



TECHNICAL MANUAL

VERSION 01 EDITION 11.05.2009

ALUTERM GROUP S.R.L. Traian Vuia Str., no. 208 400397 CLUJ Tel: +40.264.274.014 Fax: +40.264.274.014 Web Site: www.makroplast.ro



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Description

ROOFLITE[®] is a type of extruded sheet made of compact corrugated polycarbonate. The shape of the corrugation allows coupling with metal sections.

ROOFLITE[®] sheets guarantee high resistance against impact, they are extremely light and they have a high light transmission.

ROOFLITE[®] sheets are the ideal products for manufacturing industrial roofings, greenhouses, canopies, etc.

This manual outlines the main features and instructions for mounting ROOFLITE[®] polycarbonate sheets.

For further information or comments please write to:

ALUTERM GROUP S.R.L. Traian Vuia Str., no. 208 400397 CLUJ Tel: +40.264.274.014, e-mail aluterm@auterm.ro

WARNING: Purchase of ROOFLITE[®] sheets is subject to reserves, please check general sales conditions from our offices.

WARNING: All other company or product names, herein mentioned are registered trademarks belonging to the owners in question.

WARNING: All information provided for in this manual was gathered to help customers during design and laying steps. Such information was processed according to our topmost know-how and it shall be subjected to modifications without prior notice. Data borne herein shall be deemed as non-binding information and hence shall not exempt the customer for performing his own check-ups with the aim of establishing suitability for the intended use. In case of doubt or difficulty, please seek EMP SA advice before proceeding.

1. Polycarbonate general features

Polycarbonate is a thermoplastic polymer having excellent mechanical and physical properties. Due to its adaptability and durability, polycarbonates are used for example for manufacturing CDs and DVDs. In addition, its resistance against impacts makes of polycarbonates an ideal material for use in automotive, aeronautical and ballistic (airplane windows, automobile lights, anti-riot shields and helmets, etc) industry. All these characteristics, alongside the high transparency, make polycarbonates suitable for application in the building industry.

✓ Polycarbonate technical data.

		Value	Unit	Standard				
Mechanical properties								
Tensile/yield strength σ_v	>60	N/mm ²	DIN 53455					
Tensile/breaking strength σ_r		>70	N/mm ²	DIN 53455				
Yield strain ε_v		6	%	DIN 53455				
Strain at break ε_r		>100	%	DIN 53455				
Tensile elastic modulus E		2300	N/mm ²	DIN 53457				
Resistance to impact a _n	+23°C	65	kJ/m ²	DIN 53453				
	-40°C	65	kJ/m ²	DIN 53453				
Impact strength a _k a +23°C		35	kJ/m ²	DIN 53453				
Resistance Izod with indent		>700	J/m	ASTM 256-56				
Brinnel hardness H ₃₀		110	N/mm ²	DIN 53456				
Physical properties								
Specific weight		1.2	g/m ³	DIN 53479				
Refractive index n _D		1.58	n°	DIN 53491				
water absorption by immersion		0.36	%	DIN 53495				
Permeability to water vapour (0.1mm)		15	g/m² d	DIN 53122				
Thermal properties								
linear thermal expansion α	0.065	mm/m°C	DIN 53752					
Thermal conductivity λ	0.20	W/m K	DIN 52612					
VICAT softening temperature		145-150	O°	DIN 53460				
Typical values of polycarbonate material								

✓ Comparison with other products.

Compared to other plastic materials commonly used in the building industry and glass, polycarbonate is superior in many ways.

	U.M.	PC	PMMA	PVC	PET	GRP	Vetro
Density	g/m² d	1.20	1.19	1.38	1.33	1.42	4.70
Impact strength	KJ/m ²	70	2	4	3	1.2	-
Elastic modulus	N/mm ²	2200	3100	3200	2450	6000	70000
Linear thermal expansion	1/°C	6.5 x 10 ⁻⁵	7.0 x 10⁻⁵	6.7 x 10 ⁻⁵	5.0 x 10 ⁻⁵	3.2 x 10⁻⁵	0.9 x 10 ⁻⁵
Thermal conductivity	W/m K	0.20	0.18	0.13	0.24	0.15	1.3
Maximum temperature of use	°C	120°	90°	60°	80°	140°	240°
Transparency to UV rays	%	4	40			19	80
Fire behaviour		Optimal	inflammable	inflammable	inflammable	inflammable	fireproof
Resistance to ageing		Good	Optimal	poor	poor	good	excellent
Compatibility with chemical agents		Good	Good	poor	good	good	optimal

2. Sections

ROOFLITE[®] sheets are available in various shapes, thicknesses and colours. Sections and their characteristics are described in detail in the annexes.

3. UV protection

ROOFLITE[®] sheets are protected on the outer side with a layer of UV absorber that prevent the sheets against ageing, thus granting their durability over the time. The protected side, which must be installed externally, is distinguished by the mark indicating "UV side" and by the lot number.

4. ROOFLITE[®] EXTRALIFE (with protection on both sides)

ROOFLITE[®] sheets can be supplied upon request with the UV protection on both sides. Such versions are subject to limitations and minimum quantities. Please contact our offices for further information.

5. ROOFLITE[®] with MIN DEW AND MIN DRIP treatment

ROOFLITE[®] sheets can be supplied, upon request, with an anti-condensation treatment applied on the inner surface. Application of the MIN DEW and MIN DRIP treatment is ideal for applications in greenhouses and swimming pools as it prevents the formation of water droplets inside the structure.

6. Warranty

ROOFLITE[®] sheets are covered by a warranty against ageing for a period of 10 years. Warranty terms and conditions include loss of lighting and variation of the yellow index. Please contact our sales offices for exact terms and conditions.

7. Light transmission

ROOFLITE[®] sheets offer maximum light transmission allowing to exploit the entrance of light to the maximum. ROOFLITE[®] sheets offer a complete range of colours that allow proper dosage of light and offer advanced solutions if it is necessary to reduce the passage of solar energy, such as the "ROOFLITE ATHERMIC" sheets.

Colour	Light transmission					
	0.8 mm 1.0 mm 1.1 mm 1.2 m					
Crystal (0010)	89	89	89	89		
Opal (0037)	80	75	75	75		
Opal (9011)	2	2	2	2		
Smoky grey (0024)	60	55	55	55		

8. Fire behaviour

ROOFLITE sheets maintain the optimal properties of fire reaction of polycarbonate material. We have available various certifications valid in several countries. For further information, please contact our sales offices.



9. Thermal conductivity

Polycarbonate thermal conductivity confers to polycarbonate a good insulation with respect to profiled sheets made of metal material.

Thermal conductivity 0.20 W/m K

10. Thermal expansion

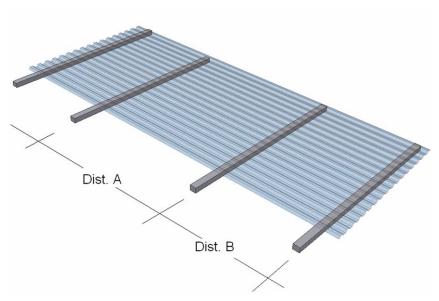
The polycarbonate thermal expansion value must always be borne in mind for a proper design.

This value must be considered as an important parameter when selecting the suitable type of fixing.

11. Hail resistance

ROOFLITE[®] sheets have obtained excellent hail resistance performances. Impact tests have been performed at Istituto Giordano (Italy) with a simulated crashed test by means of polyamide balls with a diameter of 40 mm and thrown at subsequently growing speeds. No breakages were observed even at high speed (60 m/sec).

12. Flat solution



ROOFLITE[®] sheets shall be mounted on continuous and orthogonal supports with respect to the length of the sheets.

The supports must be smooth and free of any objects capable of jeopardising the integrity of the sheets, such as projecting nails, wires, strings, protection nets, etc.

13. Minimum slope

In order to facilitate the flow of rain water we recommend laying the ROOFLITE[®] sheets with a minimum slope of 5%.

