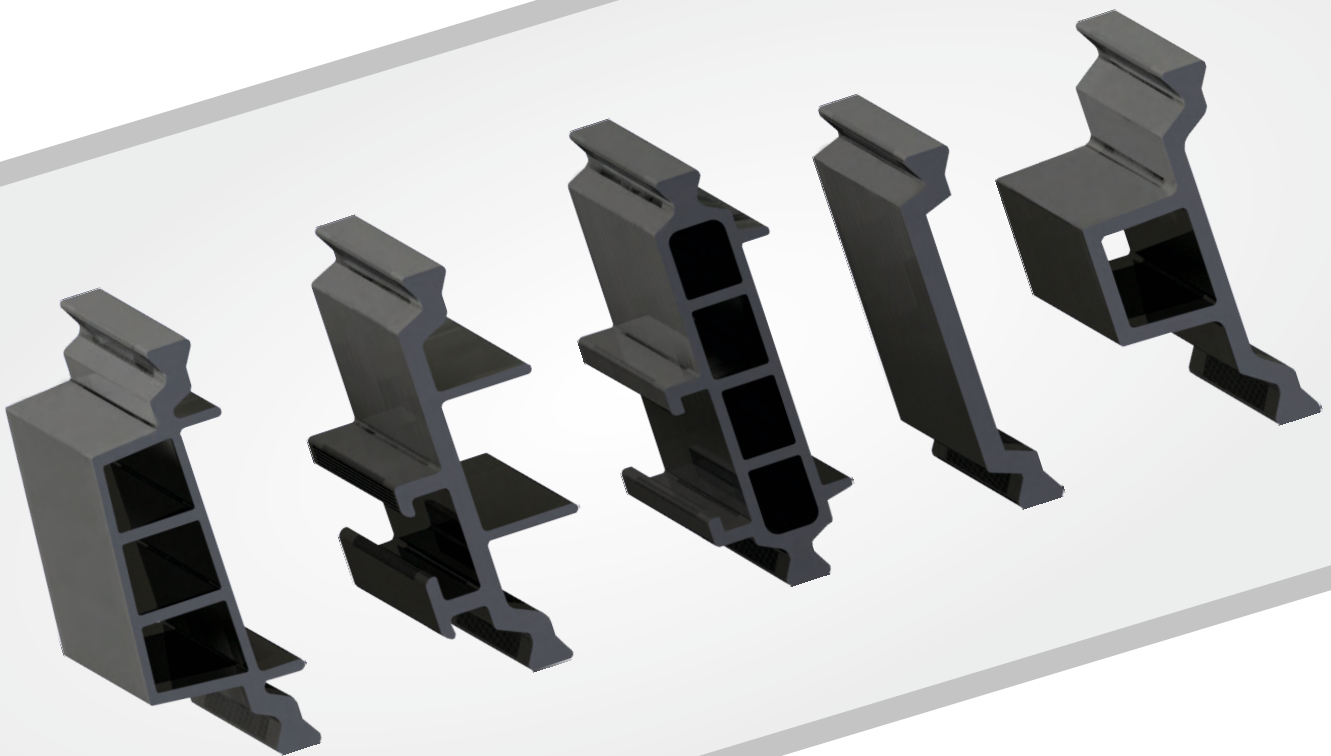


STANDARD INSULATING PROFILES



NURLU

thermal barrier solutions
for aluminium
windows, doors and facades

COMPANY



20+ YEARS



50+ EXTRUDERS



20+ COUNTRIES



150+ PARTNERS

ever-growing capacity ✓

production efficiency ✓

commitment to quality ✓

global expertise ✓

long-term partnership ✓

customer-centric approach ✓



TAILORED SOLUTIONS FOR NON-STANDARD REQUESTS

If our standard profiles don't provide the solution you require, we would be glad to develop custom insulating profiles for exclusive use according to customer-specific requirements.



