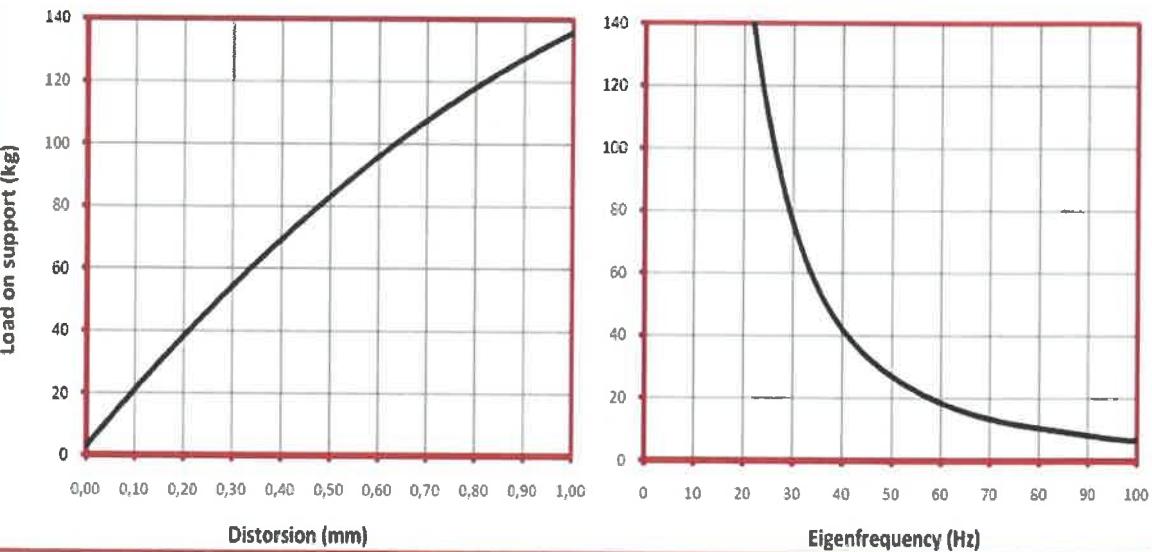


## Product Datasheet

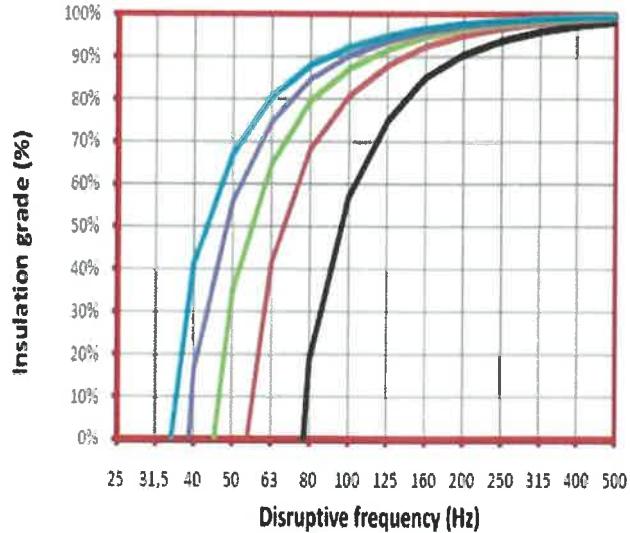
## SUMO rubber profile

### Anti-vibration absorption



Load on support (kg)	Eigenfrequency (Hz)	Insulation grade (%) (*)
25	52	56,8%
50	36,7	80,7%
75	30,2	87,1%
100	26,2	90,2%
125	23,3	92,2%

(\*) Disruptive frequency 100 Hz



The advice and technical information represents our best knowledge regarding the properties and the use of the product. The figures shown are average values for current production and can be changed and updated by Niccons ITALY srl at any time without notice, and according to his own discretion. The document is the property of Niccons ITALY Srl All rights are reserved.



Object: Loading certificate **SUMO LC**

Niccons Italy srl certifies the following loading criteria for its own range of anti-vibration supports :

Item n°	Loading rate/pc (kg) *
LC68-045-01	<b>180 kg</b>
LC68-060-01	<b>200 kg</b>
LC68-100-01	<b>220 kg</b>
LC68-045-04	<b>180 kg</b>
LC68-060-04	<b>200 kg</b>
LC68-100-04	<b>220 kg</b>

\*MAX LOADING RATE TO ALLOWS THE CORRECT FUNTIONING OF THE VIBRATION ABSORPTION PROCESS(SEE BELOW TABLES)

In cases where a foot is used in roof applications, the installer is obliged to verify maximum load capacity of roof before installation.