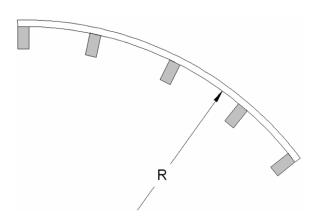
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14. Recommended maximum length

Alongside the high thermal expansion typical of polycarbonate and depending on the type of fixing used in the past for the ROOFLITE[®], we recommend using sheets with a maximum length of 4000 mm.

In case of extremely long flaps, we recommend overlapping several sheets length-wise; however, by means of a proper positioning of the slots suitably protected by sealing gaskets it is possible to use sheets even longer than 4 m.

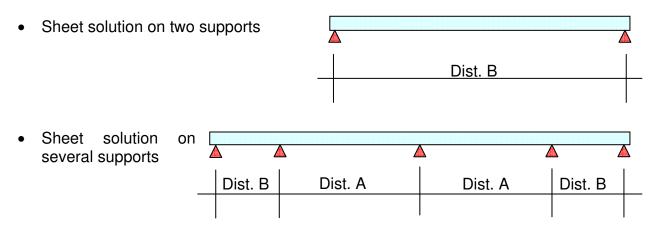
15. Curved solution



ROOFLITE[®] sheets may be mounted on curved structures but complying with the conditions that the radius outlined by the succession of the supports has a value greater than the minimum values indicated for each type of section.

16. Allowable loads

Allowable values for the maximum distances between the supports are indicated in the tables regarding each single section. Such values can also be used for curved solutions. Alongside the type of sheet, the distance of the supports also depends on the type of application.



Fixing must be made on all purlins according to the methods and indications included in this document. The values indicated in the tables are

- ✓ Ultimate strength safetry coefficient equivalent to 1.5
- ✓ Maximum distortion 50 mm

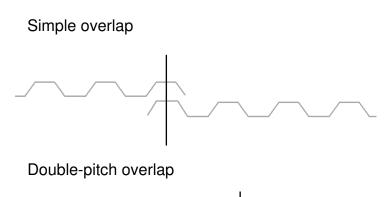
In case of very low slopes, deformation under load could create a counterslope causing leakage and water stagnation. In such cases, timely control of deformation under load is required.

18.

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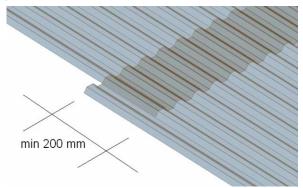
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17. Overlaps



Fixing

In case of overlapping several sheets lengthwise, it is necessary that such operation be performed at a transverse support and that there be at least a 200 mm overlap. Overlapping ROOFLITE[®] sheets require following simple rules. For side overlapping, at least one complete pitch is recommended, but in case of low slopes (5% to 10%) or in cases where the flap is considerably long (longer than 4 metres) at least a double pitch overlap is recommended.



the length of the sheet and it is equivalent to:

Fixings must be provided with gaskets suitable to grant watertight sealing bearing in mind that the hole must be suitably slotted to guarantee the thermal expansion of the polycarbonate sheet.

The slotting pitch depends on

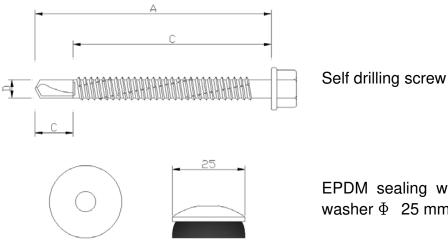
Screw diameter 6 mm						
Sheet length (mm)	Slotting (mm)					
Up to 2.000 mm	10 mm					
Up to 4.000 mm	12 mm					
Up to 6.000 mm	15 mm					
Up to 8.000 mm	20 mm					
Up to 10.000 mm	25 mm					

19. Fixing at the purling

ROOFLITE[®] sheets must be anchored in an integral manner with respect to the support structure through an adequate number of fixings and suitable for support (wood, metal purling, etc.).

The distance required for proper fixing depends on the pitch and shape of the wave. The fastening force must be such not to deform the sheet but, at the same time, guarantee a good operation of the gasket.

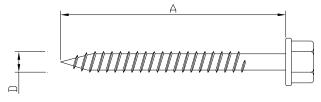
✓ Self-drilling fixings on a metal structure with gasket and metal washer



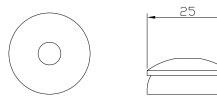
EPDM sealing washer with aluminium metal washer $\Phi\,$ 25 mm.

Size	Spanner (mm)	Diameter D (mm)	Total length A (mm)	Useable length B (mm)	Drilling capacity C (mm)
6.3 x 45 mm	8	6.3	45	30	6
6.3 x 60 mm	8	6.3	60	45	6
6.3 x 80 mm	8	6.3	80	65	6
6.3 x 100 mm	8	6.3	100	85	6

 Recommended fixings on wooden structures (not available) with gasket and metal washer.

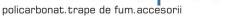


Screw for wood



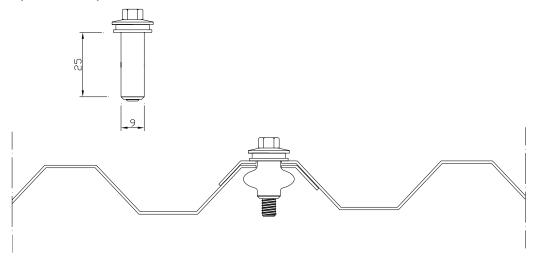
EPDM sealing washer with aluminium metal washer Φ 25 mm.

Size	Spanner (mm)	Diameter D (mm)	Length A (mm)				
6.5 x 60 mm	8	6.5	60				
6.5 x 75 mm	8	6.5	75				
6.5 x 100 mm	8	6.5	100				
For supports made of wood consider screwing at least 30 mm deep.							

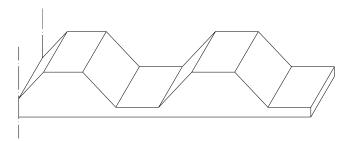


20. Side overlap seam

At the side rebate of two ROOFLITE® sheets it is recommended to seam the two overlapped strips with a special dowel.



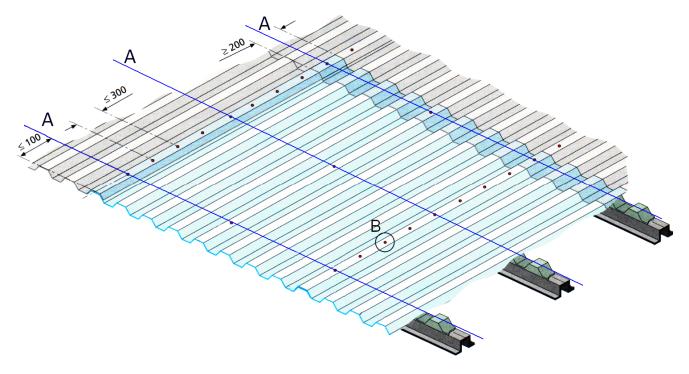
21. Closure strip



For better thermal insulation and in prevent the pressureorder to fastening of the screws from damaging the polycarbonate wave by pressing it, use of a shaped foamed PE closure strip to be interposed between the purling and the corrugated sheet.

22. Arrangement of the accessories

For proper laying of the ROOFLITE® sheet, the closure strips made of foamed PE are required to be arranged beneath the sheet so as to enhance resistance against the fastening force of the screw; furthermore, the closure strips bumper increase the air sealing between the support and the sheet. The distance of the purlins shall be assessed depending on the expected load, the thickness and type of sheet section (check the suitable sheet tables). Fixings passing through the purlins (fixing lines A) shall be performed on the ridge of the sheet and sufficient (in number) to guarantee stability against wind. The seaming on the overlap, at positions where there is no the purlin (B), is being required for all side overlaps. Minimum arrangement of fixings per sheet section can be observed from the product specifications sheet.



Overlapping with already installed sheets must be at least 200 mm both upstream and downstream. Such value shall be increased in case of low slope.

Any projections, with respect to the last purling, of the polycarbonate sheet shall not exceed 100 mm.

23. Packaging and forwarding

As standard packaging, ROOFLITE[®] sheets are supplied on wooden pallets, protected by a thermo-welded and strap-fastened thick polyethylene film.

Customised sheets shall be packaged according to the discretion of EMP SA. In case of special requests (transfer at worksites, unloading problems, etc), please make arrangements when placing orders with our sales offices and the latter will see to meeting your requirements.