MATERIAL VARIETY

The right material for each type of application (e.g. PVC, ASA, ABS)



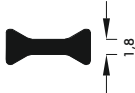
DESIGN ASSISTANCE

Application advices regarding insulation during the entire process


CERTIFICATES



10 MM




911100




913100

14.6 MM




913146


14.8 MM



911148




912148




922148

15 MM




911150




921150


16 MM




911160



912160




913160




914160


17.8 MM




911178



912178




922178




915178

12 MM



911120



913120



913148



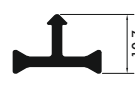
915148




925148



922160




932160




924160


14 MM




913140




914140




914148



924148




923148






















































































934148









































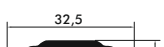







17 MM



917601

18 MM	18.6 MM	20 MM		21.6 MM	22 MM
 911180	 911186	 911200	 912200	 913216	 911220
 913180	 912186	 913200	 934200		 913220
 914180	 913186	 923200	 974200		 912220
 915180	 928186	 924200	 964200		 914220
 928180		 914200	 933200		 924220
 924180		 916200	 984200		
 923180		 915200	 928200		 915220
		 926200	 922200		
		 954200			
		 944200			

24 MM		26 MM		27 MM		28 MM	
							
911240	922240	921240	911260	913270	913280		
							
923240	943240	994240	913260	914270	915280		
							
913240	918240	995240	914260	915270	916280		
							
912240	984240	996240	912260	924270	911280		
							
914240	974240		918260		928280		
		25 MM					
915240	932240			934260	918280		
							
925240	954240	911250					
			26.8 MM				
916240	944240	913250					
							
924240	934240	914250	932268				
							
933240	964240	924250	922268				
							
			912268				

28.8 MM	32 MM	34 MM		35 MM	39 MM
 911288	 913320	 924340	 914340	 926350	 916390
	 925320	 916340	 915340	 913350	 926390
30 MM		 946340	 954340	 914350	 936390
 921300	 911320	 934340	 964340		 913390
 913300	 915320	 936340	 944340	36 MM	
 915300	 928320	 956340	 976340	 913360	
 911300	 914320	 926340	 933340		40 MM
 914300	 924320	 923340	 996340	 913380	 911400
 918300	 935320	 913340	 974340	 915380	 913400
		 966340	 986340		 923400

54 MM	65 MM	75 MM
913540	913650	913750
915540		
916540		












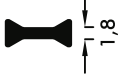









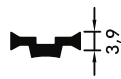

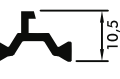






OPERATING RODS	SPECIAL PROFILES
917600	917610
917620	920100
917630	917603
917640	917613
	917606
	917635
	917605
	917604




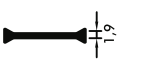
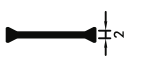




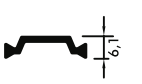










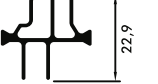


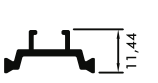














ANY QUESTIONS?

For your technical inquiries and questions just scan this QR Code with your mobile and start a Whatsapp conversation immediately

In case you prefer email: technical@nurlu.com



9 MM	14.8 MM		16 MM	17.8 MM	18 MM
 NPP016	 NPP002	 NPP017	 NPP008	 NPP054	 NPP038
	 NPP005	 NPP011	 NPP046	 NPP053	 NPP104
10 MM	 NPP042	 NPP211	 NPP004	 NPP009	 NPP112
 NPP115	 NPP212	 NPP076	 NPP220		 NPP039
	 NPP048	 NPP210	 NPP010		
12 MM	 NPP001	 NPP026	 NPP329	 NPP047	
 NPP033	 NPP382				

