														5°							5°							5°											10°						
Thermoforming minimum radius	Danpavoute 8: 0.80 m														Danpavoute 10: 1 m							Danpavoute 10: 1 m							Danpavoute 16: 1.30 m																		
Maximum span thermoformed without arch	Danpavoute 8: up to 1.75 m														Danpavoute 10: up to 2.50 m							Danpavoute 10: up to 2.50 m							Danpavoute 16: up to 2.80 m											only with arches						
Certified manufacturing	ISO 9002														ISO 9002							ISO 9002							ISO 9002									ISO 9002		ISO 9002						
Guarantee (ten years) + hale	YES														YES							YES							YES									YES		YES						
1200 joules resistance	P.V. SOCOTEC/CERMA test report														P.V. test report SOCOTEC/CERMA							P.V. test report SOCOTEC/CERMA							P.V. SOCOTEC/CERMA test report																		P.V. test report SOCOTEC/CERMA
Technical agreements	SOCOTEC specialised inquiry C.S.T.B. Technical advice (for roof and cold formed vault applications)																																					SOCOTEC specialised inquiry								

** French standards / ** Approximatives values, measured according to ASHRAE - 74 - 1988 standards, by in house testings*
**** Approximative values according to calculation*

U (K) COEFFICIENT

U (K) Coefficient of the walls: Represents the heat flow through a m² of wall for a temperature difference of 1 degree between the exterior and interior.

Average comparaison with glass and opaque wall with or without insulation.

Average values		U = Wm² C° (K)
Single glazing		5.7
Traditional insulating glazing air strip	6 mm	3.4
	10 mm	3.1
Insulating glazing with a not very emissive air strip glass	6 mm	2.9
	10 mm	2.4
Opaque traditional wall without insulating		2.0
Well insulated opaque wall		0.5

Our systems are able to evolve, those values are only indicative and do not engage the responsability of Dan Pal (UK).

DAN PAL
Light architecture