24. Transport

ROOFLITE[®] sheets shall be transported on suitable means in such a manner that sheets and pallets completely lie against the platform. Ropes and blocks, required to hold the pallets firm during transport, shall be positioned in such a manner not to damage the sheets. Any damage occurring during transport shall be reported within eight hours upon reception of the goods. For proper analysis of the problem, reference to the CMR transport document is required.

25. Transfer and storage

Transfer and storage of ROOFLITE[®] sheets are delicate operations that could damage the sheets. Therefore, strict compliance with the following instructions is of paramount importance:

- Maximum care when using forklift trucks is recommended. Forks shall not come into direct contact with the sheets under no circumstances whatsoever.
- In case belts or balances are used for lifting, use belts at least 200 mm wide for proper distribution of weights, interpose a wooden board with a greater length than the width of the sheet between the package or pallets and the ropes.
- The distance of the forks must be such to avoid flexions of the pallet.
- In case of storage of several pallets stack a maximum of three pallets (do not stack the pallets directly but use supports capable of preserving the contact surface (polystyrene, insulations etc).
- In case of stacking a pallet previously laid against the ground, ensure that there are no stones stuck on lower part of the pallet capable of ruining the surface on which they are meant to lie.
- Stack the pallets with an integral packaging with a slight slope to allow flow of possible condensations and water stagnation.
- Keep the integral packages in sheltered place or in a place where they can be covered with canvas to protect the packages against harsh conditions and ensure proper aeration.
- Packages that have been already opened must be stored indoors.
- If performed by hand, transfer of single sheets shall occur with the sheet on its side.



26. Cleaning

When cleaning ROOFLITE[®] sheets, strictly use only products certified for cleaning polycarbonates (see the manufacturer specifications sheet).

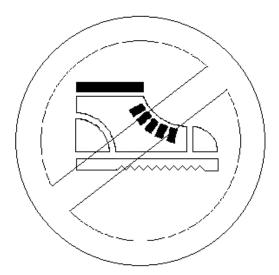
In order to maintain the light transmission, the latter must be cleaned periodically with water and non-alkaline soap or with suitable detergents, subsequently thoroughly rinsing with water.

Dirt must be removed with maximum care, using soft rags to avoid altering the UV protection layer.

WARNING:

Do not use alkaline detergents, solvents in general, abrasive detergents, brushes, steel wool, blades or sharp devices that might damage the UV protection layer.

27. Safety – Access to roofing



During both laying and maintenance operations do not walk directly on the ROOFLITE[®] polycarbonate sheets.

As a matter of fact, the polycarbonate sheets are <u>NOT</u> made to be walked on and they are subject to breaking.

In case you need access to the roofing, use the suitable gangways which guarantee safety for all the operators.

Protect the sheets against possible scratches with suitable covers.

WARNING:

In case of access to the roofing, should there be risks of falling or breaking, assemble all the required elements in compliance with all the work safety regulations in force in the country in question.

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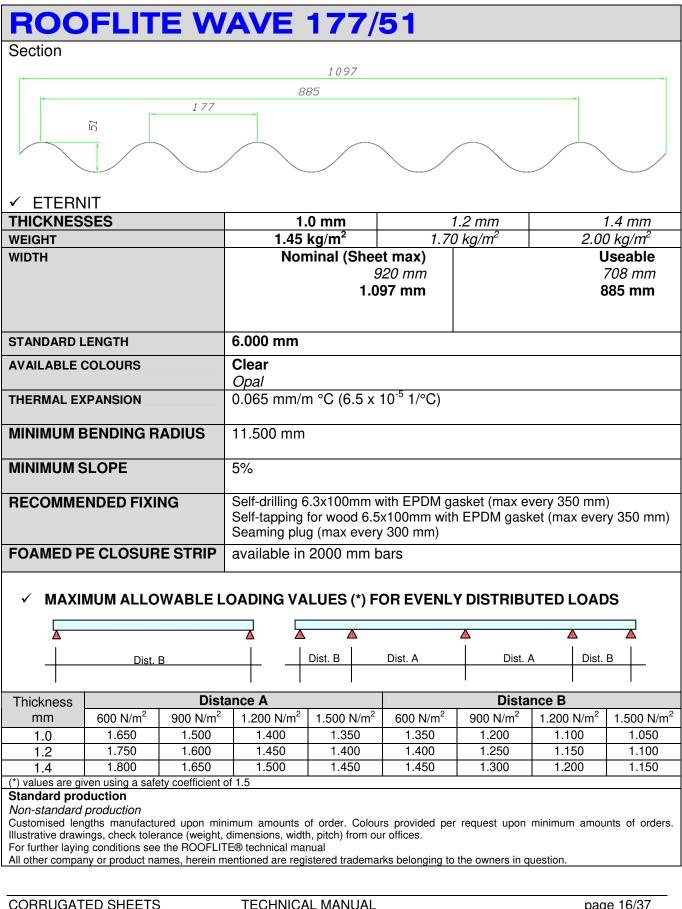
ANNEX 1 - WAVE 76/18

ROOFLITE WAVE 76/18											
Section					,	-					
Coolon					1265						
-					1265						
-					1216						
	- 76									00	,
\sim	\checkmark	\sim	\frown	\sim	\sim	\checkmark	\sim	\sim	\sim		
											1
THICKNES	SES				0.8 mm	<u>ו</u>		1.0 mm		1	.1 mm
WEIGHT	010			1.1	0 kg/m			5 kg/m ²			kg/m ²
WIDTH							et max)		1		seable
							660 mm			-	08 mm
							836 mm			-	00 mm
							040 mm				88 mm
							116 mm			-	64 mm
STANDARD L			6.0	00 mm		1.	265 mm			1.2	16 mm
			Cle								
AVAILABLE (COLOURS		Op								
THERMAL EX				65 mm/m	°C (6.5	x 10	⁻⁵ 1/°C)				
MINIMUM E	BENDING R	ADIUS	4.000 mm								
MINIMUM S	SLOPE		5%								
RECOMME		NG	Self-drilling 6.3x60 mm with EPDM gasket (max every 300 mm) Self-tapping for wood 6.5x60mm with EPDM gasket (max every 300 mm)								
			Seaming plug (max every 300 mm)								
CLOSURE	STRIP		Ava	ailable in 9	988 mm	bars	6				
✓ MAXII	MUM ALLO	WABLE	LO	ADING VA	LUES	(*) F0		OISTRIBL	JTED LC	AD	S
<u>A</u>					<u>م</u>	<u>\</u>					
	Dist.	В			Dist. B		Dist. A	Dist. A	4 I	Dist. E	3
I									I		
Thickness				ce A 1.200 N/m ²					nce B	- 1	
mm	mm 600 N/m ² 900 N/m				1.500		600 N/m ²	900 N/m ²	1.200 N/	m²	1.500 N/m ²
0.8	1.000	900		850	800		800	700	650		650
1.0 1.050 950 1.1 1.100 1.000				900 900	850 850		850 850	750 800	700 750		650 700
(*) Values are gi			nt of		000	,	000	000	750		700
Standard pro	duction	-									
Non-standard	production	ired upon r	ninimi	um amounts	of order	Coloui	rs provided per	request upon	minimum a	moun	its of orders
Illustrative drawi	Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders. Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices.										
	For further laying conditions see the ROOFLITE® technical manual All other company or product names, herein mentioned are registered trademarks belonging to the owners in question.										
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CORRUGAT	ED SHEETS	5		TECHNIC	AL MAN	UAL				page	e 15/37

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ANNEX 2 – WAVE 177/51 (Eternit)





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ANNEX 3 - WAVE 147/49 (Eternit)