18.6 MM	20 MM	21 MM	22 MM	24 MM	
					
NPP003	NPP027	NPP299	NPP030	NPP032	NPP114
					
NPP007	NPP035		NPP034	NPP130	NPP287
		21.8 MM			
					
	NPP216	NPP082	NPP031	NPP113	NPP231
					
	NPP029	NPP084	NPP195	NPP036	NPP230
					
	NPP305	NPP083		NPP213	NPP215
					
	NPP085	NPP194		NPP079	NPP327
					
	NPP306	NPP192		NPP037	NPP376
					
	NPP325				
					
	NPP326				
					
	NPP384				
				25 MM	
					
				NPP091	
				28.8 MM	
					
				NPP222	

FACADE PROFILES

NPP250	NPP086	NPP160	NPP068	NPP110	NPP252
NPP144	NPP207	NPP045	NPP095	NPP028	NPP285
NPP141	NPP139	NPP159	NPP121	NPP124	NPP251
NPP283	NPP278	NPP044	NPP019	NPP123	NPP253
NPP143	NPP020	NPP043	NPP021	NPP122	NPP330
NPP284	NPP314	NPP058	NPP217	NPP346	NPP339
NPP140	NPP328	NPP300	NPP094	NPP351	NPP315
NPP041	NPP324	NPP057	NPP142	NPP161	NPP337
NPP263	NPP316	NPP313	NPP087	NPP255	NPP318
	NPP237				


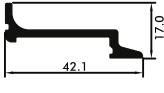
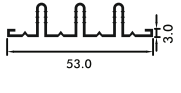

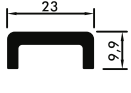

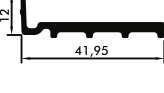
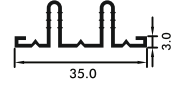
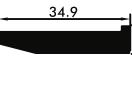

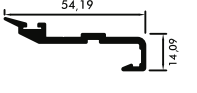

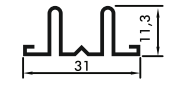
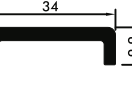

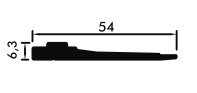
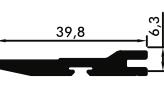
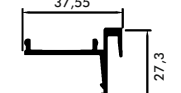
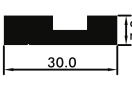
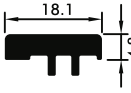
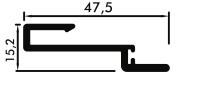

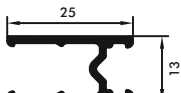

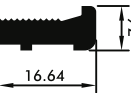
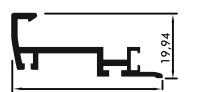


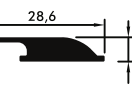
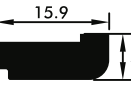
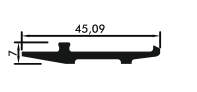
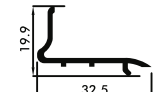

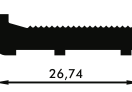
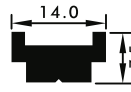
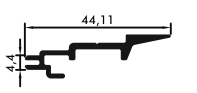

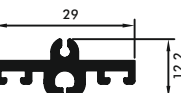

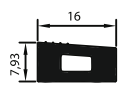
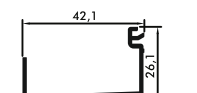
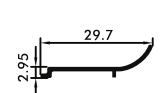
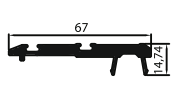
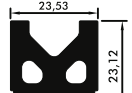
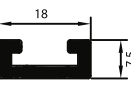
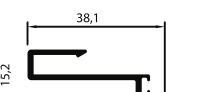
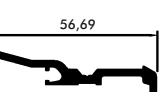

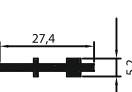
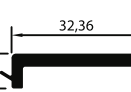
FACADE PROFILES

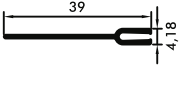

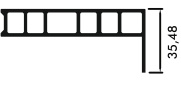
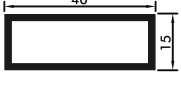
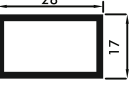
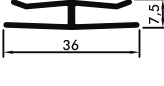



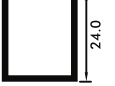

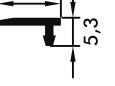



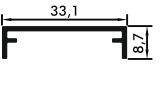
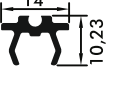



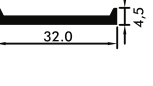

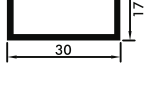



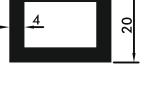

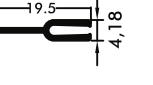








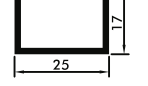
NPP148	NPP025	NPP165
NPP069	NPP232	NPP208
NPP105	NPP129	
NPP191	NPP233	
NPP064		
NPP276		