Nicola Pignolo

President

NICCONS ITALY srl



Object : Sumo profile

ALLOY EN AW-AlMgSi

6060

Is an alloy with excellent extrudability and an average hardness.

Lends itself well to being welded, and has a good formability.

It does not present problems of finishing.

It's therefore perfect for decorative applications, door and window frame.

CHEMICAL COMPOSITION PERCENTAGE													
Mg	Si	Fe	Ti	Cu	Cr	Mn	Zn	Others each - total	Al				
0.35-0.60	0.30-0.60	0.10-0.30	0.10	0.10	0.05	0.10	0.15	0.05-0.15	Reminder				
Mechanical Properties													
BAR			Tensile strength		Yield strength		Elongation						
temper designation	Dimension mm		$R_m$ MPa		$R_{p0.2}$		A %	$A_{50mm}$ %					
	D <sup>1)</sup>	S <sup>2)</sup>	min.	max.	min.	max.	min.	min.					
T4 <sup>4</sup>	≤150	≤150	120	-	60	-	16	14					
T5	≤150	≤150	160	-	120	-	8	6					
T6 <sup>4</sup>	≤150	≤150	190	-	150	-	8	6					
TUBE													
temper designation	Dimension mm		$R_m$ MPa		$R_{p0.2}$		A %	$A_{50mm}$ %					
	e <sup>3)</sup>		min.	max.	min.	max.	min.	min.					
T4 <sup>4</sup>	≤15		120	-	60	-	16	14					
T5	≤15		160	-	120	-	8	6					
T6 <sup>4</sup>	≤15		190	-	150	-	8	6					
PROFILE <sup>5)</sup>													
temper designation	Dimension mm		$R_m$ MPa		$R_{p0.2}$		A %	$A_{50mm}$ %					
	e <sup>3)</sup>		min.	max.	min.	max.	min.	min.					
T4 <sup>4</sup>	≤ 25		120	-	60	-	16	14					
T5	≤ 5 5 < e ≤ 25		160 140	- -	120 100	- -	8 8	6 6					
T6 <sup>4</sup>	≤ 3 3 < e ≤ 25		190 170	- -	150 140	- -	8 8	6 6					
Physical properties													
Density		2,7 Kg/dm <sup>3</sup>		Specific heat capacity (0-100 °C)		0.92 J / (g x °K)							
Elastic modulus		66000 N/mm <sup>2</sup>		Thermal expansion (20-100 °C)		23 x 10 <sup>-6</sup> x K <sup>1</sup>							
Bulk modulus		26500 N/mm <sup>2</sup>		Thermal conduct. (20°C (T6))		1.75 W / (cm x °K)							
Metting point		605 °C		Resistivity (20°C (T6))		3.25 μΩ x cm							

1. D = Diameter of the round bars
2. S = Width of square ad exagonal bars
3. e = thicknesses
4. May be obtained by tempering extrusion press
5. The minimum value for the entire section

## Indications for the materials used for SUMO profiles realization.

The materials used for profiles realization are essentially two:

1. Bonding glue
2. Black rubber

To certificate the effects of UV radiation, temperature, etc on the SUMO profile are necessary specific tests executed on SUMO samples.

Here follow you can find Bonding glue and Black rubber characteristics

### 1. Polyurethane glue

A binder used is a polyurethane glue.

Chemically is a glue based of diphenylmethanediisocyanate, the following table shows the glue characteristics.

#### Product Data

	Unit	Value	Method
Density (25°C)	g/cm	1,100	G133-08
Viscosity (25°C)	mPa.s	9,000	G133-07
NCO content	%	15.2	G133-06
Storage Stability	days	90	

#### Processing Data

	Unit	Value	Method
Density	Kg/m <sup>3</sup>	1,080	ISO 845
Hardness	Shore A	97	DIN 53 505
Tensile strength	N/mm <sup>2</sup>	>33	DIN 53 504
Elongation	%	160	DIN 53 504
Water absorption	%	<0.7	DIN 53 495



## 2. Black rubber

The rubber used is a Stirene Buttadiene Rubber. The following tables shows the rubber characteristics of t last chemical analysis :