ROOFLITE WAVE 147/49									
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				1016					
-				1018					
- 14	17						64		
		\sim			\frown	\frown			
	<u> </u>		\searrow	\sim		$/$ \setminus	$ \land $		
✓ ETERN	IT B6								
THICKNES			1	.0 mm	1	.2 mm			
WEIGHT				kg/m ²		5 kg/m^2			
WIDTH				ninal (Shee			L	Iseable	
				-	50 mm			379 mm	
				1.0	86 mm		1.0	16 mm	
STANDARD L	ENGTH		6.000 mm						
AVAILABLE C	OLOURS		Clear						
			<u>Opal</u>	00 (0 F	10-5 1 (0 0)				
THERMAL EX	PANSION		0.065 mm/m °C (6.5 x 10 ⁻⁵ 1/°C)						
MINIMUM B	ENDING R	ADIUS	11.500 mm						
MINIMUM S	LOPE		5%						
RECOMME	NDED FIXI	NG	Self-drilling 6.3x80 mm with EPDM gasket (max every 300 mm)						
			Self-tapping for wood 6.5x100mm with EPDM gasket (max every 300 mm) Seaming plug (max every 300 mm)						
FOAMED PE	CLOSURE S	TRIP	Not available						
✓ MAXI	MUM ALLO	WABLE L	OADING VA	ALUES (*) FO	OR EVENL	Y DISTRIBL	JTED LOAD	S	
				A					
1	Dist.	B		Dist. B	Dist. A	Dist. A	A Dist.	в	
+		5			2.00.71				
Thickness		Dist	ance A		Distance B				
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	
1.0	1.600	1.450	1.350	1.250	1.250	1.150	1.050	1.000	
1.2	1.650	1.500	1.400	1.350	1.350	1.200	1.100	1.050	
(*) Values are gi		ety coefficient	of 1.5						
	Standard production								
Non-standard production Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders.									
Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices. For further laying conditions see the ROOFLITE® technical manual.									
For further laying All other compar					ks belonging to	the owners in a	uestion.		
	,					<u> </u>			

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ANNEX 4 - WAVE 83/20 (Iscom)

ROOFLITE WAVE 83/20											
Section											
			1060								
			1000								
50			- 83								
	\sim	\sim	\checkmark	\frown	\sim	\frown	\checkmark				
1											
✓ ISCOM – S											
	Sinus 20-63	1	2 mm								
WEIGHT			kg/m ²								
WIDTH			ninal (Shee	t max)		l	Iseable				
				60 mm		-	00 mm				
STANDARD LENGTH		6.000 mm									
AVAILABLE COLOURS	S	Clear									
		Opal		1 0-5 1 (0 0)							
THERMAL EXPANSIO	N	0.065 mm/n	n °C (6.5 x ⁻	10 ⁻³ 1/°C)							
MINIMUM BENDIN	G RADIUS	4.500 mm									
MINIMUM SLOPE		5%									
RECOMMENDED F	IXING	Self-drilling 6.3x60mm with EPDM gasket (max every 250 mm)									
		Self-tapping for wood 6.5x75mm with EPDM gasket (max every 250 mm)									
		Seaming plug (max every 300 mm)									
FOAMED PE CLOS	SURESTRIP	Not available									
✓ MAXIMUM AL	LOWABLE L	OADING VA	LUES (*) FO		Y DISTRIBL		S				
			▲ ⊥			▲ I					
	Dist. B		Dist. B	Dist. A	Dist. A	A Dist.	B				
Thickness		ance A	4 - 00 0 1/ 2	2000 01/ 2		nce B	2				
mm 600 N/r	m ² 900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²				
1.2 1.100) 1.000	950	900	900	800	750	700				
(*) Values are give using a safety coefficient of 1.5											
Standard production Non-standard production	Standard production										
Customised lengths manu	ufactured upon min				request upon	minimum amou	nts of orders.				
Illustrative drawings, check For further laying condition				r offices.							
All other company or produ				ks belonging to	the owners in q	uestion.					



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ANNEX 5 - OMEGA 76.2/16

ROOFLITE OMEGA 76.2/16								
Section								
-				1266				
				1219				
			<u> </u>			76. 2		
THICKNESSE	S			8 mm		.0 mm		
WEIGHT				kg/m²) kg/m²		
WIDTH			Non		t max) 90 mm 66 mm		1.	lseable 143 mm 19 mm
STANDARD L	.ENGTH		6.000 mm					
AVAILABLE COLOURS Clear Opal								
THERMAL EXPANSION 0.065 mm/m °C (6.5 x 10 ⁻⁵ 1/°C)								
MINIMUM BE	NDING RADIL		4.000 mm					
MINIMUM SLO	OPE		5%					
RECOMMEN	DED FIXING		Self-drilling 6 Self-tapping Seaming plu	for wood 6.5	x75mm with			300 mm)
FOAMED PE	CLOSURE ST	RIP	Not availab	e				
✓ MAXII	MUM ALLO	WABLE LO	DADING VA	LUES (*) FO	OR EVENL	Y DISTRIBL	JTED LOAD	S
<u> </u>				<u> </u>			A	
	Dist.	P		Dist. B	Dist. A	Dist. A	Dist.	в
+	Dist.		+ $+$		2.00.71		. Dist.	
Thickness		Dista	nce A			Dista	nce B	
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
0.8	950	850	800	750	750	700	650	600
1.0	1.000	900	850	800	000	750	700	650
(*) Values are give using a safety coefficient of 1.5 Standard production <i>Non-standard production</i> Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders. Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices. For further laying conditions see the ROOFLITE® technical manual All other company or product names, herein mentioned are registered trademarks belonging to the owners in question.								

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ANNEX 6 - TRAPEZ 76/18

ROC				270				
Section								
-				1265				
				1216				
	76							00
						~	~	
								1
THICKNESS	ES			.8 mm		.0 mm		1.1 mm
WEIGHT				kg/m ²		i kg∕m²) kg/m²
WIDTH			Non	ninal (Shee	,		-	seable
				-	60 mm		-	508 mm
				-	07 mm			760 mm
					40 mm		-	988 mm
					16 mm		-)64 mm
				1.2	65 mm		1.2	16 mm
STANDARD	LENGTH		6.000 mm					
AVAILABLE	COLOURS		Clear					
Opal, bronze, athermic								
THERMAL EXPANSION $0.065 \text{ mm/m} \circ \text{C} (6.5 \times 10^{-5} \text{ 1/} \circ \text{C})$								
MINIMUM BE	ENDING RADI	JS	4.000 mm					
MINIMUM SL	OPE		5%					
RECOMMEN			Self-drilling 6	3x60mm wi	th EPDM das	ket (max ev	erv 300 mm)	
			Self-tapping	for wood 6.5	x60mm with I		et (max every	300 mm)
			Seaming plu		,			
FOAMED PE	CLOSURE ST	RIP	available in	1000 mm b	ars			
✓ MAX		WABLE L	OADING VA	LUES (*) F		Y DISTRIBL	JTED LOAD	S
A				A			A	<u> </u>
	Dist.	В		Dist. B	Dist. A	Dist.	A Dist.	В
Thickness		Diet	ance A			Dioto	nce B	
Thickness	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m
mm								
0.8	1.100	1.000	900	850	850	800	750	700
<u>1.0</u> 1.1	1.150 1.250	1.050 1.050	950 1.000	900 950	900 950	850 850	800 800	750 750
	give using a safe			330	330	000	000	730
Standard pro			1.0					
	l production							
inon-standard								
Customised le	ngths manufactu	ired upon min	imum amounts o	of order. Colou	rs provided per	request upon	minimum amou	nts of orders
Customised le Ilustrative drav	ngths manufactu vings, check tole	rance (weight, o	imum amounts d dimensions, widtl E® technical mai	h, pitch) from ou	rs provided per ir offices.	request upon	minimum amou	nts of order

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ANNEX 7 - TRAPEZ 205.4/35.4

ROOFLITE TRAPEZ 205,4/35,4 Section 1100 1027 205.5 35 1.0 mm 1.2 mm THICKNESSES 1.45 kg/m² 1.70 kg/m^2 WEIGHT Nominal (Sheet max) Useable WIDTH 1.100 mm 1.027 mm STANDARD LENGTH 6.000 mm Clear **AVAILABLE COLOURS** Opal 0.065 mm/m °C (6.5 x 10⁻⁵ 1/°C) THERMAL EXPANSION MINIMUM BENDING RADIUS 8.500 mm MINIMUM SLOPE 5% Self-drilling 6.3x80mm with EPDM gasket (max every 207 mm) **RECOMMENDED FIXING** Self-tapping for wood 6.5x100mm with EPDM gasket (max every 207 mm) Seaming plug (max every 300 mm) Not available FOAMED PE CLOSURE STRIP MAXIMUM ALLOWABLE LOADING VALUES (*) FOR EVENLY DISTRIBUTED LOADS Dist. B Dist. A Dist. A Dist. B Dist. B **Distance B Distance A** Thickness mm 600 N/m² 900 N/m² 1.200 N/m² 1.500 N/m² 600 N/m² 900 N/m² 1.200 N/m² 1.500 N/m² 1.0 1.450 1.350 1.250 1.150 1.150 1.050 1.000 950 1.2 1.550 1.400 1.300 1.250 1.250 1.100 1.050 1.000 (*) Values are give using a safety coefficient of 1.5 Standard production Non-standard production Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders. Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices

For further laying conditions see the ROOFLITE® technical manual.