SLIDING PROFILES

NPP269	NPP238	NPP289
NPP264	NPP182	NPP177
NPP180	NPP279	NPP206
NPP089	NPP092	NPP145
NPP146	NPP107	NPP063
NPP006	NPP198	NPP353
NPP077	NPP022	NPP361
NPP261	NPP062	
NPP295	NPP333	
NPP309	NPP311	

SPECIAL PROFILES

 <p>NPP221</p>	 <p>NPP093</p>	 <p>NPP071</p>	 <p>NPP281</p>	 <p>NPP280</p>
 <p>NPP111</p>	 <p>NPP274</p>	 <p>NPP070</p>	 <p>NPP023</p>	 <p>NPP103</p>
 <p>NPP262</p>	 <p>NPP128</p>	 <p>NPP296</p>	 <p>NPP273</p>	 <p>NPP055</p>
 <p>NPP268</p>	 <p>NPP127</p>	 <p>NPP340</p>	 <p>NPP101</p>	 <p>NPP075</p>
 <p>NPP303</p>	 <p>NPP181</p>	 <p>NPP319</p>	 <p>NPP040</p>	 <p>NPP088</p>
 <p>NPP265</p>	 <p>NPP061</p>	 <p>NPP343</p>	 <p>NPP096</p>	 <p>NPP024</p>
 <p>NPP277</p>	 <p>NPP078</p>	 <p>NPP344</p>	 <p>NPP203</p>	 <p>NPP018</p>
 <p>NPP290</p>	 <p>NPP249</p>	 <p>NPP345</p>	 <p>NPP056</p>	 <p>NPP348</p>
 <p>NPP302</p>	 <p>NPP090</p>	 <p>NPP347</p>	 <p>NPP282</p>	 <p>NPP349</p>
 <p>NPP321</p>	 <p>NPP334</p>	 <p>NPP354</p>	 <p>NPP350</p>	 <p>NPP381</p>

SPECIAL PROFILES			BOX PROFILES	
 NPP234	 NPP301	 NPP175	 NPP219	 NPP149
 NPP291	 NPP098	 NPP176	 NPP298	 NPP060
 NPP015	 NPP099	 NPP260	 NPP236	 NPP248
 NPP266	 NPP307	 NPP320	 NPP257	 NPP256
 NPP015A		 NPP336	 NPP051	 NPP254
 NPP267		 NPP338	 NPP259	 NPP151
 NPP235		 NPP335	 NPP246	 NPP049
 NPP244		 NPP322	 NPP247	 NPP155
		 NPP383	 NPP059	