Parametro	U.M	Valori	Incertezze	Limiti	Metodo
pH	unità di pH	6,76	±0,07		CNR IRSA 1 Q64 Vol3 1985
Solidi totali	105°C	% p/p	99,3	±2,0	CNR IRSA 2 Q64 Vol2 1984
Residuo a 550°C		% p/p	4,30	±0,09	CNR IRSA 2 Q64 Vol2 1984
Punto di infiammabilità	°C	>60		55	PENSKY – MARTENS*
Idrocarburi leggeri	C≤12	mg/kg t.q	<5		EPA5021A 2003 +
					EPA8015D2003*
Idrocarburi pesanti	C>12	mg/kg t.q	<5		EPA3540C 1996 +
					EPA3611B 1996+*
IDROCARBURI TOTALI		mg/kg t.q	<10	100	*
Fenoli		mg/kg t.q	<0,5	30000	CNR IRSA 19° Q64 Vol3
Arsenico	As	mg/kg t.q	<1,75	1000	UNI EN 13657 :2004+UNI EN
					ISO 11885 :2000*
Cadmio	Cd	mg/kg t.q	<0,12	1000	UNI EN 13657 :2004 + UNI
					EN ISO 11885 :2000*
Mercurio	Hg	mg/kg t.q	<0,85	1000	UNI EN 13657:2004 + UNI
					EN ISO 11885:2000*
Selenio	Se	mg/kg t.q	<2,5	25000	UNI EN 13657:2004 + UNI
					EN ISO 11885 :2000*
Piombo	Pb	mg/kg t.q	<1,4	1000	UNI EN 13657 :2004 + UNI
					EN ISO 11885 :2000*



Parametro	U.M.	Valori	Incerezza	Limiti	Metodo
Cromo	Cr	mg/kg t.q	<0,24		UNI EN 13657 :2004 + UNI EN ISO 11885:2000*
Cromo esavalente	CrVi	mg/kg t.q	<5	1000	CNR IRSA 16 Q64 Vol3 1986
Nichel	Ni	mg/kg t.q	<0,5	1000	UNI EN 13657 :2004 + UNI EN ISO 11885 :2000*
Rame	Cu	mg/kg t.q	<0,18	25000	UNI EN 13657 :2004 + UNI EN ISO 11885 :2000*
Zingo	Zn	mg/kg t.q	<0,06	1000	UNI EN ISO 13657 :2004 + UNI EN ISO 11885 :2000*
SOLVENTI AROMATICI					
Benzene		mg/kg t.q	<1	1000	EPA5021A 2003 + EPA8015D 2003
Toluene		mg/kg t.q	<1	50000	EPA5021 A 2003 + EPA8015D 2003*
Xileni		mg/kg t.q	<1	200000	EPA5021A 2003 + EPA8015D 2003*
Etilbenzene		mg/kg t.q	<1	250000	EPA5021A 2003 + EPA8015D 2003*
Stirene		mg/kg t.q	<1	200000	EPA5021A 2003 + EPA8015D 2003*
SOLVENTI ALIFATICI					
1,3-butadiene		mg/kg t.q	<1	1000	EPA5021A 2003 + EPA8015D 2003*
Acetone		mg/kg t.q	<1	200000	EPA5021A 2003 + EPA8015D 2003*
Metiletilchetone		mg/kg t.q	<1	200000	EPA5021A 2003 + EPA8015D 2003*

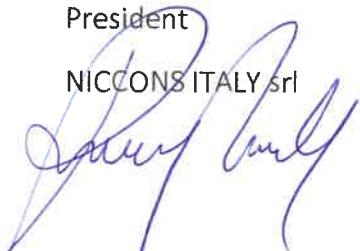
Metil-acetato	mg/kg t.q	<1	200000	EPA5021A 2003 + EPA8015D 2003*
Etile Acetato	mg/kg t.q	<1	200000	EPA5021A 2003 + EPA8015D 2003*
i-butilacetato	mg/kg t.q	<1		EPA5021A 2003 + EPA8015D 2003*
n-butilacetato	mg/kg t.q	<1		EPA5021A 2003 + EPA8015A 2003*
Metanolo	mg/kg t.q	<1	3000	EPA5021A 2003 + EPA8015D 2003*
i-propanolo	mg/t.q	<1	200000	EPA5021A 2003 + EPA8015D 2003*
Isobutanolo	mg/kg t.q	<1	100000	EPA5021A 2003 + EPA8015D 2003*
n-butanolo	mg/kg t.q	<1	100000	EPA5021A 2003 + EPA8015D 2003*

Best regards

Nicola Pignolo

President

NICCONS ITALY srl





**Object:** SUMO fire class

Niccons Italy srl certifies that our SUMO rubber support are manufactured using NBR

Compound with the following fire class :

**Class B2, according to DIN 4102 regulation.**

Best regards

Nicola Pignolo

President

NICCONS ITALY srl

A handwritten signature in blue ink, appearing to read "Nicola Pignolo". The signature is fluid and cursive, with some loops and variations in line thickness.