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ANNEX 8 - TRAPEZ 207/35 (Klockner)

DOO				7 00	7/95			
	FLII		RAPE	2 20	1/35			
Section				1070				
				1070				
				1035				
			-	207				
				\		32		
	(NER 35/20	07		-				
THICKNESSE	S			0 mm		.2 mm		
WEIGHT				kg/m² ninal (Shee) kg/m²		Iseable
WIDTH				•	70 mm		-	035 mm
					00 mm			35 mm
STANDARD L	ENGTH		6.000 mm					
AVAILABLE COLOURS Cristal Opal								
THERMAL EXPANSION $0.065 \text{ mm/m} \circ \text{C} (6.5 \times 10^{-5} \text{ 1/°C})$								
MINIMUM BE	NDING RADIL	JS	8.500 mm					
MINIMUM SL	OPE		5%					
RECOMMEN	DED FIXING		Self-drilling 6 Self-tapping Seaming plue	for wood 6.5	x100mm with			y 207 mm)
FOAMED PE	CLOSURE ST	RIP	Not availab	е				
✓ MAXI	MUM ALLO	WABLE L		LUES (*) F	OR EVENL	Y DISTRIBL	JTED LOAD	S
A				A			A	
	Dist.	В		Dist. B	Dist. A	Dist. /	A Dist.	в
							I	ļ
Thickness	0		ance A	2	2		nce B	0
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
1.0	1.500	1.350	1.250	1.200	1.200	1.050	1.000	950
1.2 (*) Values are g	1.550	1.400	1.300	1.250	1.250	1.100	1.050	1.000
Standard pro Non-standard Customised len Illustrative draw For further layin	duction production ogths manufactu ings, check toler g conditions see	red upon min ance (weight, o the ROOFLIT	imum amounts o dimensions, widtl E® technical man nentioned are reg	n, pitch) from ou nual.	ir offices			nts of orders.
CORRUGAT	ED SHEETS	;	TECHNICA	L MANUAL			pag	e 22/37



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ANNEX 9 - TRAPEZ 333/38 (Metecno)

ROO	FLIT	ETF	RAPE	Z 3	33	3/38			
Section									
-				1020)				
-				1000	7				-
				333					
		/	\frown					38	
\square		/				/ \	L		
✓ METEC	CNO A38	<u>.</u>				-			
THICKNESSE	S			1.0 mm			1.2 mm		
WEIGHT				50 kg/m²) kg/m²		
WIDTH			N	lominal (et max) 020 mm		Useable 1.000 mm	
					1.0	J20 IIIII		1.000 mm	
STANDARD L	.ENGTH		6.000 mm						
AVAILABLE (COLOURS		Clear						
THERMAL EX			<i>Opal</i> 0.065 mm	/m °C (6	5 v 1	I∩ ⁻⁵ 1/°∩)			
	PANSION			``	3.				
MINIMUM BE	NDING RADIL	JS	8.500 mm						
MINIMUM SLO	OPE		5%						
RECOMMEN	DED FIXING		Upper fret:					asket (every 333 m	
				Self-tap every 3			5x100mm w	ith EPDM gasket (m	ıax
			Lower fret:				ith EPDM g	asket (every 333 m	າm)
				Self-tap	ping	for wood 6.		th EPDM gasket (m	
			Seaming p	every 3					
FOAMED PE	CLOSURE ST	BIP	Available i						
./ MAVI					*\ E (TED LOADS	
				ALUES () = (TED LOADS	
				A	7		A		
	Dist.	B		Dist. B		Dist. A	Dist. A	Dist. B	
Thickness			ance A				Dista		
mm	600 N/m ²	900 N/m ²	1.200 N/m	2 1.500 N	l/m ²	600 N/m ²	900 N/m ²	1.200 N/m ² 1.500 N/	$/m^2$

1.450 (*) Values are give using a safety coefficient of 1.5

1.400

Standard production

1.0

1.2

Non-standard production

Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders. Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices

1.000

1.100

1.100

1.150

1.000

1.050

950

1.000

For further laying conditions see the ROOFLITE® technical manual.

1.250

1.350

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1.150

1.250

900

950

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ANNEX 10 - TRAPEZ 333/42 (Remco)

ROO	FLIT	ETR	APE	Z 33	3/42			
Section								
				1040				
				1000				
-				333				
			-	333				
\frown		(\neg			4 C2		\square
		/			~			
✓ REMCO	C							
THICKNESSE			1.	0 mm				
WEIGHT				kg/m²				
WIDTH			Non	ninal (Shee			-	lseable
				1.0	40 mm		1.0	00 mm
STANDARD L	ENGTH		6.000 mm					
	-		Crystal					
			Opal					
THERMAL EX	PANSION		0.065 mm/n	n °C (6.5 x	10⁻⁵ 1/°C)			
MINIMUM BEI	NDING RADIL	JS	9.500 mm					
MINIMUM SLOPE 5%								
RECOMMEN	DED FIXING		Upper sheet:	Self-tappin	g for wood 6		gasket (ever vith EPDM g	
			Lower sheet:		6.3x45mm		gasket (ever /ith EPDM g	
				every 333				aonor (max
			Seaming plu		/ 300 mm)			
FOAMED PE	CLOSURE ST	RIP	Not availabl	е				
✓ MAXII	MUM ALLO	WABLE LO	DADING VA	LUES (*) F	OR EVENL	Y DISTRIBL	JTED LOAD	S
				<u>A</u>			<u>A</u>	
	Dist.	В		Dist. B	Dist. A	Dist. A	A Dist.	B
Thickness mm	600 N/m ²	Dista 900 N/m ²	nce A 1.200 N/m ²	1.500 N/m ²	600 N/m ²	Dista 900 N/m ²	nce B 1.200 N/m ²	1.500 N/m ²
111111	000 11/11	900 N/III	1.200 N/III	1.500 10/11	000 N/III	900 N/III	1.200 N/III	1.500 N/III
1.0	1.500	1.400	1.300	1.200	1.200	1.100	1.050	950
(*) Values are gi Standard pro		ety coefficient o	f 1.5					
Non-standard Customised len Illustrative drawi For further laying	<i>production</i> gths manufactu ings, check toler g conditions see	ance (weight, d the ROOFLITE	mum amounts c limensions, width E® technical mar entioned are regi	η, pitch) from οι ηual.	ir offices			nts of orders.
			sinionou are regi			and owners in q		

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ANNEX 11 – TRAPEZ 333/39 (Haironville)