MATERIAL DATA SHEET

Standard Polyamide 66, 25% Glass Fibre Content Properties

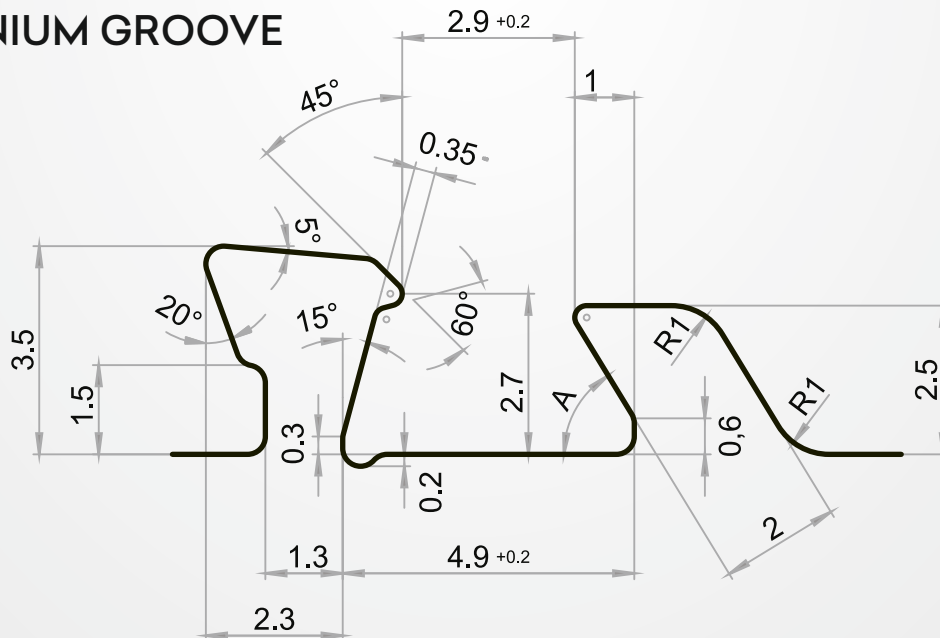
Properties	Standard	Unit	Samples taken from the extruded profile		Injected-moulded samples
			Dry ⁽¹⁾	Humidity Equilibrium ⁽²⁾	Dry ⁽¹⁾
Melting temperature	EN ISO 11357	°C	min. 250	min. 250	min. 250
Density	EN ISO 1183-1	g/cm ³	1.3 ± 0,05	1.3 ± 0,05	1.3 ± 0,05
Glass fibre content	EN ISO 1172	% weight	25 ± 2.5	25 ± 2.5	25 ± 2.5
Shore hardness D	EN ISO 868	-	min.82 ± 4	78 ± 4	82 ± 4
Impact strength	EN ISO 179-1	Kj/m ²	min. 30 or w.b.	min. 40 or without break	min. 35
Tensile strength	EN ISO 527	N/mm ²	min. 80	min. 50	min. 110
Young's modulus	EN ISO 527	N/mm ²	min. 4500	min. 2500	min. 6000
Elongation at break	EN ISO 527	%	min. 3	min. 6	min. 3
Thermal conductivity	DIN 52612		~0,3 W/m.K		
Heat resistance in oven			200°C/15 min.		
Resistance in alcali and acid			85°C /15 min.		

¹ Water content less than 0,2% by weight

² Humidity Equilibrium: Conditioning acc. to EN ISO 1110 (23°C / 50%)

It is not intended to assure legally binding or to guarantee the nature of the products, the trade capability of the products and the suitability for a certain use. We reserve the right of technical alterations.

ALUMINIUM GROOVE



COMPATIBILITY CHECK

We recommend to make a compatibility check for your aluminium cavity with our insulating profile heads. If you share your technical drawings, we would be glad to conduct a double-check. Don't hesitate to ask for our assistance.

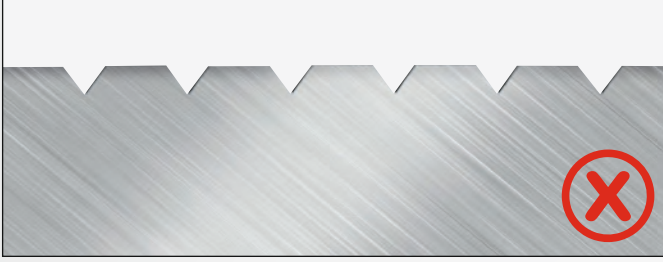
ALÜMİNYUM YUVASI UYUMLULUK KONTROLÜ

Isı yalıtım profillerimizin alüminyum yuvalarınızla uyumunu kontrol etmenizi tavsiye ederiz. Bizimle teknik çizimlerinizi paylaştığınız takdirde size bu konuda destek vermekten memnuniyet duyarız. Bize sormaktan çekinmeyin.

INSTRUCTIONS & RECOMMENDATIONS

RECOMMENDATIONS FOR KNURLING

Knurling disks should be renewed periodically. Before knurling takes place, disks must be carefully aligned to the aluminium both horizontally and vertically.



On the left figure an unprofessionally executed knurling is depicted. On the right the sharp-toothed aluminium is our choice for a good knurling. Good knurling is crucial factor contributing shear strength. Don't forget: High rolling pressure can't compensate for poor knurling.

RECOMMENDATIONS FOR COATING PROCESS

The object temperature of 180°C - 200°C and the dwell time of approx. 20 min. must not be exceeded. If this temperature or time is exceeded, the stability of the insulating strips may suffer. In order to eliminate sagging of the composite profile (for horizontal lines), it must be supported at regular intervals.