ROO	FLIT	ΈΤ	RA	PE	Ζ3	33	3/39				
Section											
					1050	0					
-					1000	0					
	333										
-			-								
\frown			\square				\bigcap			36	\square
								\square	~		
✓ HAIRO	NVILLE 39)/333									
THICKNESSE				1.0) mm			1.2 mm		1	1.4 mm
WEIGHT				1.40 k) kg/m²		1.95	5 kg/m²
WIDTH				Nom	inal (S					-	seable
						1.05	0 mm			1.0	00 mm
STANDARD L	ENGTH		6.000 r	nm							
AVAILABLE (COLOURS		Clear								
			Opal				5				
THERMAL EX	PANSION		0.065 r	nm/m	°C (6.5	x 10	⁻⁵ 1/°C)				
MINIMUM BE	NDING RADIL	JS	8.500 r	nm							
MINIMUM SLO	OPE		5%								
RECOMMEND	DED FIXING		Upper s	heet:							/ 333 mm)
					Self-tap every 3			6.5x100mm	with EP	DM g	asket (max
			Lower s	heet:			6.3x45mm v	vith EPDM o	basket ev	verv 33	3 mm
					Self-tap	ping	for wood				asket (max
			Coomin	م برام م	every 3						
FOAMED PE	SDACED		Seamin Not ava			ery 3	00 mm)				
	SFACEN		Notavi								
√ ΜΔΧΙΙ	MUM ALLO					(*) F(V DISTRI			
						() ! '			BUILD		
					. 4	Δ		A	•	A	
	Dist.	В			Dist. B		Dist. A	Dis	st. A	Dist.	в
Thickness		Di	stance A					Dis	tance B		
mm	600 N/m ²	900 N/m	n ² 1.20	0 N/m ²	1.500 l	N/m ²	600 N/m ²	900 N/m ²	² 1.200	N/m ²	1.500 N/m ²
1.0	1.400	1.300	1.	200	1.10	00	1.150	1.050	95	50	900
1.2	1.500	1.350		250	1.20	00	1.200	1.050	1.0	00	950
(*) Values are gi Standard pro		ety coemicie	nt of 1.5								
Non-standard	production					. .					
Customised len Illustrative drawi								er request upo	on minimur	n amou	nts of orders.
For further laying	g conditions see	the ROOF	LITE® tech	nical ma	nual.			o the owner !			
All other compar	ny or product ha	unes, nereir	mentionec	i are reg	istered tra	uemai	KS DEIONGING T	U THE OWNERS I	n question.		

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ANNEX 12 - TRAPEZ 250/40 (5greche)

ROC	FLIT	E TF	APE	Z 25	0/40			
Section					-			
-				1040				-
-				1000				
	250							
04	 							
✓ 5 frets	S			<u> </u>				
THICKNESSE	S			.0 mm				
WEIGHT				kg/m ²				
WIDTH			Nor	ninal (Shee 1.0	t max) 40 mm		-	seable 00 mm
STANDARD L	ENGTH		6.000 mm					
AVAILABLE	COLOURS		Crystal Opal					
THERMAL EX	(PANSION		0.065 mm/r	n °C (6.5 x	10⁻⁵ 1/°C)			
MINIMUM BENDING RADIUS 9.000 mm								
MINIMUM SL	OPE		5%					
RECOMMENI	DED FIXING			for wood 6.5	x100mm with	sket (every 25 n EPDM gask	50 mm) ket (max ever	y 250 mm)
FOAMED PE	SPACER		Not availab	le				
✓ MAXI	MUM ALLO	WABLE LO	OADING VA	LUES (*) F	OR EVENL	Y DISTRIBL	JTED LOAD	S
				A		Α		
		-		Dist. B	Dist. A	Dist. A	A Dist.	
	Dist. I	5	+ $+$		DISI. A			
Thislusses		Diete	ance A			Diete	nce B	'
Thickness mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
1.0	1.500	1.350	1.300	1.200	1.200	1.100	1.000	950
(*) Values are o	iven using a safe	tv coefficient c	of 1.5					
Standard pro Non-standard Customised len Illustrative draw	duction production gths manufactu ings, check toler g conditions see	red upon mini ance (weight, c the ROOFLIT	mum amounts dimensions, widt E® technical ma	h, pitch) from ou nual.	r offices			nts of orders.

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ANNEX 13 - TRAPEZ 112/28 (LG 28)

ROOFLITE TRAPEZ 112/28									
Section									
1225									
✓ PROFILIA LG 28✓ ALUBEL 28									
THICKNESSES	1.0 mm		1.2 mm	1.4 mm					
WEIGHT	1.50 kg/m ²		0 kg/m²	2.10 kg/m ²					
WIDTH	Nominal (She	et max) 016 mm		Useable 896 mm					
		25 mm		1.120 mm					
STANDARD LENGTH	6.000 mm								
AVAILABLE COLOURS	Clear Opal								
THERMAL EXPANSION	0.065 mm/m °C (6.5 x	10 ⁻⁵ 1/°C)							
MINIMUM BENDING RADIUS	6.500 mm								
MINIMUM SLOPE	5%								
RECOMMENDED FIXING Self-drilling 6.3x60mm with EPDM gasket (every 336 mm) Self-tapping for wood 6.5x75mm with EPDM gasket (max every 336 mm) Seaming plug (max every 300 mm)									
FOAMED PE CLOSURE STRIP	Not available								
FOAMED PE CLOSURE STRIP	Self-tapping for wood 6.5 Seaming plug (max ever	x75mm with / 300 mm)	EPDM gask	et (max every 336 mm					

MAXIMUM ALLOWABLE LOADING VALUES (*) FOR EVENLY DISTRIBUTED LOADS

A			A	
Dist. B	Dist. B	Dist. A	Dist. A	Dist. B

Thickness	Thickness Distance A					Distance B				
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²		
1.0	1.400	1.250	1.150	1.100	1.100	1.000	950	900		
1.2	1.450	1.300	1.200	1.150	1.150	1.050	1.000	900		
1.4	1.500	1.350	1.250	1.200	1.200	1.100	1.000	950		

(*) Values are given using a safety coefficient of 1.5

Standard production Non-standard production

Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders. Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices

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ANNEX 14 - TRAPEZ 200/32 (Hiansa)

ROO	FLIT	E TF	RAPE	<mark>Z 20</mark>	0/32			
Section								
-				1081				
-				1000				-
	200						0.1	
			\frown			\frown	35	
					\	/		
	NSA MT-3	0						I
THICKNESSE		2	1.	0 mm	1	1.2 mm		
WEIGHT				kg/m ²		$\frac{5}{kg/m^2}$		
WIDTH				ninal (Shee		0	l	Iseable
					81 mm			000 mm
				1.10	00 mm		1.0	00 mm
STANDARD L	ENGTH		6.000 mm					
AVAILABLE (COLOURS		Clear					
THERMAL EX			<i>_Opal</i> 0.065 mm/n	n °C (6.5 x ⁻	10 ⁻⁵ 1/°C)			
					·····)			
MINIMUM BEI	NDING RADIL	JS	7.500 mm					
MINIMUM SLO	OPE		5%					
RECOMMEND	DED FIXING		Self-drilling 6					
			Self-tapping Seaming plug			EPDM gaske	et (max every	200 mm)
FOAMED PE	CLOSURE ST	RIP	Not availabl	e	·			
✓ MAXII	MUM ALLO	WABLE L	OADING VA	LUES (*) FO		Y DISTRIBL	JTED LOAD	S
	Dist	D		Dist. B	Dist. A	Dist.	A Dist.	
	Dist.	<u>B</u>			DISI. A			
Thickness		Dist	ance A			Dista	nce B	
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
1.0	1.400	1.300	1.200	1.150	1.150	1.000	950	900
1.2	1.500	1.350	1.250	1.200	1.200	1.050	1.100	950
(*) Values are gi		ety coefficient	of 1.5	•			•	
Standard proc Non-standard	production	red upon min	imum amounts o	of order. Colour	s provided por		minimum amou	nts of orders

rovided per request upon minimum amounts of orders. lengths manufactured upon minimum amounts Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices.

For further laying conditions see the ROOFLITE® technical manual. All other company or product names, herein mentioned are registered trademarks belonging to the owners in question.

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ANNEX 15 – TRAPEZ 200/42 (Hiansa)

ROOFLITE TRAPEZ 200/42 Section 1050 1000 200 ✓ HIANSA MT-42 1.2 mm 1.0 mm THICKNESSES 1.45 kg/m² WEIGHT $1.75 \, kg/m^2$ WIDTH Nominal (Sheet max) Useable 1.000 mm 1.050 mm STANDARD LENGTH 6.000 mm Clear **AVAILABLE COLOURS** Opal 0.065 mm/m °C (6.5 x 10⁻⁵ 1/°C) THERMAL EXPANSION MINIMUM BENDING RADIUS 9.500 mm 5% **MINIMUM SLOPE** Self-drilling 6.3x80mm with EPDM gasket (every 200 mm) **RECOMMENDED FIXING** Self-tapping for wood 6.5x100mm with EPDM gasket (max every 200 mm) Seaming plug (max every 300 mm) FOAMED PE SPACER Not available MAXIMUM ALLOWABLE LOADING VALUES (*) FOR EVENLY DISTRIBUTED LOADS A Dist. B Dist. A Dist. A Dist. B Dist. E **Distance A Distance B** Thickness 600 N/m² 900 N/m² 1.200 N/m² 1.500 N/m² 600 N/m² 900 N/m² 1.200 N/m² 1.500 N/m² mm 1.0 1.600 1.450 1.350 1.300 1.300 1.100 1.000 1.150 1.2 1.400 1.650 1.500 1.350 1.350 1.200 1.150 1.050

(*) Values are give using a safety coefficient of 1.5

Standard production

Non-standard production

Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders. Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices

For further laying conditions see the ROOFLITE® technical manual.

All other company or product names, herein mentioned are registered trademarks belonging to the owners in question.

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ANNEX 16 - TRAPEZ 333/45 (Nervesco)

ROOFLITE T	RAPEZ 3	33/45	5	
Section				
1-	1050			
	1000			
	333			
45				
✓ NERVESCO 3.45.100				1
THICKNESSES	1.0 mm		<u>1.2 mm</u>	
WEIGHT	1.45 kg/m ²		'0 kg/m²	<u> </u>
WIDTH	Nominal (Sh	ieet max) 1.050 mm		Useable 1.000 mm
		1.050 mm		1.000 mm
STANDARD LENGTH	6.000 mm			
AVAILABLE COLOURS	Clear			
THERMAL EXPANSION	<i>Opal</i> 0.065 mm/m °C (6.5	v 10 ⁻⁵ 1/⁰C)		
	9.500 mm	x 10 1/ 0)		
MINIMUM BENDING RADIUS				
MINIMUM SLOPE	5%			
RECOMMENDED FIXING	Upper sheet: Self-drill			asket (every 333 mm) with EPDM gasket (max
	every 33		0.5210011111	WILLI EFDIVI YASKEL (MAX
	Lower sheet: Self-drill	ing 6.3x45mm		asket (every 333 mm)
		U U	6.5x60mm v	with EPDM gasket (max
	every 33 Seaming plug (max eve	,		
FOAMED PE CLOSURE STRIP	Not available			

✓ MAXIMUM ALLOWABLE LOADING VALUES (*) FOR EVENLY DISTRIBUTED LOADS

		A .	A	
Dist. B	Dist. B	Dist. A	Dist. A	Dist. B

Thickness	Distance A				Distance B			
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
1.0	1.550	1.400	1.300	1.200	1.250	1.150	1.050	1.000
1.2	1.650	1.450	1.350	1.300	1.300	1.200	1.100	1.050

(*) Values are give using a safety coefficient of 1.5

Standard production Non-standard production

Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders. Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices

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ANNEX 17 - TRAPEZ 193/32 (Ondulit)

ROOFLITE TRAPEZ 193/32									
Section									
				849					
-				772	>				-
✓ ONDULIT COVERIB 850									
THICKNESSE	S			<u>.0 mm</u> kg/m²			'.2 mm) kg/m ²		
WIDTH				ninal (S	hee		/ ку/п	L	seable
						19 mm		-	72 mm
STANDARD L	.ENGTH		6.000 mm			L			
AVAILABLE (COLOURS		Crystal Opal						
THERMAL EXPANSION 0.065 mm/m °C (6.5 x 10 ⁻⁵ 1/°C)									
MINIMUM RA	DIUS OF CUR	VATURE	7.500 mm						
MINIMUM SLO	OPE		5%						
RECOMMEN	DED FIXING		Self-drilling 6 Self-tapping Seaming plu	for wood	6.5	x60mm with			193 mm)
SPACER MAD	DE OF FOAM	D PE	Not availab	le					
✓ MAXII	MUM ALLO	WABLE L		LUES (*) F(OR EVENL	Y DISTRIBL	JTED LOAD	S
				A				<u>A</u>	<u> </u>
+	Dist.	8	\rightarrow \rightarrow	Dist. B		Dist. A	Dist. A	A Dist.	<u>B</u>
Thickness		Dista	ance A				Dista	nce B	
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/	′m²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
1.0	1.300	1.200	1.100	1.050		1.050	950	900	850
1.2	1.350	1.250	1.150	1.100		1.100	1.000	900	850
Standard pro Non-standard Customised len Illustrative drawi For further layin	(*) Breaking strength values (safety coefficient 1.5) Standard production Non-standard production Customised lengths manufactured upon minimum amounts of order. Colours provided per request upon minimum amounts of orders. Illustrative drawings, check tolerance (weight, dimensions, width, pitch) from our offices. For further laying conditions see the ROOFLITE® technical manual. All other company or product names, herein mentioned are registered trademarks belonging to the owners in question.								



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ANNEX 18 - TRAPEZ 262,5/32 (Teczone)

ROOFLITE TRAPEZ 262,5/32								
Section				1122				
-				1122 1050				-
	262. 5 ✓ TECZONE TZ-32							
THICKNESSE			0.	8 mm	1	.0 mm		
WEIGHT			1.10	kg/m²	1.35	kg/m²		
WIDTH			Non	ninal (Shee 1.1	t max) 22 mm			seable 50 mm
STANDARD L	ENGTH		6.000 mm					
AVAILABLE (COLOURS		Clear Opal					
THERMAL EX	PANSION		0.065 mm/n	n °C (6.5 x ⁻	10⁻⁵ 1/°C)			
MINIMUM BENDING RADIUS 7.500 mm								
MINIMUM SLO	OPE		5%					
RECOMMEN	DED FIXING		Self-drilling 6 Self-tapping Seaming plue	for wood 6.5	x75mm with I			262 mm)
FOAMED PE	CLOSURE ST	RIP	Not availabl	e				
✓ MAXII	MUM ALLO	WABLE L		LUES (*) FO		(DISTRIBU	ITED LOAD	S
A			A A	A			A	
+	Dist. I	B	\rightarrow	Dist. B	Dist. A	Dist. A	A Dist.	<u>B</u>
Thickness		Dista	ance A			Dista	nce B	
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
0.8	1.300	1.200	1.100	1.050	1.050	950	900	850
1.0	1.400	1.250	1.150	1.100	1.100	1.000	950	900
Illustrative drawi For further laying	duction production gths manufactu ngs, check toler g conditions see	red upon mini ance (weight, o the ROOFLIT	5 imum amounts o dimensions, widtl E® technical mar entioned are regi	n, pitch) from ou nual.	roffices			nts of orders.

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ANNEX 19 - TRAPEZ 151/38 (Assanpanel)

ROO	ROOFLITE TRAPEZ 151/38							
Section								
-				957				
				906				
15	51							
✓ ASS	✓ ASSANPANEL 38/151							
THICKNESSE	S			.0 mm		1.2 mm		
WEIGHT				kg/m ²		5 kg/m²		
WIDTH			Nor	ninal (She	et max) 957 mm			lseable 106 mm
STANDARD L	ENGTH		6.000 mm					
AVAILABLE (COLOURS		Clear Opal					
THERMAL EXPANSION 0.065 mm/m °C (6.5 x 10 ⁻⁵ 1/°C)								
MINIMUM BE	NDING RADIL	JS	8.500 mm					
MINIMUM SLO	OPE		5%					
RECOMMEN	DED FIXING			for wood 6.	vith EPDM gas 5x100mm with ry 300 mm)			y 300 mm)
FOAMED PE	CLOSURE ST	RIP	Not availab	le				
✓ MAXII	MUM ALLO	WABLE L		LUES (*)	OR EVENL	Y DISTRIBL	JTED LOAD	S
	Dist.	В		Dist. B	Dist. A	Dist. /	A Dist.	в
Thickness		Dista	ance A			Dista	nce B	
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m	² 600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
1.0	1.500	1.350	1.250	1.200	1.200	1.050	1.000	950
1.2	1.550	1.400	1.300	1.250	1.250	1.100	1.050	1.000
Illustrative drawi For further layin	duction production gths manufactu ings, check toler g conditions see	red upon min ance (weight, the ROOFLIT	imum amounts dimensions, widt E® technical ma	h, pitch) from nual.	urs provided per our offices arks belonging to			nts of orders.