HANDLING, TRANSPORTATION AND STORAGE

Polyamide thermal breaks are extruded in dry state but they absorb moisture from the environment after the production as time passes. Moisture level depend the following conditions;

- Ambient temperature
- Ambient humidity
- Storage period

Polyamide profiles should be transported and stored under dry conditions away from the influence of weather. (rain, direct sunlight etc.)

During the summer time, when the temperature and humidity in storage area are higher than usual, the insulating profiles absorb more moisture than in the remaining seasons, even stored properly.

Protecting against moisture will reduce any possibility of blister formation during powder coating.

maintain ambient temperature in the range from 15 to 20 °C

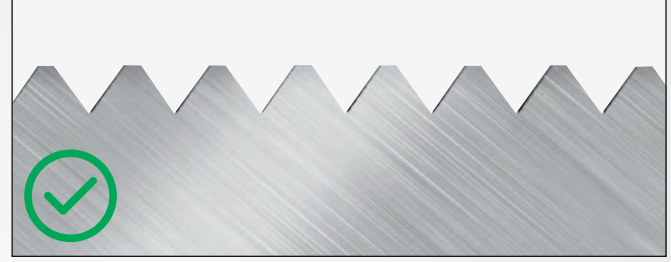
Store profiles horizontally in order to prevent bending or twisting the material, otherwise long storage periods cause permanent sagging. Support long lengths.

Natural moisture absorption causes a slight dimensional increase and change in mechanical properties depending on the storage duration and ambient climate.

TALİMATLAR & ÖNERİLER

DİŞ AÇMA ÖNERİLERİ

Dış açmada kullanılan diskler periyodik olarak yenilenmelidir. Dış açma öncesinde disklerin alüminyum yuvasıyla düşey ve yatayda doğru olarak hizalandığına emin olunmalıdır.



Soldaki görselde yetersiz diş açmaya örnek görüyorsunuz. Sağda ise keskin dişli alüminyum önerdiğimiz iyi diş açmaya örnektir. İyi diş açma, kayma dayanımını sağlamak açısından çok önemlidir. Unutmayın: Sıkma basıncını arttırmak kötü diş açma işlemi telafi etmez.

BOYA İŞLEMİ İÇİN ÖNERİLER

Kompozit (ısı yalıtım bariyeri takılmış) profillerin 180°C - 200°C sıcaklığı ve 20 dakikayı aşmayacak şekilde fırınlanması gerekir. Bu sınır aşırsa profillerin kararlılığı garanti edilmez. Sarkmaları önlemek amacıyla yatay üretim bantlarında profiller ortadan da desteklenmelidir.

TAŞIMA VE DEPOLAMA

Poliamit ısı yalıtım bariyeri profilleri ilk ürettiklerinde kurudur, zamanla ortamdaki nemi absorbe eder. Nem emiliminin miktarı aşağıdaki faktörlere bağlıdır:

- Ortam sıcaklığı
- Ortamdaki bağıl nem
- Depolama süresi

Poliamit profillerin taşıma, depolama ve işleme süreçleri kuru koşullarda, yağmurdan ve güneş ışınlarından korunaklı olarak gerçekleştirilmelidir.

Yüksek sıcaklık ve nem olan hava koşullarında, özellikle yaz mevsiminde, doğru stoklama da yapılsa profiller diğer mevsimlere göre daha fazla nem absorbe eder.

Profilleri rutubetten korumak boya işlemi sonrası kabarcık problemlerinin en aza indirilmesini sağlar.

Depolamada sıcaklık 15°C ila 20 °C arasında tutulmalıdır.

Bükülme ve eğilmeleri engellemek için özellikle standarttan uzun profilleri yatay olarak destekleyiniz. Aksi halde kalıcı sarkmalar oluşur.

Profillerin nem çekmesi, depolama koşullarına ve iklim şartlarına bağlı olarak ufak boyut artışlarına ve mekanik özelliklerde değişimlere sebep olur.

NURLU

Ramazanođlu Mahallesi.
Őeyhli, Uysal Sok. No:10,
34906 **Pendik / İSTANBUL**

Tel : +90 (216) 378 86 19
Fax : +90 (216) 378 65 23
E-Mail : contact@nurlu.com