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ANNEX 20 - TRAPEZ 228,6/19,05 (9" x 3/4") (MB9)

ROO	ROOFLITE TRAPEZ 228,6/19,05								
Section									
				965					
-				04.4				-	
-				91 4					
						-	229		
				6	1				
		\frown	~		<u>+</u>				
				t	1 1	I		I	
✓ MB9									
THICKNESSE	.5			8 mm kg/m ²					
WIDTH				ninal (Shee	t max)		1	seable	
WIDTH			Non	•	65 mm		-	14 mm	
							-		
STANDARD L	.ENGTH		6.000 mm						
AVAILABLE (Clear						
	0200110		Opal						
				n °C (6.5 x ⁻	10 ⁻⁵ 1/°C)				
MINIMUM BEI	NDING RADIL	JS	4.500 mm						
MINIMUM SLO	OPE		5%						
DECOMMENT			Self-drilling 6	2v60mm wit		kat (avary 2	20 mm)		
RECOMMEND	DED FIXING		Self-tapping	for wood 6.5	x75mm with			300 mm)	
			Seaming plug		300 mm)				
FOAMED PE	CLOSURE ST	RIP	Not availabl	е					
✓ MAXII	MUM ALLO	WABLE LO	DADING VA	LUES (*) F	OR EVENL	Y DISTRIBL	ITED LOAD	S	
							A	A	
	Dist.	В	\perp	Dist. B	Dist. A	Dist. A	A Dist.	В	
Thickness		Dista	nce A			Dista	nce B		
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	
0.8	900	750	650	600	700	650	600	550	
(*)) ()									
(*) Values are gi Standard pro		ety coefficient c	1.5						
Non-standard Customised len Illustrative drawi For further laying All other compar	<i>production</i> gths manufactu ngs, check toler g conditions see	ance (weight, of the ROOFLIT	limensions, width E® technical mar	n, pitch) from ou nual	r offices.			nts of orders.	



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ANNEX 21 – TRAPEZ 304,8/31,8 (12" x 1"1/4) (MB12)

ROO	FLIT	E TF	RAPE	<mark>Z 30</mark>	4,8/3	31,8		
Section								
-				965				
-				91 4				
	305							
	505		-					
	-	<u> </u>					25	
✓ MB12	2							I
THICKNESSE	S			8 mm		1.0 mm		
WEIGHT				kg/m² ninal (Shee) kg/m²		Iseable
WIDTH			NOI	•	65 mm		-	14 mm
STANDARD L	ENGTH		6.000 mm					
AVAILABLE	COLOURS		Clear Opal					
THERMAL EX	PANSION		0.065 mm/r	n °C (6.5 x ⁻	10⁻⁵ 1/°C)			
MINIMUM BENDING RADIUS 7.500 mm								
MINIMUM SL	OPE		5%					
RECOMMEN	DED FIXING		Self-drilling 6					
			Self-tapping Seaming plu			EPDM gaske	et (max every	305 mm)
FOAMED PE	CLOSURE ST	RIP	Not availab	le				
✓ MAXI	MUM ALLO	WABLE L	OADING VA	LUES (*) FO	OR EVENL	Y DISTRIBL	JTED LOAD	S
A						A		
				1			1	
	Dist.	<u>B</u>		Dist. B	Dist. A	Dist. A	A Dist.	<u> </u>
Thickness		Dist	ance A	1		Dista	nce B	
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
0.8	1.200	1.100	950	850	905	850	800	750
1.0	1.250	1.150	1.050	950	1.000	900	850	800
(*) Values are g		y coefficient o	f 1.5					
Standard pro Non-standard								
Customised len	gths manufactu		imum amounts o dimensions, widtl			request upon	minimum amou	nts of orders.
For further layin	g conditions see	the ROOFLIT	E® technical ma	nual.		4h		
All other compa	ny or product na	mes, herein m	entioned are regi	istered trademai	ks belonging to	the owners in q	uestion.	

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ANNEX 22 - TRAPEZ 250/40 (Cobacier)

ROO	FLIT	ETF	RAPE	Z 25	0/40			
Section								
-				1050				
				1000				
	250							
							40	
✓ COBA	ACIER 100	4						
THICKNESSE		-	1.	0 mm		.3 mm		
WEIGHT				kg/m²) kg/m²		
WIDTH			Nor	ninal (Shee 1.0	et max) 50 mm		-	lseable 00 mm
STANDARD L	ENGTH		6.000 mm					
AVAILABLE	COLOURS		Clear Opal					
THERMAL EX	PANSION		0.065 mm/r	n °C (6.5 x [·]	10⁻⁵ 1/°C)			
MINIMUM BENDING RADIUS 9.000 mm								
MINIMUM SLO	OPE		5%					
RECOMMEN	DED FIXING		Self-drilling 6 Self-tapping Seaming plu	for wood 6.5	x100mm with			y 250 mm)
FOAMED PE	CLOSURE ST	RIP	Not availab	le				
✓ MAXII	MUM ALLO	WABLE L		LUES (*) F	OR EVENL	Y DISTRIBL		PS
	Diet	D	- I I	Dist. B	Dist. A	Dist. A	1	R
	Dist.	<u>B</u>			DISt. A			
Thickness		Dist	ance A	·		Dista	nce B	
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
0.8	1.500	1.350	1.250	1.150	1.200	1.050	1.000	950
1.3	1.550	1.400	1.350	1.250	1.250	1.150	1.050	1.000
(*) Values are g		ty coefficient o	f 1.5					
Illustrative draw For further layin	<i>production</i> gths manufactu ings, check toler g conditions see	ance (weight, the ROOFLI	nimum amounts o dimensions, widtl FE® technical man nentioned are regi	h, pitch) from ou nual.	r offices.			nts of orders.



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ANNEX 23 - TRAPEZ 209/30 (Aceralia)

ROO	FLIT	ETF	APE	Z 20	9/30			
Section								
-				1097				
				1045				
	209							
	_	_	_		_	_	_	
		$\$	/ \		/ \		$\$	
✓ ACEF								
THICKNESSE			1.0 mm <i>1.2 mm</i>					
WEIGHT				kg/m²) kg/m²		
WIDTH			Nor	ninal (Shee			-	Jseable
				1.09	97 mm		1.0)45 mm
STANDARD L	ENGTH		6.000 mm					
AVAILABLE (COLOURS		Crystal					
			Opal					
THERMAL EXPANSION $0.065 \text{ mm/m} \circ \text{C} (6.5 \times 10^{-5} \text{ 1/}^{\circ} \text{C})$								
MINIMUM BENDING RADIUS 7.000 mm								
MINIMUM SLO	OPE		5%					
RECOMMEN			Self-drilling 6	6.3x60mm wi	th EPDM gas	sket (every 20	09 mm)	
			Self-tapping Seaming plu			EPDM gaske	et (max every	209 mm)
			Not availab		300 mm)			
FOAMED PE	CLUSURE 51	RIP	NUL AVAIIAD	le				
✓ MAXII	MUM ALLO	WABLE LO	DADING VA	LUES (*) F	OR EVENL	Y DISTRIBL)S
							A	
	Dist.	В		Dist. B	Dist. A	Dist. A	A Dist.	В
Thickness	2000 01/ 2		nce A	4 - 00 044 2	2000 11/ 2		nce B	4 - 00 0 4 / 2
mm	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²	600 N/m ²	900 N/m ²	1.200 N/m ²	1.500 N/m ²
1.0	1.350	1.200	1.150	1.050	1.050	950	900	850
1.2	1.400	1.250	1.200	1.100	1.100	1.000	950	900
(*) Values are gi Standard pro		ety coefficient o	if 1.5					
Non-standard	production							
Customised len Illustrative drawi						request upon	minimum amou	nts of orders.
For further laying	g conditions see	the ROOFLITE	E® technical ma	nual.		the owners in a	unction	
An other compar	ny or product na	anes, nerein me	entioneu are regi	istereu trauenial	na delotigitig [0		ພວວແບກ.	